



**BIODIVERSITY
CHALLENGE FUNDS**



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: 31st 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 including your project ref in the subject line.

Project reference	IWTEV012
Project title	Understanding the drivers of illegal exotic pet ownership in India
Country(ies)/territory(ies)	India
Lead Organisation	Wildlife Conservation Society-India
Partner(s)	Wildlife Conservation Society
Project leader	Kritika Balaji
Report date and number (e.g. HYR1)	April 2024 - September 2024 (Half Year Report 2)
Project website/blog/social media	N/A

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).

Although we are not looking for specific reporting against your indicators, please use this opportunity to consider the appropriateness of your M&E systems (are your indicators still relevant, can you report against any Standard Indicators, do your assumptions still hold true?). The guidance can be found on the resources page of the relevant fund website.

Output 1: Detailed baseline of online and physical trade in target species in pet trade in India.

Activity 1.1: Conduct consultation meetings with expert veterinarians, biologists, and wildlife rescue centre staff, etc. to develop nuanced understanding of the species in trade, consumers, and challenges.

In addition, to previously conducted interviews (23 experts (8F, 15M), we interviewed two more experts (2F, 2 Exotic pet veterinarians) in September 2024. Recent interviews align with previous findings indicating that birds, particularly African grey parrots (Appendix I), are the most popular exotic pets in India at the moment.

Activity 1.2: Conduct preliminary online searches to finalise a list of keywords for social media/e-commerce websites for further data compilation.

This activity was completed in Year 1. See Y1 Annual report.

Activity 1.3: Conduct web-scraping to compile data from media reports, CITES database, e-commerce, and social media websites, etc.

This activity was completed in Year 1. With support from another project funded by the Bureau of International Narcotics and Law Enforcement (INL) data on media-reported seizures has been gathered for the period from 2014 to 2024. With support from our INL-funded project, CITES trade data on live animal imports and exports for commercial purposes has been gathered from 2010 to 2023. We identified 20 independent e-commerce websites selling exotic pet species, contributing valuable baseline data. On YouTube, we found 44 channels advertising or selling CITES Appendix I and II species, from which baseline data has also been collected for further analysis.

Activity 1.4: Clean and analyse data from 1.3 to establish a detailed record of the exotic pet species found in online markets, with a focus on Psittaciformes, Squamates, and Testudines.

Analysis of the collected data is ongoing as we work toward developing the baseline report (Indicator 0.1). The media-reported seizures, which document 400 incidents involving 250 different species, highlights the diversity of species in the exotic pet trade in India. On YouTube, birds were more prominently featured than reptiles, with most identified channels specializing in parrot species.

Activity 1.5: Conduct annual market surveys in target pet markets in two cities in India.

In September 2024, in accordance with WCS CWT Safety and Security guidelines, we conducted a survey of Crawford market, Mumbai. Stores showcased bird species, including Amazon parrots.

Output 2: Consumer profiles for target species including their motivations for purchase and triggers for behaviour change.

Activity 2.1: Develop the questionnaire (based on existing consumer survey literature) for interviews with owners/collectors and get human studies ethics committee clearance for the same.

This activity was completed in Year 1. See Y1 Annual report.

Activity 2.2: Conduct interviews with owners/collectors of exotic pets to further develop questionnaire and refine messaging options to change behaviour.

We conducted 20 interviews (16 male, 4 female) via phone and in person with current and former exotic pet owners across India, including in Mumbai and Ahmedabad. The species owned ranged from African grey parrots to Indian star tortoises and iguanids. Interviews revealed that key motivations for purchasing exotic pets included companionship, intelligence, and considerations of space. While owners were reluctant to specify reasons that might discourage them from purchasing exotic pets in the future, we gleaned that legality and concerns about zoonotic diseases were likely significant considerations.

Activity 2.3 Finalize questionnaire for online consumer survey including pre-tested messaging options.

The survey questionnaire, along with messaging options gleaned from the previous activity, was developed, with feedback sought from the Behaviour Insights Team.

Activity 2.4: Create and run consumer survey website, including promoting it on social media and search engines.

Website development and marketing companies were identified to run the survey. With support from the WCS-India Communications Program, we also developed graphics and visual content for gamification. The survey launch is slightly delayed owing to challenges in gleaning results

(messaging options) from Activity 2.2 (please see an explanation in response to Question 2) and will commence at the start of Y2Q3.

Activity 2.5: Analyse consumer survey data to identify and develop at least 3 key consumer profiles in consultation with behaviour change experts.

This activity is slightly delayed and will commence in Y2Q3.

Output 3: Baseline of public sentiment toward exotic pets to inform strategy and assist with future demand reduction interventions.

Activity 3.1: Compile metadata on social media posts of exotic pets (along with Activity 1.3).

Comments were collated for 44 identified YouTube channels. Videos over the past year were reviewed, and comments from each video were extracted using web-scraping software. Regional comments were translated into English using Microsoft Copilot and then reviewed for accuracy.

Activity 3.2: Conduct analysis of meta data to establish an understanding of public sentiment toward exotic pets, against which future interventions can be measured.

After careful evaluation, we determined that AI tools—specifically Microsoft’s Copilot and OpenAI’s ChatGPT—are the most effective means for conducting sentiment analysis based on pre-established criteria to categorize comments as Positive, Negative, or Neutral. Videos were sub-categorized into those focused on sale/advertising, caregiving, and market/shop visits. We identified over 110 videos and with sentiment analysis completed for 85 of them.

Output 4: Behaviour change strategies for priority consumer profiles of target species.

Activity 4.1: Develop behaviour change strategies in consultation with behaviour change experts.

This activity is planned to commence in Y2Q4.

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.

- Indicator 2.1 for Output 2 in our log frame states interviews with at least 30 exotic pet owners should be completed and analysed by Y2Q2. However, we have encountered challenges in Activity 2.2 related to this output, primarily due to hesitancy among non-native exotic pet owners to participate in interviews. This reluctance appears to stem from recent updates in regulations issued by central governing agencies. Earlier this year, the Ministry of Environment, Forest, and Climate Change issued a [notification](#) mandating that owners declare their exotic pet species on a government portal by 28th August 2024. Records from states and union territories including [Karnataka](#) and [Delhi](#), indicate that the number of owners registering is less than anticipated, in comparison to the [32,000 Indians](#) who declared their ownership in a 2020 Amnesty Scheme. Some owners approached declined to be interviewed, likely due to concerns that it may be linked to the declaration mandate. Some expressed scepticism about government involvement in the interview process, despite our assurance that anonymity and confidentiality would be maintained. We anticipate being able to conduct some more interviews to meet this output by Y2Q3, however, are unclear whether the target of 30 can reasonably be met. The ongoing updates and changes in legislation may also affect participation in the survey (Activity 2.4). We remain optimistic that incorporating gamification into the survey, along with guaranteed anonymity, will help us achieve our target results. To meet the target, we will circulate the anonymous survey among experts and interviewed owners to share with their contacts.
- Indicator 3.2 for Output 3 in our log frame states that Sentiment analysis of at least 100 Facebook posts selling exotic pets will be completed in Y2Q1. However, we have faced challenges in collecting comments on Facebook (Meta) due to the company’s policies against web scraping. We explored alternative methods, including specialized software and manual compilation, but disregarded these options due to legal considerations and the labour-intensive nature of the effort. Further, observations of exotic pet groups on Meta, supported by an INL-

funded project, reveal that interactions on this platform are largely limited to buyer-seller exchanges, such as inquiries about prices or delivery details, with minimal comments reflecting public or general sentiment. Consequently, we do not believe that Meta is the most suitable platform for sentiment analysis; rather, we find YouTube to be more appropriate for this purpose. We will communicate this learning to NIRAS in a Change Request to amend this indicator.	
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/ No
Formal Change Request submitted:	Yes/ No
Received confirmation of change acceptance:	Yes/ No
Change Request reference if known: <i>If you submitted a financial Change Request, you can find the reference in the email from NIRAS confirming the outcome</i>	

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Estimated underspend:
4c. If you expect and 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?
None

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.
Feedback on our Annual Report was “ <i>There is no specific activity and timeline for the production of a baseline report(s), yet this is a key product. Please set this out in the description of outputs in the next report.</i> ”

We appreciate the reviewers' comment. Data collected through Activities 1.1, 1.4, and 1.5, is being analysed toward the development of a baseline report, with chapter outlining completed. Sentiment Analysis of YouTube videos Activity 3.2 is also ongoing toward the development of a report highlighting public perception toward popular exotic pet species. We anticipate that baseline reports will be ready by Y2Q4, at which time we also intend to make them publicly available.

Checklist for submission

For New Projects (i.e. starting after 1st April 2024)	
Have you responded to any additional feedback (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.	
If not already submitted, have you attached your risk register ?	
For Existing Projects (i.e. started before 1st April 2024)	
Have you responded to feedback from your latest Annual Report Review ? You should respond in section 6, annexes other requested materials as appropriate.	
For All Projects	
Include your project reference in the subject line of submission email.	
Submit to BCFs-Report@niras.com .	
Have you clearly highlighted any confidential information within the report that you do not wish to be shared on our website?	
Have you reported against the most up to date information for your project ?	
Please ensure claim forms and other communications for your project are not included with this report.	