

## Biodiversity Challenge Funds Projects Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus

### Half Year Report

It is expected that this report will be a **maximum of 2-3 pages** in length.

**If there is any confidential information within the report that you do not wish to be shared on our website, please ensure you clearly highlight this.**

**Submission Deadline: 31<sup>st</sup> October 2024**

**Please note all projects that were active before 1 October 2024 are required to complete a Half Year Report.**

**Submit to: [BCF-Reports@niras.com](mailto:BCF-Reports@niras.com) including your project ref in the subject line.**

<b>Project reference</b>	31-003
<b>Project title</b>	Securing critically endangered wildlife and human livelihoods in south-eastern Sénégal
<b>Country(ies)/territory(ies)</b>	Sénégal
<b>Lead Organisation</b>	Zoological Society of London
<b>Partner(s)</b>	Direction des Parc Nationaux, Panthera, Am Bé Koun Solidarité, Antelope Conservation, IUCN/SSC Primate Specialist Group Section on Great Apes
<b>Project leader</b>	Rosie Woodroffe
<b>Report date and number (e.g. HYR1)</b>	HYR1 31 Oct24
<b>Project website/blog/social media</b>	NA

**1. Outline progress over the last 6 months (April – September) against the agreed project implementation timetable (if your project started less than 6 months ago, please report on the period since start up to end of September).**

Please note that we successfully applied to delay the start of our Darwin grant by one quarter (CR24-010). Thus, we are reporting on three, rather than six, months of work.

Our project is at a very early stage but is making clear and steady progress. All project agreements have been signed, allowing funds to be shared between partners. With the exception of the project veterinarian (see below), project staff have been recruited and fieldwork has started both inside and outside Niokolo-Koba National Park. Project activities and indicators were reviewed at our first Project Board meeting and all remain relevant and appropriate.

Significant achievements in this first quarter include

- Following development of a National Conservation Action Plan for wild dogs (and cheetahs) just before the Darwin grant started, our team travelled to Guinea to help the Office Guinéen des Parcs et Réserves (OGPR) and the Wild Chimpanzee Foundation to develop a new management plan for Badiar National Park, which borders Niokolo-Koba. This is the first

transboundary management activity between the two parks in decades, and was initiated by our regional and national conservation planning for wild dogs and cheetahs. Once finalised, this plan can be reported against standard indicator DI-B01 (which was not originally among our indicators).

- In late July 2024, UNESCO removed Niokolo-Koba from its list of World Heritage in Danger citing our conservation plan for wild dogs, as well as other evidence, among the criteria informing its decision.
- The design of livelihood surveys, education campaigns, desnaring operations, camera trap surveys, and wild dog collaring missions are all at an advanced stage and should all have outputs to report in the coming months.

**2. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.**

Shortly after our Darwin funding was confirmed, we were given an extension to a previous grant. We therefore successfully applied to delay the start of our Darwin grant by one quarter (CR24-010). Thus, we are reporting on three, rather than six, months of work.

Three weeks after our funding was confirmed, and before our project started, Sénégal held national elections which led to a change of government. The incoming Minister of Environment and Sustainable Development appointed a new Director of National Parks, who appointed a new Conservateur of Niokolo-Koba National Park. As a result, our established relationships with government at every level had to be re-established. This process was time-consuming, delaying some field activities, but ultimately very productive.

These changes delayed our recruitment of the project veterinarian. It has emerged that the Direction des Parcs Nationaux (DPN) has only one veterinarian (indeed, there is only one wildlife veterinarian in all of Senegal), and the incoming Director was unwilling to second him to our project, as had been verbally agreed previously. We have now agreed a new plan with DPN in which we will work with the DPN veterinarian in the first year on wildlife-related activities while working with non-DPN veterinarians to initiate rabies vaccination outside the park, recruiting a new full time veterinarian in Y2. We are therefore submitting a change request to shift international wildlife veterinary training into the Y2 budget.

**3. Have any of these issues been discussed with NIRAS and if so, have changes been made to the original agreement?**

Discussed with NIRAS:	Yes/ <del>No</del>
Formal Change Request submitted:	Yes/ <del>No</del>
Received confirmation of change acceptance:	Yes/ <del>No</del>
Change Request reference if known: CR24-010 (for change of start date; change to veterinarian training funds have not yet been discussed with NIRAS)	

**4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2024 – 30 September 2024)**

**Actual spend:**

**4b. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this financial year (ending 31 March 2025)?**

Yes  No

**4c. If you expect an underspend, then you should consider your project budget needs carefully.** Please remember that any funds agreed for this financial year are only available to the project in this financial year.

**If you anticipate a significant underspend because of justifiable changes within the project, please submit a re-budget Change Request as soon as possible. There is no guarantee that Defra will agree a re-budget so please ensure you have enough time to make appropriate changes to your project if necessary. Please DO NOT send these in the same email as your report.**

**NB: if you expect an underspend, do not claim anything more than you expect to spend this financial year.**

**5. Are there any other issues you wish to raise relating to the project or to BCF management, monitoring, or financial procedures?**

No.

**6. Please use this section to respond to any feedback provided when your project was confirmed, or from your most recent annual report.** If your project was subject to an Overseas Security and Justice Assistance assessment please use this space to comment on any changes to international human rights risks, and to address any additional mitigations outlined in your offer letters. Please provide the comment and then your response. If you have already provided a response, please confirm when.

Our responses to the feedback we received are given below, with the feedback in *blue italics* and our responses in plain text.

*• dependency on key project staff (one veterinary officer) is a risk. While long-term sustainability was responded to in your letter, it would be useful to have a plan in place to deal with the eventuality of the vet leaving or becoming ill during the project;*

As noted above, this is an issue which has already arisen with the project. It has become apparent that there is currently only one wildlife veterinarian in DPN, indeed, there appears to be only one in the whole of Senegal, highlighting the importance of this element of capacity development. In partnership with DPN, we have now developed a plan which should help to meet our project needs

- (i) We have identified a newly-qualified veterinarian, with some wildlife experience, much enthusiasm, and glowing endorsements from all who have worked with her, who will start with our project full time in 2025. Excitingly, she will be the first female wildlife veterinarian in Senegal, helping to contribute to our GESI goals.
- (ii) Until she starts, we will initiate our domestic dog work on a temporary basis with domestic animal veterinarians.
- (iii) Throughout, we will work with the one DPN veterinarian as needed (e.g., for collaring missions, developing snare removal plans, etc).
- (iv) Employing multiple veterinarians would exceed the budget of this project. However, DPN allows some of its non-veterinarian elite agents to perform some activities which elsewhere would demand veterinary qualifications. We will work with DPN and other partners to build the capacity of these agents, so that coverage is in place to address any emergencies if the veterinarian is travelling or unwell. Of course, in the long term we hope to secure additional funds to support a small veterinary unit for DPN.

*• it is not clear if the development of water projects for grazing and inoculation of chickens will be enough to deter the scale of illegal activity. What was the barrier to chicken inoculations in the past (was it only vet capacity)?*

Although these activities were identified from local community development plans, we agree that it is not clear whether they will be sufficient to deter illegal use of Niokolo-Koba; this is a reason for evaluating them on a small scale before proposing to implement them all around the park. Our initial livelihood questionnaire is seeking to better understand the reasons for illegally accessing the park, and the barriers to alternative livelihoods such as chicken farming.

Questionnaire results will be used to inform livelihood activities, altering or amending them if needed.

*• biannual camera monitoring of people and animals does not sound like a lot. Will this be enough?*

We are confident that biannual camera trap monitoring inside Niokolo-Koba will be sufficient to meet the specified needs. Each of these camera surveys covers the whole park (approximately 9,000km<sup>2</sup>). Over 400 cameras are used; deploying and retrieving them takes 6 field teams several weeks. The cameras are in place for 3-4 months, and each survey generates literally millions of images, which take months to process and analyse. As flooding of roads makes Niokolo-Koba largely inaccessible for several months each year, surveying more frequently would make it almost impossible for the field teams to do anything else.

Because camera trapping on this scale is so labour-intensive, project partners Panthera-Senegal leads these park-wide surveys every two years, alternating them with more focused surveys aimed at estimating carnivore population density. These focused surveys provide valuable wildlife monitoring information, on which we shall draw, but they do not give the same “snapshot” information on people, prey, etc provided by the park-wide surveys.

Camera trap surveys outside Niokolo-Koba will follow the same protocol as the park-wide surveys, to provide comparable data on benefits and threats to the focal species, as well as the focal species themselves.

*• in addition to monitoring dog bites (indicator 2.9), could the incidence of human rabies cases relative to the number of reported dog bites be recorded over the project period? While the number of dog bites has been shown to be a reliable indicator of human rabies risk, this will probably change as the number of dogs vaccinated increases;*

We certainly plan to collect data on human rabies, as well as dog bites. However, our experience from a parallel project in Kenya is that, because these numbers are low, they are subject to stochastic variation, potentially generating imprecise indicators of project performance. It is for this reason that, like many other projects, we have proposed dog bite injuries as a headline indicator, retaining human rabies as a subsidiary measure. We note that a decline in the number of dog bites, as the number of vaccinated dogs increases, is exactly the sort of change we are hoping to see.

*• has detailed consideration been given to minimising personal security issues (in addition to gender or other sectoral issues mentioned in the safeguarding policies described) associated with dealing with illegal activities?*

Safeguarding was discussed in some detail at our first Project Board meeting, where it will be a standing item on the agenda for the lifetime of the project. Personal security is of course a key concern for DPN, which leads on all antipoaching activities, in relation both to its own staff and to local communities with whom they interact. The antipoaching work entailed in this project concerns de-snaring, so it is less likely to entail encounters with armed poachers than is the standard patrol approach with which DPN rangers are familiar. Nevertheless, all such work entails risks to personal security, and risk assessments are being reviewed and updated for all project activities.

*• it is not clear the extent to which local communities have been consulted about the proposed activities (some of which may be beneficial, but others such as increased law enforcement may be perceived otherwise);*

Local communities are being consulted before any activities take place in their areas of residence. We maximised the chances of our activities being locally acceptable by proposing interventions identified during consultations held with local communities, before the project was conceived, in the course of developing a “charter of good governance” intended as a “model for participatory conservation of biodiversity and natural resources on the outskirts of the protected area”, led by project partner Am Bé Koun Solidarité (1). Livelihood activities were chosen from local community development plans, which were developed with substantial engagement from communities and other stakeholders (e.g., 2,3).

Although not every community member may agree with increased law enforcement in the park, it is important to bear in mind that (i) the particular form of law enforcement we are conducting

entails simply removing snares placed illegally in the park, rather than actively confronting poachers; (ii) snaring is not a commonly used approach to poaching in Senegal, indicating that the number of poachers setting snares is very low and the overwhelming majority of community members will be unaffected; (iii) snaring inside a national park is an activity which Senegal's democratically elected government has identified as illegal; (iv) snaring is an extremely inhumane and wasteful way to harvest bushmeat; in a study in Uganda, 63% of animals killed in snares were left to rot as the snares were not checked (4); (v) where snares are set and then abandoned, desnaring can be likened to "litter-picking" as well as to "law enforcement"; (vi) snaring is capable of extirpating wild dog populations (5), and this particular population appears to be genetically irreplaceable. Taking into account all these factors, we feel that the balance of harm vs benefit strongly favours our de-snaring activities.

*• to what extent has local market demand for chicken production been confirmed?*

The proposal to promote chicken farming as an alternative to wild meat was derived from local development plans for one of communities in which we are working {Commune de Linkering, 2021 #3515; Commune de Tomboronkoto, 2020 #3514}. However, before any such livelihood work takes place, local acceptability and demand will be confirmed through household questionnaires, with activities amended if required.

*• the application is still limited in how it intends to engage with gold miners (both legal and illegal), who appear to be key to protecting the long-term biodiversity of the Park;*

We plan to target our engagement with gold miners based upon where our surveys outside Niokolo-Koba detect priority wildlife. We note that the new government has shown increased resolve to tackle the problem of illegal mining, with a recent ban on mining in the worst affected areas (6).

*• while the project is timely, it is not clear that a sustainable solution is achieved within just 3 years. It would therefore be helpful to clarify how ZSL will transfer project management responsibilities to named local partners, and to have a plan in place to help these local partners secure follow-on funding;*

We appreciate and agree that a sustainable solution to conserving our focal species and area will not be in place within this three-year project. Indeed, our community activities are targeting just three communities outside Niokolo-Koba; even if they were successful, they would need to be expanded to surround the entire park in order to have their maximum benefit.

All of our work is conducted in close collaboration with local partners; we have only one full time team member who is not Senegalese, and he is working hard to integrate his work into Senegalese systems and partner organisations. All our wildlife work is conducted in close collaboration with DPN, and all our community and education work is led by Senegalese development NGO Am Bé Koun Solidarité. We are well aware of the need to help these partners to secure future funding to maintain and expand successful project activities. We are also aware that the decision of UNESCO to remove Niokolo-Koba from the list of "World Heritage in Danger" looks likely to encourage substantial investment in the area from the World Bank. We are working to empower our partners to try to secure access to some of these funds, to support an expanded project in future.

*• it would be helpful to have numerical indicators for numbers of individuals/households that will be targeted in the logframe (indicators 0.3, 0.4).*

The numbers of individuals/households will be updated in future following the (imminent) administration of the livelihood questionnaire.

**Literature Cited**

- (1) echoriental.com (2018) *Tamba : Élaboration d'une charte de bonne gouvernance à la périphérie du Parc National de Niokolo Koba/ULB Coopération-Am Bé Koun et les acteurs en conclave*. <https://echoriental.com/tamba-elaboration-dune-charte-de-bonne-gouvernance-a-la-peripherie-du-parc-national-de-niokolo-koba-ulb-cooperation-am-be-koun-et-les-acteurs-en-conclave/>.
- (2) Commune de Tomboronkoto (2020) *Plan de Développement Communal (PDC) de Tomboronkoto 2020-2025*. République du Sénégal.

(3)	Commune de Linkering (2021) <i>Plan de Développement Communal (PDC) de Linkering 2021 - 2025</i> . Republique du Sénégal.
(4)	Mudumba, T., Jingo, S., Heit, D. & Montgomery, R.A. (2021) The landscape configuration and lethality of snare poaching of sympatric guilds of large carnivores and ungulates. <i>African Journal of Ecology</i> , <b>59</b> , 51-62.
(5)	Leigh, K.A. (2005) The ecology and conservation biology of the endangered African wild dog ( <i>Lycaon pictus</i> ) in the Lower Zambezi, Zambia. PhD thesis, University of Sydney.
(6)	Reuters (2024) <i>Senegal suspends mining to protect Faleme river</i> . <a href="https://www.reuters.com/business/environment/senegal-suspends-mining-protect-faleme-river-2024-08-28/">https://www.reuters.com/business/environment/senegal-suspends-mining-protect-faleme-river-2024-08-28/</a> .

## Checklist for submission

<b>For New Projects (i.e. starting after 1<sup>st</sup> April 2024)</b>	
Have you <b>responded to any additional feedback</b> (other than caveats) received in the letter you received to say your application was successful which requested response at HYR (including safeguarding points)? You should respond in section 6, annexes other requested materials as appropriate.	X
If not already submitted, have you attached your <b>risk register</b> ?	X
<b>For Existing Projects (i.e. started before 1<sup>st</sup> April 2024)</b>	
Have you responded to <b>feedback from your latest Annual Report Review</b> ? You should respond in section 6, annexes other requested materials as appropriate.	NA
<b>For All Projects</b>	
Include your <b>project reference</b> in the subject line of submission email.	X
Submit to <a href="mailto:BCFs-Report@niras.com">BCFs-Report@niras.com</a> .	
Have you <b>clearly highlighted any confidential information</b> within the report that you do not wish to be shared on our website?	X
Have you reported against the most <b>up to date information for your project</b> ?	X
Please ensure claim forms and other communications for your project are not included with this report.	X