

## Final Evaluation Report

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| Your Details               |   |
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| <b>Full Name</b>           | Abdou-Wakilou Bio Keri  |
| <b>Project Title</b>       | Safeguarding the Hooded Vulture: An Assessment of Spatiotemporal Dynamics and Participatory Conservation Efforts in Benin's W Transboundary Biosphere Reserve |
| <b>Application ID</b>      | 40490-1   |
| <b>Date of this Report</b> | February 27 <sup>th</sup> , 2024  |

**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  |
|--|--------------|--------------------|----------------|---|
| Investigate the perceptions of local communities on Hooded Vulture population trends and its conservation evidence.  |              |                    |                | We successfully surveyed 439 individuals across various age groups, socio-linguistic background, occupation, and gender in Kandi, Banikoara, Malanville, and Karimama, the target municipalities of study. These surveys, as planned, assessed community perceptions, knowledge and attitudes towards the hooded vulture, including its uses, threats, population trends and occurrences. Additionally, we explored the behavioural intentions of local communities regarding the vulture's conservation. |
| Kickstarting awareness campaigns with an impromptu vulture awareness caravan on International Vulture Awareness Day. |              |                    |                | We recognised the global vulture awareness day on September 2nd 2023 as an opportune moment to raise awareness in Kandi. Though not originally planned for this time, we proactively organised a walking caravan to inform diverse audiences about vultures, their challenges, and ongoing conservation efforts. Seizing this opportunity, we also conducted an environmental education session for children, turning an unplanned event into a valuable contribution to vulture conservation.            |
| Local communities raising awareness and outreach   |              |                    |                | Our awareness successfully engaged diverse groups including hunters, farmers, bushmeat traders, students, youths, and community stakeholders. These sessions fostered a deeper understanding of the hooded vulture's importance and its conservation needs. Discussions yielded valuable insights into potential  |

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|  |  |  | <p>conservation strategies, such as continued awareness campaigns, nesting site protection, and an end to poaching. Moreover, local communities put forth their own conservation strategies for the hooded vulture, such as establishing feeding areas and safeguarding vultures in Fulani camps and butcheries. We further extended our outreach to schools, providing environmental education programmes for children on biodiversity conservation, with a particular emphasis on the hooded vulture.</p> |
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**2. Describe the three most important outcomes of your project.**

**a) ) Knowledge Gap and Positive Attitudes:**

Our project revealed a strong understanding of the hooded vulture among respondents, including its threats and potential uses. While most expressed positive attitudes towards conservation efforts, a knowledge gap was identified between those attitudes and actual support for conservation. This suggests a need for future awareness campaigns to bridge this gap and translate knowledge into concrete conservation actions.

**b) Hooded vulture at risk of extinction:**

Our study brought to light a decline in the hooded vulture population around the W Transboundary Biosphere Reserve as indicated by the local ecological knowledge of the respondents. Poaching, habitat loss and nesting site reduction emerged as significant factors influencing changes in hooded vulture occurrence and population in the study area. Climate changes, natural mortality, and migration were not deemed significant drivers of these changes, although, migration exhibited a moderate impact on occurrence changes. This indicates the critical importance of addressing poaching, and habitat loss in conservation of hooded vulture.

**c) Community Engagement and Conservation Strategies:**

Through awareness sessions, environmental education, and the outreach initiative diverse communities across the targeted municipalities actively participated in hooded vulture conservation effort. Our surveys have informed our awareness-raising initiatives, which aim to enhance community understanding, foster positive attitudes, and empower them to conserve the hooded vulture. We have prioritised addressing poaching and habitat loss, identified as the primary threats to the species in this region of Benin. The local communities have developed a deep understanding of the significance of the hooded vulture and its conservation. These discussions have

led to the identification of various local strategies, attitudes, and behaviours conducive to the conservation of the hooded vulture. These strategies include: (i) raising community awareness, (ii) monitoring vulture populations and reporting potentially dangerous incidents, (iii) protecting nesting sites, (iv) adopting sustainable agricultural practices that minimise deforestation, pesticide and harmful chemical use, (v) effective waste management to reduce vulture exposure to harmful substances in contaminated carcasses, and (vi) stopping hooded vulture poaching. These community-driven strategies offer valuable insights for future conservation efforts.

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

The team did not encounter any significant difficulties. Some potential villages for the study were inaccessible due to a lack of road infrastructure or crossings and security issues. However, this was not a major obstacle, as we often relied on local artisanal means and the assistance of the police and forestry officers to overcome this challenge.

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

The surveys were conducted directly within local communities, where residents were encouraged to share their local ecological knowledge about the hooded vulture. In most cases, they are aware of the significance of this species, not only for ecological balance but also for their cultural and traditional well-being. For others, the awareness caravan reached a significant number of children, youth, and adults who received education about the challenges of hooded vulture conservation. Furthermore, the awareness sessions within local communities brought together diverse individuals of all ages (youths, adults, and elderly), various professions (hunters, farmers, bushmeat traders, students, and other stakeholders), and different ethnic groups (Bariba, Dendi, Mokole, Fulany, Hausa, Djerma, etc.). We employed a bottom-up approach to sensitise these groups and collectively, we worked with them to develop locally relevant conservation strategies for the hooded vulture. Additionally, our environmental education programmes had a significant number of children.

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

Yes, this work must be continued. The hooded vulture remains critically endangered throughout the W-Arly-Pendjari complex. Our project has provided relevant data on the species conservation status around the W Reserve and successfully raised awareness within communities. However, awareness raising efforts in this region need

to be stepped up, given the conservation status of this species. Expanding these efforts to all reserves, particularly "Pendjari Biosphere Reserve" reserve in Benin, is essential for landscape-scale conservation. Building on the commitment we have seen; the next step should be establishing vulture conservation clubs within each district. This will empower communities to uphold the strategies they helped define. Additionally implementing telemetry monitoring will provide crucial data for effective hooded vulture tracking.

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

Two manuscripts are currently in preparation for submission to peer-reviewed journals. The first explores how community knowledge, attitudes, and intention shape hooded vulture conservation around Benin's Transboundary Biosphere Reserve, the second investigates the use of local ecological knowledge in understanding the spatiotemporal dynamics of the hooded vulture. Upon acceptance, we will share the main take-home messages via tweets, along with the hashtag #TheRuffordFoundation to acknowledge their funding support for the project. We will also upload the papers on ResearchGate for maximum visibility. We also plan to present these results at international conferences as soon as we have the opportunity, particularly those on birds organised by Birdlife International, the Vulture Foundation and others, while acknowledging the generous support of Rufford.

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

Our project's conclusion emphasises three key next steps. First, we will ensure post-project monitoring as described in the project, through field visits and collaboration with NGOs and partner organisations to assess progress within the communities and the impact of our activities. Second, we intend to continue addressing various topics outlined in section 5 of this report, actively participating in conferences to share our findings and highlight the Rufford Foundation support. We will also forge collaborations with leading organisations such as Birdlife International and the Vulture Foundation. Finally, driven by our passion for conservation, we are committed to expanding our efforts to enhance local community engagement to protect others threatened species.

#### **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?**

We proudly display the Rufford Foundation logo in talks given at workshops and during school outreach programs. We also acknowledged The Rufford Foundation in the two manuscripts undergoing peer for publication.



**Photo 1:** A Model of T-shirts and banners has been designed for raising awareness among local communities, featuring the Rufford logo on the right chest, a photo of the species on the left chest, and a message on the back. The T-shirts have been produced in four different local languages as well as French.

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

**SOFFO Zynatou** (BSc): a civil servant and Biomonitoring and Participatory Officer at African Park, has played a pivotal role in selecting key villages, coordinating surveys, and fostering collaboration with local authorities and NGOs, greatly enhancing our project initiatives. Zynatou's adept coordination skills have strengthened partnerships and improved the overall effectiveness of conservation initiatives. Her impactful contributions also extend to mobilizing communities for awareness campaigns and educational programs for children.

**KPATCHIA Essoham Joel** (MSc): He has been pivotal in collecting essential data through extensive surveys, engaging local communities to glean insights into their knowledge, attitudes, and intentions regarding hooded vulture conservation. Additionally, he played a key role in orchestrating a caravan, and organizing impactful awareness-raising and school outreach tailored. His proactive involvement has significantly contributed to the comprehensive understanding and promotion of hooded vulture conservation initiatives.

**ADAMOU Zoukarnêni** (MSc): Similar to Joel, Zoukarnêni plays a pivotal role in collecting data through thorough surveys, actively involving local communities to extract insights into their knowledge, attitudes, and intentions regarding hooded vulture conservation. Notably, Zoukarnêni takes a crucial role in coordinating the vulture conservation awareness caravan. His proactive engagement has been instrumental in significantly advancing the broader understanding and promotion of hooded vulture conservation initiatives.

**BIO KERI Abdou-Wakilou** (MSc): With my skills in Protected Area Management and Biosphere Reserve management, I have served as the leader of this project. I have

been involved in every stage of the project from start to finish, collaborating with other team members throughout the process.

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

We express our sincere gratitude to The Rufford Foundation for their generous funding that has played a pivotal role in advancing our project. Their support has been instrumental in unraveling the intricate ecological insights held by local communities regarding the status of vulture conservation and the dynamic factors influencing it. Additionally, we extend our appreciation for the invaluable contribution of the foundation in elucidating the attitudes and conservation intentions of these communities towards the hooded vulture, a cornerstone for the sustainable conservation of this species.

Moreover, the Rufford Foundation's funding has empowered us to collaborate closely with these communities, facilitating the development of targeted local strategies for the preservation of the hooded vulture. Beyond conservation efforts, their support has also allowed us to embark on educational initiatives, particularly among the children in the W Biosphere Reserve, fostering awareness and commitment to the cause. We are truly thankful for the Rufford Foundation's unwavering commitment to environmental conservation and community engagement.

### **Some pictures**



**Photo 2:** A closing photo captures the scene in the village of Angaradebou, within the municipality of Kandi. The local communities, now sensitized, raise their voices in unison, proclaiming, "Together, let's save the Hooded Vulture."



**Photo 3:** With joyful spirits, the pupils of the public primary school in Bogo Bogo, Karimama, enter the classroom as dedicated conservationists. Each of them carries a sign bearing a message about vultures and their conservation, while proudly wearing the awareness-raising T-shirts.





**Photo 4:** Images Section: A mixed session bringing together children, youth, and adults engaging in interactive discussions on Hooded Vulture conservation in the municipality of Malanville.



**Photo 5:** Illustration: An image capturing one of our interactive exchanges with the communities discussing local conservation strategies for the Hooded Vulture.



**Photo 6:** Image illustrating an interview session in the commune of Kandi. The respondent points to the Hooded Vulture to attest to their knowledge of the species.



**Photo 7:** An image capturing a scene from the caravan, featuring individuals equipped with awareness tools, passionately advocating and enlightening the communities of Kandi about the significance of Hooded Vulture conservation.



**Photo 8:** Children showing concern about the conservation of vultures by holding signs that say "**Sannu Sannu, su noma nenuna, su kayabere kunusikagi**" (Greetings, we are here to protect the vultures) and "**Iri ma yeber&ku foaba**" (We must protect them).