

Biodiversity Challenge Funds Projects Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus Half Year Report

Note: 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 2023

Project reference	DARCC002
Project title	Building capacity and community resilience for grassland conservation in Bhutan
Country(ies)/territory(ies)	Bhutan
Lead partner	Royal Botanic Garden Edinburgh, 20a Inverleith Row, EH3 5LR
Partner(s)	Government of Bhutan, Department of Forest and Park Services. Government of Bhutan, National Biodiversity Center
Project leader	Colin Pendry
Report date and number (e.g. HYR1)	31 October 2023, HYR2
Project website/blog/social media	n/a

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

Project start date: 9 May 2022

Overview

Tshering Dorji completed his MSc studies in September 2023 and is now working towards finalizing the rest of the objectives.

Output 1

1.1 Enrol Darwin Fellow on MSc in Biodiversity and Taxonomy of Plants at RBGE/University of Edinburgh, and provide support throughout the course.

Tshering completed the MSc course with Distinction in September 2023.

1.2 Organize training programme for Darwin Fellow in digital plant photography, with particular focus on macro photography.

The training was carried out during Tshering's initial visit to RBGE and the techniques taught have been applied in the subsequent field trips. Training in slide digitisation and metadata capture was recently carried out.

1.3 Organize training programme for Darwin Fellow on database management of graminoid species. Dataset creation and maintenance.

Tshering has used Padme, RBGE's in-house taxonomic database to record his specimen data and to compile a dataset of existing Bhutanese graminoid collections at RBGE.

Output 2

2.1 One month field study in Dagala region of Bhutan to study the grassland communities to assess the conservation status of graminoid species, and threats and opportunities to livelihoods.

The first field work took place from 12 July to 14 August 2022 and the second trip to Bhutan was from 3 May to 11 June 2023. The methodology followed the protocols developed by Caroline Lehmann's Global Grassy Group, with 20 sites surveyed in 2022 and 22 in 2023.

- 2.2 Collect ecological and population data, and voucher herbarium specimens of at least 30 key graminoids and economically important grassland species of medicinal importance.

 150 herbarium specimens were collected during the fieldwork, and they have been identified to 98 morphospecies (26 graminoid species).
- 2.3 Prepare bilingual identification guides for at least 20 species of graminoids using high quality images using Plants and You format developed at RBGE.

 The format for the Plants and You guides has been finalized and the first guides are being prepared using images collected in the field, scans of herbarium specimens and 401 graminoid slides which he has digitised from RBGE's Bhutanese slide collection.
- 2.4 Upload image profiles and occurrence data in Pl@ntNet system for at least 20 species of graminoids to improve the identification confidence scores of the Pl@ntNet identification app. Uploading of images to Pl@ntNet will take place in Y2 Q3.

Output 3

- 3.1 Conduct awareness-raising programme on the importance of rangeland biodiversity and carry out initial baseline and end of year surveys amongst 50 HH in Dagala. Initial baseline survey conducted and household information collected from 32 HH (80% coverage). The remaining 20% of the households not surveyed in the Y1 have been identified by project partners in Bhutan and will be surveyed in Y2Q3 to bring the coverage closer to 100%.
- 3.2 Conduct awareness raising programme including 3 days community workshop for least 50 HH in importance of biodiversity and sustainable management of rangeland resources. Tshering is planning the workshops with project partners in Bhutan for awareness programme to be held at the end of Y2. The workshop will cover various components such as rangeland management, biodiversity conservation, sustainable utilization, and strategies for promoting more equitable and inclusive management group.
- 3.3 Test and revise prototype bilingual identification guides with the community groups and use the feedback to improve the identification guides developed in Output 2. The identification guides will be tested in the workshops at the end of Y2

Output 4

4.1 Identify herbarium specimens using the resources in India (CAL), Nepal (KATH) and UK (Natural History Museum, RBG Kew, RBG Edinburgh), and liaising with the grass specialists at these institutions.

Identification of the specimens has been carried out at RBGE and Kew. KATH and CAL will be visited in Q4.

4.2 Gain experience and receive mentorship in biodiversity/poverty alleviation projects from experienced Darwin Initiative project leaders/partners at RBG Kew and RBGE. Tshering has developed a good relationship with staff members at RBGE and is preparing applications for future work based on the research carried out in this project.
4.3 Work with specialists at RBG Kew (Maria Vorontsova) and RBGE (Caroline Lehmann) to improve understanding of grassland ecology, sampling methods, and sustainable management. Tshering has been a member of Caroline Lehmann's research group since his arrival, aligning his research with their sampling methods and he has worked closely with team members on the analysis of his data. He has spent one week at Kew and worked there with Maria Vorontsova. He is currently working on a paper describing his study and its implications for Bhutanese rangeland management.
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.
n/a
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:
4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2023 – 30 September 2023)
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 2024)?
Yes ☐ No x Estimated underspend: £
4c. If yes, then you need to 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 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?	
n/a	

If you are a new project and you received feedback comments that requested a response, or if your Annual Report Review asked you to provide a response with your next half year report, please attach your response to this document.

All new projects (excluding Darwin Plus Fellowships and IWT Challenge Fund Evidence projects) should submit their Risk Register with this report if they have not already done so.

Please note: Any <u>planned</u> modifications to your project schedule/workplan can be discussed in this report but should also be raised with NIRAS through a Change Request. <u>Please DO NOT send these in the same email</u>.

Please send your **completed report by email** to BCF-Reports@niras.com. The report should be between 2-3 pages maximum. <a href="mailto:Please state your project reference number, followed by the specific fund in the header of your email message e.g. Subject: 29-001 Darwin Initiative Half Year Report