PROGRESS REPORT ON THE INDIGENOUS VULTURE MONITORING PROJECT: JUNE 7, 2016

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Executive Summary

The Indigenous Vulture Monitoring Project report summarizes the activities that have been carried as stipulated by the project’s core mandate and set objectives. This report is to help stakeholders to have first-hand knowledge of the details of the Vulture Monitoring Project, spearheaded by the Department of Conservation Biology and Entomology of the School of Biological Sciences in the College of Agriculture and Natural Sciences, University of Cape Coast. The report comprises the following: an overview of the project, training workshops and seminars, radio discussions, media coverage, achievements and finally challenges. It also highlights the way forward and some key findings of the Indigenous Vulture Monitoring Project (IVMP).

The team members are optimistic that the Indigenous Vulture Monitoring Project so far has been successful in carrying out set objectives even in the midst of some challenges. This project we believe has whipped up the interest of many to accept the saying that “Vultures are unsung environmental heroes, as a world without vultures will be a foul smelling place full of rotting carcasses and unbearable smell”.
1.0 INTRODUCTION

The indigenous vulture monitoring project (IVMP) is aimed at first training local inhabitants across all districts in the Central Region of Ghana with future plans of extending to all other regions in Ghana. This is to build capacity in the local people with skills in vulture identification and monitoring that will aid our efforts in vulture conservation in Ghana. It’s also aimed at creating a nationwide data base on vulture population in Ghana in the short term to ascertain the status of vultures in Ghana. Having trained the local inhabitants they were engaged in reporting vulture numbers and activities on monthly basis to a central database and also helped in further awareness creation in their respective districts. The project has now been expanded to cover all 10 regions in Ghana with the hope that by September 5, 2016 it will yield a nationwide data leading to the declaration of status of vulture population trends and threats facing vultures in Ghana.

So far the IVMP has consolidated its efforts in the protection of vultures in Ghana by organizing two major training workshops in University of Cape Coast and Ho Polytechnic as well as several public lectures and both print and electronic media discussions. Overall, the IVMP’s activities have been broadcasted on four television programmes, eight radio discussions, six public talks, three industrial talks and two print media reports.

The activities of the IVMP has exposed the general public and Ghanaians to the importance of vultures and the threats facing these birds from the very activities of the people they are made to help. Tremendous progress has been made in achieving project objectives whiles in spite on logistical and financial challenges. The project has been expanded greatly to cover the entire country and new dimensions regarding project objectives have been developed and some field data has been collected. The project is more than half way through and this report is an update on what has happened so far, achievements, challenges and the way forward for the IVMP.

Fig.1: Participants at the first IVMP training workshop at the Sasakawa Centre in the University of Cape Coast.

The goal of this training workshop was to build capacity in local people with skills in vulture identification and monitoring. Each participant trained during the workshop becomes an IVMP representative in their locality, providing monthly reports on vultures and their activities. Indeed this was the phase 1 of the IVMP that saw the training of some 40 participants from about seven out of the ten regions in Ghana. The participants have been loyal and have sent data to an online database they created as part of the training obligation. This is the database the project is using. An update on this training has already be submitted and can be found at the link here http://www.rufford.org/projects/justus_deikumah. In view of this, the details reported earlier are not repeated in this current update. The rest of this update will focus on what the IVMP team have been doing since the last update on 27th January, 2016.

3.0 ONE DAY VULTURE MONITORING TRAINING WORKSHOP AT G.M AFETI AUDITORIUM, HO POLYTECHNIC, HO, VOLTA REGION on the 7TH APRIL, 2016.

During the January workshop in Cape Coast as discussed earlier, there were no participants from three regions (Greater Accra, Volta and Eastern Regions) hence IVMP team decided to organize a one-day training workshop in the Volta Region in order to first capture some volunteers from there and also intensify our awareness creation. This one-day training workshop was co-hosted by the Ho Polytechnic in the Volta Region. During this workshop participants were trained in the skills of vulture identification and monitoring aimed at building local capacity for vulture conservation. This workshop attracted a Representative of the Volta Regional Minister, Madam Helen Ntoso who read a speech on her behalf. It also attracted Chiefs, Schools, Colleges, political parties, heads of relevant government and private institutions, religious groups, heads of institutions, butchers, artisans, and traders in these regions just to mention a few.

It was envisioned that participants trained will provide reports on vulture sightings and activities from their respective communities. This is aimed at adding to the already underway data collection to establish baseline information of the population trend and status of vultures in Ghana. The seminar was held in collaboration with the Faculty of Applied Social Sciences of Ho Polytechnic.

The workshop was centered on the theme “the importance of vultures and their roles in keeping communities free of diseases like cholera”. The first discussion was led by Dr. Justus P. Deikumah (Project Coordinator). The discussion focused on general importance and ecosystem services provided by vultures; threats vultures face; global population trends; ecological implication of vultures’ extinction; conservation interventions needed and opportunities for the youth to be part of solutions. The presenter highlighted the fact that vultures are important scavengers. They provide key ecosystem services such as keeping our cities clean of dead animals and that their presence reduces the rate of disease transmission among other scavengers. He further explained the importance of vultures in preventing the outbreak of diseases such as cholera, rabies, botulism etc. He pointed out that, the presence of vultures helped to reduce the number of other scavenger that gather around carcasses and rather serve as important disease reservoirs. Certain threats to the population of vultures including direct and indirect poisoning; persecution; electrocution; starvation; habitat loss; poor waste management and disposal practices as well as vehicular collision were discussed and debated. Some conservation strategies needed to ensure a rapid response to the plight of vultures were also discussed. These included support systems for vulture monitoring, education
and awareness creation programmes, an urgent nationwide vulture monitoring programme needed to ascertain the status of vulture population, research into breeding ecology in Ghana and a multidisciplinary approach to finding lasting solutions to vulture population decline.

3.1 Volta Vulture Forum (VVF)
After the main presentation, seminar participants were put into groups. This session was facilitated by Prof K. A. Monney a team member of the IVMP. Groups were presented with varying topics for discussion. Some of the topics for discussion were current trends in vulture population, threats causing decline in vultures and conservation outlook necessary to save vultures. Groups were mandated to make a 5 minute presentation on their findings. This session was very successful and informative as participant expressed their knowledge on related thematic topics and demonstrated understanding of current issues related to vultures. After this group discussion the groups’ representatives made short presentations. Finally the groups issued a common communique that was reported by some electronic media houses across the country. The communique is yet to be published in the print media. The cost of this is however too high per our budget. We are still working on this.
3.2 Vulture identification and monitoring skills
After the group discussions, the project director (Dr. Justus P. Deikumah) took participants through techniques in vulture identification and monitoring. Participants were educated on ways to identify all eight species of vultures that occurred in Ghana and tell the difference from other birds of prey. Primarily participants were trained with skills of vulture monitoring and were tasked to provide weekly information on vulture activities and sightings within their local community. The seminar however ended with an appeal for funding support aimed at raising money to support the IVMP.
Media coverage
Overall, the IVMP activities have been broadcasted on four television programmes, eight radio discussions, six public talks, three industrial talks and two print media coverages. The IVMP team featured on morning talk shows by the management of Cape FM, ATL FM in the University of Cape Coast, and Ahomka FM all in the Cape Coast Metropolis as well as Kiss FM in Drobo near the Ivory Coast boarder to Ghana where there were phone in calls from that country reporting vulture activities. Prior to the seminar at Ho Polytechnic, radio discussions were held at Volta Premier FM in the Ho metropolis to raise public awareness and to announce the proposed seminar and it activities.

Television broadcast were made possible by the Ghana Television (GTV) and TV3. TV3 hosted the IVMP team on its famous “New Day Morning Talk Show”. The theme for discussion was “Birds and the Environment: The Importance of Vultures in Keeping Cities free of Cholera”. This was presented by Dr. Justus P. Deikumah (Project Coordinator), Prof. K. A. Monney and supported by the Secretary to the Project Mrs. Mary Adjei-Ayiah. Ghana television reported live on all training workshops so far and granted several interviews to the project director. It was a great privilege to be granted such offers as they provided the platform to communicate to a wider audience on issues concerning vultures. It is worth to add that proceedings from seminars, workshops and media discussion have also gained some publicity on the websites of the University of Cape Coast (URL), Ho Polytechnic, Atlantic FM Online, and the Ghanaian times newspaper. For instance “Hatred for vultures in Ghana makes it difficult to see their importance. - Dr. Justus Deikumah” on ATL online
4.0 IVMP PHASE II: VULTURE SURVEYS AND INTERVIEW

This phase of the projects builds on capacity from the IVMP PHASE I where trained participants were tasked to provide weekly or monthly updates on vulture sightings and activities in their local communities. Currently the IVMP has received data from about 120 communities for the first stage of the PHASE II. The second stage is already underway and participants have started providing information from their respective localities. As part of IVMP PHASE II goals 460 people have been interviewed so far from five regions to solicit perceptions and attitudes about vulture conservation in Ghana. Details of results and findings are structured into three journal articles as indicated in section “5.0 Academic publications in preparation and conference invitations below. Extracts from two of those journal articles are briefly described here as follows.

In the first paper we found that the Ghana situation of vulture population decline and threats is worse, as information on vultures are scanty and are either based on opportunistic sightings by birdwatchers or unpublished works by some individuals. This paper represents the first ever comprehensive study on the population, decline trends and country specific threats facing vultures in Ghana. Vultures and other opportunistic birds were surveyed at slaughter houses, landfill sites, roost sites and communities in >100 survey locations including 1 National Park. Surveys were complemented with road counts. The study recorded 1101 hooded vultures, 11 white-backed vultures and 4 palm-nut vultures. More vultures were concentrated mostly at slaughter houses. Refuse dumps and final waste destinations surprisingly had unusually very low representation of vultures. The study identified field based threats and investigated how these threats influence the abundance/presence of vultures in Ghana. It was found that hunting for traditional medicine had a significant but negative influence on the presence of hooded vultures in the study sites while burning of old lorry tyres as a substitute for firewood to singe meat at slaughter houses revealed negative impacted on the vultures. The loss of trees particularly the silk cotton tree, *Ceiba pentandra* as major roost and nesting site had a negative influence on the vultures. Vultures of Ghana may be at a higher risk of total population collapse if stringent conservation measures are not put in place. It is recommended that the government enacts laws to ensure a countrywide ban on the use lorry tyres at slaughter houses, to regulate the use and sale of agricultural / domestic pesticides and poisons and discourage the sale of vulture parts for traditional medicine. It is also suggested that further studies is conducted into the alarming rate at which silk cotton trees are extracted for infrastructural development (<10 yrs ago) and the consequences for vulture populations in Ghana regarding the strong association revealed in this study between them.

In the second paper, we used a mixed method structured and key person interviews were to sample the views of 460 respondents is the three main ecological zones in Ghana in over >50 communities sampled at random. It was revealed so far that over 70% of the respondents were more familiar with the hooded vulture than the remaining species. Vultures were culturally important to 56% of respondents. About 44% of respondents owned farms while 70% reared one or more types of livestock. Diseases that affected livestock were common and usually treated with diclofenac sodium. Livestock carcasses were usually not available to vultures as the majority (64%) preferred to bury dead animals than leave them out in the open. However, a new poisoning pathways. It is confirmed Furadan 4F use to poison wildlife and later remove the offal that are later consumed by vultures was reported by 78% of respondents that is linked to bush meat hunting method. The majority of respondents responded positively to the concept of vulture conservation and thought that vultures were important and need to be protected. The study identified poisoning, habitat loss particularly loss of *Ceiba pentandra* tree and trade in vulture parts for traditional medicine as major threats to vultures in Ghana. Public education and awareness creation, positive attitude towards the environment, vulture
conservation programmes and protection of breeding sites were some urgent conservation actions recommended to ensure the survival of vultures.

5.0 ACADEMIC PUBLICATIONS IN PREPARATION AND CONFERENCE INVITATIONS

Currently three strong journal articles are in preparation on vultures in Ghana. They are:

1. **J.P. Deikumah** (in press). Population status and identified field threats of Critically Endangered old world vultures in West Africa *(Target journal: Biological Conservation)*

Abstracts and drafts are available on demand but will be made fully available including metadata once they are published. Declarations of funding source for these papers are made clearly. The Project director has been invited to present two papers at the 2nd Pan African Vulture Summit by the IUCN Specialist Group in Dakar, Senegal (October 2016). Preparations are underway to attend the conference.

6.0 SOME INTERESTING FINDINGS SO FAR

The project so far has identified some potential threats vultures may be facing. Some of these threats are quiet unique and perhaps peculiar to Ghana and West Africa only. Some identified or reported threats are as follows:

i. The use of old lorry tyres at abattoirs / slaughter houses to singe slaughtered animals.

ii. A unique poisoning pathway through bush meat hunting. Currently in Ghana hunters have resolved to use Furadan 4F-Urine concoction for hunting. They poison bait with this concoction and when animal (Grass-cutters) feed on poisoned bait they die. Hunters then remove the offal of the dead animals and dispose of them. When vulture eat these poisoned offal they may die. Almost 100 out of 460 people interviewed so far mentioned this.

iii. It has been observed that there is a direct association between hooded vultures and *Ceiba pendandra*, the Silk cotton (locally called *Onyina*) tree. The over exploitation of this tree for furniture and construction in recent times, it is possible that the drastic decline in the number of this tree positively corresponds to loss of breeding sites. A looming co-extinction hypothesis to be tested?

iv. The use of vulture and their part for traditional medicine and trade in parts possess threat to vultures. On the local traditional market vulture parts (egg, head, feathers, legs) are very valuable and expensive. This has raised the interest of many traditional healers since the trade is lucrative and rewarding.
7.0 OVERALL ACHIEVEMENTS SO FAR

The following are some of the progress made so far:

1. Over 640 people participated in the two different training workshops organized.
2. Phase one (dry season) data from field vulture counts complete.
3. Phase two (wet season) vulture survey already underway.
4. About 460 respondents out of 1000 target were so far interviewed in the expanded project to solicit opinions, perceptions and attitudes of local people towards the concept of vulture conservation in Ghana.
5. A communiqué was issued at the conclusion of the one day training seminar to highlight the importance of vultures and to call for all and sundry to participate in protecting them.
6. IVMP and funders have an overwhelming 29 media and public exposures
7. An online database system was developed by the workshop participants. This has moved the project a step faster in achieving its set objectives of creating a short-term baseline data on vulture population status in Ghana. This online database system is not complicated and is easy to access.
8. The general public now report activities of vultures in Ghana regularly including dead vultures wherever sighted.

8.0 THE WAY FORWARD

8.1 International Vulture Awareness Day 2016
Preparations are underway to celebrate the International Vulture Awareness Day 2016 at a national level. Target groups are the Presidency, Political parties and other key stakeholders that matter for vulture conservation in Ghana.

8.2 Future direction of the project
Experiences from this workshops have led to the development of various follow-up projects we believe will complement efforts to saving vultures in Ghana. Those under development in the interim include

i. Vulture Signage Project: Putting details of vulture facts on bill boards at dumpsites, abattoirs, slaughter houses, schools and communities.

ii. Save the “Onyina” and save the vulture Project: Investigate the relationship between vultures and the silk cotton tree and the over-exploitation of the tree that could lead to a policy change on the tree.

iii. Stop the hunting of bush meat with poisons and stop poisoning vultures project: Threats identification and confirmation of the poisoning pathway in Ghana Project

9.0 CHALLENGES

Though several progresses have been made and project goals are being made steadily, some challenges were encountered. Expansion of the project may have been blamed on financial constraints. We chose to expand the project to cover the entire country on demand from some stakeholder institutions and also because our quest to provide a more representative data on status on vultures as well as identify threats on a similar scope. Raising local funds have been used to compliment funds from our two main sources. Some participants have relocated from their communities as we anticipated at some stage and hence team
members have to travel to such places to collect data. Industrial talks especially in mining companies were a bit expensive and out of our budgets, however, such travels have become necessary as we identified the extractive industry as a major player in the destruction of vulture habitats. Also before many of these industries were granted permits, vultures were not under any threats and hence we believe our trips have provided valuable information to them regarding future clearings and environmental impact assessments. Despite the financial challenges, the IVMP team believes that we can meet all project objectives in record time including completing part of the extensions made. We do hope to apply for further grants to be able to carry out future projects in a direction that will reduce the damming threats vultures in Ghana and West Africa are facing currently.

10.0 CONCLUSION

In the opinion of the organizers the competence at which participants and the general public grasped the concept and need for vulture conservation and the way they were able to implement monitoring and identification techniques in the field was remarkable. This suggests that participants are well equipped to carry out their mandate for vulture conservation in their local communities. Awareness creation had gone on great e.g. during the training workshop we had reports that 2 vultures had been killed. Both incidents were reported by community members via phone calls. The cause of death of one was not known but one was killed by a reckless driver. Interestingly we received more than 21 calls on the accident. We least expected the Ghanaian to report on a dead vulture given how much they hated the live one. We are hopeful that the project will yield quality results that will establish the status of vulture population and trends in threats to vultures in Ghana within the stipulated 12 month period. We are confident that public education has gone down well and chiefs and opinion leaders have promised to participate fully in the fight to save vultures in Ghana. They also promised to carry the message to members of their communities and be the mouth piece for vultures in their respective communities. We are confident that gradually the project is taking root and that the attitude of the Ghanaian we believe is changing towards vultures for the better.