



Darwin Initiative/Darwin Plus Projects Half Year Report (due 31st October 2020)

Project reference	25-017
Project title	Enhancing rural Caucasian community livelihoods through fruit and nut conservation
Country(ies)/territory(ies)	Armenia and Georgia
Lead organisation	Royal Botanic Gardens Kew
Partner(s)	Nature Heritage NGO (Armenia), National Botanical Garden Georgia (Georgia) and Institute of Botany, Georgia (Georgia)
Project leader	<i>Dr Aisyah Faruk (PI), Ian Willey (Co-PI)</i>
Report date and number (e.g. HYR3)	31/10/2020 HYR3
Project website/blog/social media	https://www.kew.org/science/our-science/projects/enhancing-rural-caucasian-livelihoods-fruit-and-nut-conservation ; https://www.kew.org/read-and-watch/adventures-in-armenia ; <i>Tweets done on Co-PI account (@)</i>

1. 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).

Output 1: Partners have faced difficulties accessing their respective target communities due to COVID-19. Despite the challenges, they have managed to engage with their respective Biodiversity Champions remotely and continued to work towards achieving Output 1. Below are short summaries of achievements towards Outputs 1.3, 1.4, 1.5, 1.6 and 1.7:

Georgia

Having already established a demonstration plot in year 2, partners are extending the size of their plot within the school grounds. In September 2020, stakeholder-meetings involving village residents, committee members, school principal and the village governor were held to finalise the plot. This wider engagement will ensure the demonstration plot is accessible and ready to be cultivated to the target number of community members. Partners have also begun working with their target community to identify suitable methods for disseminating project learning to neighbouring communities. They have analysed results from a survey conducted earlier in the year which found 177 out of 195 people from neighbouring communities are interested in sustainable harvesting techniques.

Armenia

Demonstration plots in Armenia are developing well, with community members reporting to partners how the plants are growing. Out of the 12 individual shrubs planted, only two did not survive the first growing season (1 *Crataegus meyeri* and 1 *Berberis vulgaris*). Partners believe this was due to the poor root system of the plant prior to planting out. Similar with the Georgian partners, the Armenian partners will continue to gather survey data safely (i.e. through Biodiversity Champion and Steering Community) to identify if targets are being met. They are also continuing to develop their community-led conservation action plan by engaging with the community remotely, giving confidence that despite COVID-19, Output 1.6 and 1.7 will be achieved before project end.

Planned large gatherings to disseminate project learning and Conservation Action Plans to neighbouring communities in Armenia have had to be abandoned due to the pandemic and recent military unrest between Armenia and Azerbaijan. We are in discussion with partners on ways to continue this dissemination via the production of a book/booklet, highlighting project learning and listing edible species in Armenia. Following the pause in holding large gatherings, partners have been restricted to small training sessions. They have since trained three more members of the community in sustainable harvesting techniques.

We are working with both the Georgian and Armenian partners to assess the possibility of training a further 10% of the community by end of project (i.e. total 20% of community members trained by project). This is reliant on further restrictions on travel not being reimposed during the winter months, which is likely, therefore, we are working on alternative methods of training such as dissemination via instructional leaflets for local Steering Committee members to distribute safely.

Output 2: Partners faced problems accessing their institutions and field sites in March and April 2020 but have capitalised on time in both settings since restrictions were lifted April through May. To date, partners across Armenia and Georgia have collected and processed seed from 110 species. They have also duplicated these collections to the MSB.

Data on the collections (e.g. locality etc) and seed quality is available online for 83 species (68%) via the Data Warehouse. Partial data is available for 109 species (awaiting results on seed quality). Therefore, the project is on course to completing output 2.2.

Output 3: Partners have continued to gather data both in the field and from partner countries to complete the remaining six Red List Assessments. Acquiring data from other countries to complete assessments has proven difficult due to limited access across many institutions. However, we are beginning to see some progress as more countries are slowly lifting restrictions and are confident all 20 assessments will be submitted to SIS by February 2020.

Output 4: Despite limited access to their institutions MSc students and their supervisors continue to progress on achieving Output 4.

Armenia: Razmik Papikyan successfully defended his MSc thesis in May 2020. He is now working with MSB co-ordinators and in-country project supervisors to publish his findings in peer reviewed journal.

Georgia: Despite having to take personal leave from university this year, Ana Kvlividze continues to make good progress with finalising her MSc. She has drafted several chapters of her thesis and is on course for completion before project end.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months (for Covid-19 specific delays/problems, please use 2b). Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

At the beginning of Year 3, Dr Elinor Breman stepped down as PI for the project following a change of role within RBG Kew. As a result, Dr Aisyah Faruk has taken up the PI role and successfully recruited Ian Willey as Co-PI. Although an unexpected development, we can report no notable problems arose in the change-over process.

Armenian partners have reported difficulty completing Red List Assessments due to absence of GPS data on herbarium sheets and the added requirement for co-operation between neighbouring countries. They have found alternative methods to gather GPS data using Google Earth. although time consuming is now yielding positive results.

Seed numbers for some collections are low, leading to concerns over the future use of collections by NGOs and local communities. Lower seed numbers can in part be attributed to the more challenging nature of collecting seed from trees and shrubs.

Trees often occur in lower densities in the environment meaning greater distances need to be covered to locate the next possible individual to collect seed from, therefore for some species, low seed numbers may have been unavoidable. For future projects relating to tree seed collecting, we would stress the importance of maximising genetic diversity by targeting more individual trees rather than trying to maximise number of species.

During the project we also found that some collections of seeds were unviable (not alive). This was rather unexpected, as partners are highly experienced seed conservationist, and therefore, are well trained in conserving seeds of wild flora. Seeds from wet fruit and/or woody species can, however, be exceptionally difficult to conserve. We are working closely with partners to identify specific reasons why some of the collections are unviable and at which point in the process we must adapt to ensure future collections are of good enough quality for long-term conservation.

One major development in the last couple of months is the escalated conflict between Armenia and Azerbaijan. Although the target community and partner institution are far from the disputed zone, the country is being impacted by the recent clashes and being placed under additional restrictions on top of the current measures to combat the Covid-19 pandemic. If there are further escalations, it is highly probable that delivery of project outputs can be delayed.

2b. Please outline any specific issues which your project has encountered as a result of Covid-19. Where you have adapted your project activities in response to the pandemic, please briefly outline how you have done so here. Explain what residual impact there may be on your project and whether the changes will affect the budget and timetable of project activities.

Activities reliant on access to target communities has, unsurprisingly, been impacted the most. Although the situation has been improving since the summer, alternative plans are in place to ensure intended outputs can still be achieved by March 2021, for example, training smaller groups to ensure social distancing and developing a booklet to disseminate to community members. The bulk of work is complete towards Output 3, but partners are still gathering data from nearby countries to complete global assessments. If the pandemic worsens across the region, resulting restrictions can impact delivery of this output before the project end.

The final meeting in Georgia to present project findings at the Annual Biodiversity Conference is now being cancelled due to the pandemic. Funds were in place for all project partners to travel to Georgia, which has now been redirected based on close conversation with partners followed by a Change of Request Form. We will review current governmental advice on travel in the new year and request change of use of existing travel budget for Kew staff accordingly.

2c. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: Yes (partner travel budget change but not Kew travel budget)

Formal change request submitted: Yes (partner travel budget change, not Kew travel budget)

Received confirmation of change acceptance: Yes (partner travel budget change, not Kew travel budget)

3a. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend:

3b. 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 rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget 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.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

We would like to inquire about the possibility of a no-cost extension to enable delayed project activities to continue past the 31st of March 2021. Is this raised in the same way (ie CRF) and if so, would there be a specified deadline for submission?

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

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

Please send your **completed report by email** to Darwin-Projects@ltsi.co.uk. The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 25-001 Darwin Half Year Report**