

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	DARCC014
Project title	Enhancing the capacity and capability of orchid conservation in Armenia
Country(ies)/territory(ies)	Armenia
Lead partner	Royal Botanic Gardens Kew
Partner(s)	Nature Heritage NGO
Project leader	<i>Dr Aisyah Faruk, RBG Kew</i>
Report date and number (e.g. HYR1)	<i>31 October 2023; HYR2</i>
Project website/blog/social media	<i>Updates via @KewScience or [REDACTED]</i>

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.

The project aims to enhance the conservation of temperate, terrestrial orchids and their associated habitats in the Caucasus Biodiversity Hotspot through increasing the capability and capacity of local communities, civil institutions, and NGOs in Armenia to identify and conserve orchids in situ and ex situ.

In the second year of the project, we set out to review the learnings from year 1 to ensure that the participants have retained and are confident in utilising the lessons learnt from their training. This was done via an online survey, which was sent out to the participants of the CITES training course held in July 2022. The survey was done in both English and Armenian. Out of the 15 participants that took part in the training, 13 responded to our survey. On average, the majority of respondents felt comfortable describing the aims and functions of CITES (8.8 score out of 10) and would be confident in undertaking a Non-Detriment Finding for a species (8.6 score out of 10). Participants felt the least confident in participating in a Conference of the Parties, although this could be a language barrier issue rather than confidence in the subject matter itself. The second least confident score was related to analysing a proposal to amend the CITES appendices (for addition or removal of species). We will take this learning to the stakeholder meeting at the end of the project to identify any further support we can give to increase this confidence score.

In July 2023 project PI conducted a joint training day with Professor Matthew Davies from the University of Cambridge on community participatory mapping development and applications for the project staff and wider Institute of Botany staff members. The training was done in Yerevan, and the trained team members were then tasked to engage with the Yenokavan community and conduct

participatory mapping with the members of the village, which gave the PI and Prof Davies a way of reviewing retention and learning from the previous training. We co-developed the applications to capture data relating to landscape use, alongside discussing current challenges with different community members (including the community Head and his office staff). Semi-structured interviews with 90 community members (~25% of Yenokavan community) was done to identify socio-economic background, current knowledge of in situ plant conservation, this equated to 69 women and 21 men.

The MSc student recruited in the first year of the project has started actively working with the project members on her project. She participated in field expeditions with the in-country team members where she was trained to carry out identifying orchids, collecting seeds and assessing threats to orchid populations. Quadrat sampling was used to assess species population size and the results from this study will be used to inform project partners and other stakeholders of the project, along with her thesis write up.

Training in ex situ conservation in-country by trained personnel has exceeded the original target (95% women) and evidence of learning from this training was measured through pre- and post-training surveys. These have yet to be analysed by the PI. Between May – August 2023, the in-country team collected 16 species of orchids from 34 populations. The collection team was able to use their training from year 1 to identify the best time to collect orchid seeds, and how to ripen pods that were collected before point of dispersal. PI saw evidence of the team using the ripening chambers that were set up a year ago, and the fine sieves that were purchased by in-country partners to clean orchid seeds. A new member of the in-country seed processing team also attended the online Seed Conservation Techniques Course led by RBG Kew in September 2023.

The following shows updates relating to Darwin Standard Indicators:

[DI-A01] Number of people from key local stakeholders completing relevant training on orchid trade and conservation.

Baseline: 0 people trained on orchid trade and conservation

Update: Target of 10 people trained exceeded (15 in total) in Year 1

[DI-A02] Number of training placement at the MSB completed by individuals of key national stakeholders on banking exceptional species.

Baseline: 0 people on training placements for conserving exceptional species.

Update: Target of 2 people trained met (1 in Year 1 and 1 in Year 2).

[DI-A03] Number of local organisations with improved facilities and staff knowledge for seed banking short-lived species

Baseline: 0 local organisation with capability and capacity to bank short-lived species.

Update: Target of 1 institution built up in terms of capability and capacity met in Year 1

[DI-A05] Number of project partners reporting to have delivered further training to other members of staff on orchid conservation by project end

Baseline: 0 trainers trained staff

Update: 2 trainers target met; 11 trained by trainers in-country exceeded (original target 8)

[DI-C04] New assessments of biodiversity resource use for the Yenokavan community published.

Baseline: 0 assessment available

Update: Semi-structured interviews conducted and finished; Participatory Mapping conducted, analysis is still in progress.

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.

Initially, the unripe orchid pods were left in the paper bags in the ripening chambers as the chamber was quite small compared to the number of pods collected and team was worried about cross-contamination between species. The result was mould growing on the paper bags which can damage the seeds, therefore we needed to find an alternative solution for large volumes. We decided to make platforms in the chamber to enable more pods to be ripened, and we are trialling putting the cut stalks with pods in water to carry on the development process. Seeds from all are being processed and banked in-country, after which they will be duplicated and analysed for viability. In future, we will need to look at setting up multiple chambers for ripening if the water method does not work. This may have an impact on the number of species with viable seeds are safeguarded as part of the project.

Challenges relating to financial market fluctuations meant that the exchange rates have impacted the amount the in-country partners receive for their activities. This was mitigated by the PI and have yet to be seen to impact the outputs of the project significantly. However, we might still see a slight overspend in the overall project budget, which will be part of the in-kind contributions from RBG Kew.

In-country partners are finding it challenges to procure a fluorescent microscope for the amount budgeted due to the rising costs of equipment and shipping. Therefore, they have engaged with the Institute of Botany to apply for capital funds that will help plug this gap. We will need to wait for approval from the Armenian Ministry, which can take a few months.

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

Discussed with NIRAS: No

Formal Change Request submitted: No

Received confirmation of change acceptance No

Change request reference if known: N/A

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2023 – 30 September 2023)

Actual spend: £ [REDACTED]

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 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?

No

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

Please send your **completed report by email** to BCF-Reports@niras.com. The report should be between 2-3 pages maximum. **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**