

## Final Evaluation Report

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| Your Details               |  |
|----------------------------|--|
| <b>Full Name</b>           | DOGNIMON Ayeman Samson   |
| <b>Project Title</b>       | Supply chain of vulture's body part trade in Benin: strategies to vulture conservation |
| <b>Application ID</b>      | 36154-1  |
| <b>Date of this Report</b> | 06/12/22   |

**1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

| Objective   | Not achieved | Partially achieved | Fully achieved | Comments   |
|---|--------------|--------------------|----------------|--|
| OS1: Identify the diversity, quantity, and habitats source of vulture's specimens recorded in the traditional medicine market |              |                    |                | According to the activities planned in the project submitted, the surveys should cover the seven main traditional medicine markets but with information received on the first markets investigated, citing bordering countries as provision sites of vulture specimens, we extended our survey to these traditional medicine markets located in the north of Benin (eight markets).  |
| OS2: Investigate the diversity and the distribution of vulture species occurred in Benin                                      |              |                    |                | On a countrywide scale, 16 districts in Benin were cited by respondents as provision zones of vulture body parts. This information, combined with those recorded in the literature, led us to conduct surveys in 19 districts bordering five protected areas.  |
| OS3: raise education awareness on the conservation of vultures in Benin   |              |                    |                | Our conservation awareness campaign activities were carried out in two primary schools. The first is close to the Pendjari National Park and the second to Trois Rivières classified forest. These two protected areas were the main occurrence areas for vultures in Benin. The campaign focused on the bird's important ecological role and the danger of losing species. We specifically discussed the consequences of vulture poisoning and the decline in the population of this species. |

**2. Describe the three most important outcomes of your project.**

**a).** The result from the interviews in traditional medicine markets (TMM) revealed that these markets are mainly supplied by vultures from neighbouring countries such as Burkina Faso, Niger, Nigeria, and Togo. Some specimens originated from Ghana, Cote d'Ivoire, and Cameroon. On a countrywide scale, 17 districts in Benin were cited by the sellers from southern traditional medicine markets (southTMM) as provision zones of vulture body parts.

**b).** Six species of vultures were recorded in the TMM - hooded vulture (*Necrosyrtes monachus*), white-headed vulture (*Trigonoceps occipitalis*), white-backed vulture (*Gyps africanus*), Rüppell's vulture (*Gyps rueppelli*), Egyptian vulture (*Neophron percnopterus*), and lappet-faced vulture (*Torgos tracheliotos*). Our results showed that the selling price varies significantly according to the body part, species, and market. The typical trade chain starts with vulture hunters from the rural areas neighbouring protected areas in northern Benin, Niger, Nigeria or Burkina Faso. The vultures are transported first to rural markets where they are wholesaled and then transported to southern TMM. There is also a direct relationship between the main source and the southern market. There is also a direct relationship between the markets surveyed and each other.

**c).** The results of the surveys conducted among people living around the protected areas cited as a source of vultures revealed that, among the six species recorded in the TMM, only *Necrosyrtes monachus*, *Gyps africanus* and *Torgos tracheliotos* occur in Benin and restricted to the north according to local ecological knowledge.

The crossed analysis of local knowledge from local people and sellers in TMM allowed to range the current distribution areas of the three vulture species occurred in Benin from 10°0' to 12°5' N. These species are under unsustainable trade together with the other three species.

### **3. Explain any unforeseen difficulties that arose during the project and how these were tackled.**

During the surveys with stakeholders in the traditional medicine markets, we were not able to conduct interviews with some sellers who initially thought that we were an informant from the forest services. To overcome this difficulty, we recruited a seller in each market to assist our team and facilitate interviews with the sellers. Each guide put us in touch with other vendors in other markets.

### **4. Describe the involvement of local communities and how they have benefited from the project.**

Local communities were very crucial for the success of this project. During the data collection in the market and the village, we worked with traders and local people as guides and involved them in awareness sessions. The community benefited indirectly from this project through awareness. In fact, to multiply the impact, the students involved in awareness were encouraged to educate their respective families on the conservation of the vulture population. The conservation message developed by young people from these schools will be shared on the social platform (Facebook) to reach an even larger group of practitioners.

### **5. Are there any plans to continue this work?**

There are plans to continue this work. The awareness session was implemented with the collaboration of Nature plus NGO, a youth-led organisation that aims at the

conservation of wildlife and human well-being. We hope to continue awareness-raising campaigns on the conservation of vultures. In the traditional medicine market, we hope to raise awareness among vendors about the dangers of handling vultures and their use. We also believe that it is necessary to guide them toward other income-generating activities.

#### **6. How do you plan to share the results of your work with others?**

We intend to publish our results in peer-reviewed journals. A manuscript is currently in advanced preparation and will be submitted to the Journal of Conservation Science and Practice. We have already participated and shared our findings in the action planning workshop for conserving West African vultures in Nigeria from October 12th to 14th 2022. We have just received a grant to participate in the Student Conference on Conservation Science in Cambridge scheduled for 28th-30th March 2023. At this international event, we will give a talk on our findings. Moreover, the finding will also be shared next year at the International Scientific Symposium of the National Agricultural University of Ketou and the International Scientific Days of Lomé and will share a policy brief to the General Directorate of Water, Forests and Hunting.

#### **7. Looking ahead, what do you feel are the important next steps?**

Our results showed the extent of vulture trade for belief-based use. Some specimens come from our protected area where little is known about the real diversity and population size. One of the main factors affecting vultures, apart from belief-based, is cultural perceptions. We think that it is necessary to assess the species diversity, abundance, frequency, and season of vultures at abattoirs and the threats to the vulture's population in their occurrence zones. These areas will continue to be the focus of our project in the future.

#### **8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?**

The Rufford Foundation logo was used on our vulture conservation awareness poster. It will be used in our oral presentation at SCCS 2023 in Cambridge and in all future presentations. The Rufford Foundation will also be acknowledged in planned publications.

#### **9. Provide a full list of all the members of your team and their role in the project.**

**Michaïre LIMA:** He is the head of Nature plus NGO. He has undertaken organisation efforts during the implementation of this project, he worked closely with local community.

**Machihoudou BAPARAPÉ:** He has contributed to field data collection in the protected areas, he also worked closely with local community.



**Auriol GANSOU:** He earned his Bachelor in Natural Resource Management from The University of Abomey-Calavi. He has contributed to data collection in traditional medicine market.

**Elodiade HOUINDOTE:** She has assisted in elaborating the training awareness material and taking pictures.

#### **10. Any other comments?**

We would like to express our gratitude to The Rufford Foundation which funded this project that represents the first on vulture conservation. This project launched our career in conservation. We hope to continue working with The Rufford Foundation to extend our work and design a more elaborated strategy for the effective conservation of this taxonomic group.