# Final Evaluation Report

## Your Details

<table>
<thead>
<tr>
<th><strong>Full Name</strong></th>
<th>Josiah Ibrahim</th>
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<tbody>
<tr>
<td><strong>Project Title</strong></td>
<td>Habitat utilization of wading birds in Hadejia-Nguru Wetlands Nigeria</td>
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<tr>
<td><strong>Application ID</strong></td>
<td>34641-1</td>
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<tr>
<td><strong>Date of this Report</strong></td>
<td>13/09/2022</td>
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1. Indicate the level of achievement of the project’s original objectives and include any relevant comments on factors affecting this.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Not achieved</th>
<th>Partially achieved</th>
<th>Fully achieved</th>
<th>Comments</th>
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<td>Conservation education to primary/secondary school students and teachers, as well as orientating surrounding communities on biodiversity conservation</td>
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<td>Through this aspect of the project, participants gained a deeper understanding of the need to conserve biodiversity and the environment, particularly vultures. Around the wetland complex, seven primary/secondary schools established conservation clubs.</td>
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<td>Improving the population of the critically endangered Hooded and Egyptian vulture and other bird species with similar habitat requirements.</td>
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<td>Currently, we are monitoring four different breeding sites for hooded vultures within the wetland complex.</td>
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<td>To determine habitat preference and utilisation of waterbirds across the Wetland complex.</td>
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<td>Wetlands that retain water throughout the year have been utilised more by water birds for foraging than other wetlands that do not retain water. Fishing activities have been recorded more in wetlands that retain water throughout the year, a significant threat to water birds that use these wetlands.</td>
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2. Describe the three most important outcomes of your project.

a). The perception and attitude of community members toward conserving the wetland complex have been transformed through a series of well organised conservation education programmes. Primary/secondary school students are now good ambassadors of conservation.
b). Four breeding sites of hooded vultures have been identified and monitoring of these sites is ongoing. The study site has been shown to be a good stopover and foraging site for the near threatened pallid harrier and other Palearctic migrants.

c). Wetlands that retain water throughout the year have been utilised more than others that do not. Fishing gear has been shown to be the main threat to these wetlands. Fishermen and women have been oriented on fishing gear, reducing the risk of water birds being trapped.

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

Despite an extension, the time to complete the project was not adequate because the prolonged water cover has made access roads to other wetlands challenging, especially for habitat utilisation surveys.

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

At the onset of the project, a meeting was held with community leaders, and the project’s first phase was introduced to them. There was much excitement among the village heads and community leaders when they heard about the project.

The local community (students, farmers and teachers) actively participated in project implementation and benefited from the project in the form of knowledge and skill gains and material gains. For instance, student (conservation club members) participation in the assessment of wetland bird ecological studies and their conservation practices and international biological diversity conservation day have gained knowledge, skill and material benefits like t-shirts and refreshments.

The involvement of two local field guides in fieldwork has provided some green income for the local people. These local guides were also trained in field methods to act as forest conservation guards.

5. Are there any plans to continue this work?

Yes, having known the breeding sites for the four hooded vultures, which are endangered species within the wetland complex, there is a plan to continue monitoring these birds until they are fledged and possibly tag the juveniles with satellite transmitters to study their post-dispersal patterns. By understanding their movements, conservation officers can protect them within the wetlands complex and throughout northern Nigeria, thereby improving their population.

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

The knowledge and skills developed could be used in other places with similar challenges to conserving wetlands. We will share our experience with other local communities, learning institutions, and conservation agencies in Nigeria.
We will achieve these through poster development, seminars, workshops, media such as scientific journals, popular science articles, blog sites, and even the National Park Service Facebook page. Given the need to conserve wetlands in African countries, this project will inspire similar research in Nigeria and possibly Africa.

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

The project has revealed the importance of Hadejia-Nguru Wetlands Nigeria as refugia of biodiversity and conservation concern in the degraded Sahel region in northeast Nigeria. Next, the steps will be:

- Knowing the biodiversity potential of Hadejia-Nguru Wetlands, the most critical step is influencing policy regarding biodiversity conservation in remnant habitats.
- Vegetation and avian species monitoring must be established at Hadejia-Nguru Wetlands.
- Patas monkeys (*Erythrocebus patas*) and olive baboons (*Papio anubis*) were cited during the survey. Although these species are a minor concern on the IUCN Red List of Threatened Species, in this part of the country they appear to be declining. This is due to human activities, alongside poaching. There is a need to conduct surveys of primates in the Hadejia-Nguru Wetlands and to raise conservation awareness to stop hunting of these primates.
- We will continue developing our manuscript for publication and write another proposal for Rufford to continue working on the breeding ecology and movement of the hooded vulture.

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?

Yes, we used the logo on the introduction letters and in all the correspondence with district officials. The RF received publicity during the project period through seminars and school presentations.

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

Josiah Ibrahim: The project coordinator, an expert in water bird monitoring and conservation education officer, has been involved in every project activity and has led the team.

Israel Adedeji Bolade is a team member of this project and a wildlife ecology expert. He has been involved in every activity of the project.

Rahila Meribah Yilangi: She is a team member of this project and a wildlife ecology expert. The team lead for vegetation measurement. She has been involved in every activity of the project.
10. Any other comments?
RF is acknowledged for providing funds which enabled the execution of this critical and well timely project. Thanks to district authorities, local leaders, educators and the entire Hadejia-Nguru Wetlands communities surrounding Lake Chat-Basin National Park for your excellent corporation.