





Darwin Initiative/Darwin Plus Projects Half Year Report

(due 31st October 2021)

Project reference	27-014
Project title	Coffee natural capital for environmental and livelihood sustainability in Uganda
Country(ies)/territory(ies)	Uganda
Lead organisation	Royal Botanic Gardens, Kew
Partner(s)	National Agriculture Research Organization (NARO), Kampala Makerere University, Kampala Kyagalanyi Coffee Ltd, Kampala (<u>Volcafe Uganda</u>) Clifton Coffee Ltd, Bristol
Project leader	Aaron Davis
Report date and number (e.g. HYR1)	Half year report, Year 2 (HYR1). 27-104 started on 1 October 2020. We provided a yearly report (based on six months project duration) in May 2020: this is our first six month report.
Project website/blog/social media	https://www.kew.org/science/our-science/projects/uganda- coffee-natural-capital

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).

Please see Implementation Timetable (attached), which provides details of progress and other information for Year 2 HYR 1 activities and progress).

Output 1

- 1.1. Coffee diversity/forest survey. Field work activities have been undertaken according to schedule, despite some delays due to CV-19 restrictions in UK (international travel/border control) and Uganda (in-country movement). Fieldwork and other in-country activities by RBG Kew staff have been delayed for much of Year 2. However, travel restrictions have now been eased and if the status remains as is, we will be able to undertake all Year 2 activities and deliverables as per the project Log Frame. In-depth fieldwork has been undertaken in Zoka Forest, and Semuliki (Bwamaba) Forest. Field data has been collated and archived. Field survey in Itwara and Kalinzu forests by Ugandan project staff are scheduled for Qtr 3 (2021).
- 1.2 <u>GIS Course.</u> Due to CV-19 restrictions this has been delayed and is now scheduled for February (Qtr 4) 2022.

Output 2

2.2 & 2.5(a). Coffee value chain logistics and Coffee quality evaluation (industry). Liberica coffee samples (a set of 10 samples) have been assessed by two independent sensory (tasting) panels. Five of the 10 samples (each 300 g) received good to excellent scores for

quality and flavour (higher value commercial); and five as poor to good (lower value commercial). Coffee price point and export volumes are now under discussion.

- 2.5(b). <u>Coffee quality evaluation (chemistry)</u>. Detailed chemical (metabolomic) analysis was completed undertaken in Qtr 1 and Qtr2 (2021) using: (1) Low res. LC-MSn (Velos Pro), (2) high res. LC-MSn (Fusion), (3) GC-MS (liquid injection), (4) GC-MS (Thermal desorption) and (5) NMR. This work was more extensive that originally envisaged. The data has been analysed and the results produced. Interpretation of the results is ongoing.
- 2.6. <u>Nursery set up</u>. Planting stock was acquired from Zirobwe (Luwero) farm sites. A new, two hectare Liberica coffee farm in southern Uganda is scheduled for planting in 2022.

Output 3

- 3.1 & 3.2. <u>Installation of climate equipment and recording of data</u>, and <u>Soil moisture survey</u>. Due to CV-19 restrictions this has been moved to Qtr 3 (2022). These activities are scheduled to commence on 5 December 2021. Activity within this time-frame will keep the delivery on schedule as per the Log Frame (i.e. within Year 2).
- 3.3, 3.5a, 3.5b. <u>Pest and disease survey</u>, and <u>Biodiversity surveys</u> (zoological and botanical). The first year (i.e. project year) of activities have been completed by Ugandan researchers. Reports to be gathered in Qtr 3 2021.
- 3.4. <u>Field trial (Liberica)</u>. Planting stock was acquired from Zirowbwe (Luwero) farm sites in Zoka Forest and Semuliki (Bwamba) Forest in Qtr 1 and 2 (2021), propagated and planted in the field trials. It is now under careful management (i.e. end Qtr 2).

Output 4

4.1. <u>Field trial set up (eugenioides)</u>. Eugenioides localities/distribution survey was completed in Qtr 2 (2021): material of eugenioides coffee was located at Itwara, and planting materials were collected for the field trial. Propagation of the material is underway.

Output 5

- 5.1. <u>Yearly meetings</u>. We have regular virtual meetings with the project team and other stakeholders. The first in-person meeting has been moved to Qtr 3 (2021) due to CV-19 travel restrictions.
- 5.2. <u>Data assembly</u>. Mapping and other data has been databased and archived. A literature review is in progress. Visuals (images and illustrations) are being archived for use in the Strategy Document.
- 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.

There have been no problems outside those caused by CV-19 restrictions. Project partners have been extremely responsive and proactive, and have demonstrated substantial flexibility in the face of CV-19 restrictions. Budget expenditure for the FY 2021/22 is on course.

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.			
In-country activities designated to RBG Kew staff have been delayed due to CV-19 travel restrictions. If travel restriction easements continue to hold, and RBG Kew are permitted to travel to and within Uganda, we will be on-track for project Log Frame delivery for 2021/22. We (RBG Kew) are now scheduled to be in Uganda in Qtr 3, December 2021 (meetings, plot and farm work, other field work) and in Qtr 4, February 2022 (GIS course, meetings, collaborative fieldwork.			
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/ No		
Formal change request submitted:	Yes/ No In Year 1 report.		
Received confirmation of change acceptance	Yes/No, and revised expenditure actioned.		
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?			
No, thank you.			
We may have secured additional funding from a private beneficiary to support farm selection of Liberica coffee.			

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

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