



Darwin Initiative/D+ Project Half Year Report (due 31st October 2019)

Project reference	26-017
Project title	Maximising community and conservation benefits from plants of Mount Mulanje
Country(ies)/territory(ies)	Malawi
Lead organisation	Botanic Gardens Conservation International (BGCI)
Partner(s)	Mulanje Mountain Conservation Trust (MMCT), Forestry Research Institute of Malawi (FRIM)
Project leader	Kirsty Shaw
Report date and number (e.g. HYR3)	<i>HYR1</i>
Project website/blog/social media etc.	https://globaltrees.org/news-blog/new-value-for-an-endangered-tree-to-serve-mulanje-mountain/

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

1.1 Ten nurseries, established and certified in project 23-026, produce a minimum aggregate total of 400,000 Mulanje Cedar seedlings in years 1-3, benefiting 150 nursery workers.

Eight nurseries were maintained from Darwin project 23-026; two ceased functioning due to poor performances and disagreements within the nursery groups, and because they had access to other livelihood opportunities whilst there was a delay to fund transfers leading to uncertainty of a continued market of seedlings for restoration. 8.5 kg of Mulanje Cedar seed was collected from *ex situ* forestry stands and distributed to the nurseries: 4 kg in June 2019 and 4.5 kg in September 2019. So far, 84,625 Seedlings have been propagated:

Nursery	Traditional Authority	District	Members (Women)	Seedlings propagated
<u>Makolera</u>	Mkhumba	Phalombe	16 (15)	20,000
<u>Lomoliwa</u>	Mabuka	Mulanje	16 (13)	4,700
<u>Kadewere</u>	Mkhumba	Phalombe	14 (9)	12,600
<u>Nakhonyo</u>	Mkanda	Mulanje	9 (5)	8,227
<u>Kazembe</u>	Mkanda	Mulanje	8 (6)	9,700
<u>Chole</u>	Mkanda	Mulanje	15 (10)	9,800
<u>Gambeya</u>	Mabuka	Mulanje	8 (7)	10,198
<u>Nessa</u>	Mabuka	Mulanje	12 (3)	9,400

1.2 Design and implement planting trials at 8 sites on Mount Mulanje, benefiting people employed to transport and plant seedlings

To help design new restoration trials, a team from the Ecological Restoration Alliance of Botanic Gardens (Louise Egerton-Warburton from Chicago Botanic Garden, US; Stuart Hall ex Stellenbosch University Botanic Garden, South Africa; Carole Elliot from Kings Park and Botanic Garden, Australia; and Kurt Dreisilker from The Morton Arboretum, US) - with FRIM, BGCI and MMCT staff - visited sites planted with Mulanje Cedar on Mount Mulanje from 15th-21st September

2019. A workshop was conducted to discuss trial designs with a written design being drafted. The trials will investigate soil and vegetation dynamics, and the use of fire adapted companion species on Mulanje Cedar growth and survival. The team also suggested trials for MMCT's nursery, to test mountain soils impacts on Mulanje Cedar growth, and the effects of planting fire resistant species in firebreaks on Mount Mulanje.

2.1 Write contract for consultants.

An essence marketing and use consultant has been contracted to conduct a feasibility study of Mulanje Cedar Essential oils in year 1. In addition, MMCT and BGCI have produced a draft contract for a socio-economic consultant. Once finalised, MMCT will advertise for a socio-economist to complete a baseline socio-economic survey before the end of year 1.

2.2 Establish project steering committee to guide and monitor project progress and development of conservation-commerce model.

The Project Steering Committee was established and the first meeting was held on 10th July 2019. The committee membership included: Mr Carl Bruessow (MMCT), Mr Henry Chinthuli (MMCT), Mr Ibrahim Mitole (MMCT), Dr Tembo Chanyenga (FRIM), Mr Innocent Tauro (FRIM), Ms Kirsty Shaw (BGCI), Mr Alex Hudson (BGCI), Senior Chief Chikumbu (Representative of Traditional Leaders), Mr Suzgo Gondwe (Environmental Affairs Department), Mr Stephen Sakhama (Environmental Affairs Department), Mr K. Kafatia (Malawi University of Science and Technology), Mr Mavuto Kapyepye (Farm), Dr Zacharia Magombo (National Herbarium and Botanic Gardens of Malawi), Mr. Dickson Mazibuko (Chancellor College of Malawi), Mr Erick Mbigwani, (District Forestry Officer Mulanje), Mr David Nangoma (African Parks).

During the meeting, MMCT and BGCI outlined the steering committee's role and members agreed to support the project to ensure it is kept on target and help with any issues that occur.

2.3 Commission study to improve understanding of Mulanje Cedar potential uses and markets, identify commercial partners and quantify potential.

MMCT contracted Arthur Stevens to conduct a feasibility study for essence marketing and use of Mulanje Cedar. He completed a desk study in July, which highlighted potential uses and extraction techniques. He visited Malawi from 11th to 23rd August 2019 to investigate research options and the potential uses and value chains of Mulanje Cedar essential oils in Malawi. He visited research institutes (E.g. Chancellor College and Malawi Bureau of Standards) and commercial operators for essential oil products (E.g. Kibebe Malawi, Maluso Cooperative Union, Kawandama Hills, Chemical Enterprises and Candlex Limited).

2.6 MMCT and FRIM monitor nursery certification scheme and Cedar Growers and Planters Association (CGPA) (established in project 23-036) which becomes fully inclusive of planters for essence extraction.

FRIM inspected the 8 Mulanje Cedar nurseries in August 2019. They reported all the nurseries are well situated and well managed. FRIM certified 2 nurseries (Nakhonyo and Kadewere) for achieving the minimum standards of grading their seedling stocks before planting out.

3.1 Identify optimal sustainable extraction techniques for Mulanje Cedar essence.

Arthur Stevens submitted the feasibility study (activity 2.3) to BGCI and MMCT in October 2019 that identifies the research needed and the institutions that could carry it out to identify the optimal sustainable extraction techniques for products from Mulanje Cedar oil.

3.4 Work with Traditional Authorities in year 1 to identify 150 people (60% women) from ten communities around Mount Mulanje to form essence extraction enterprises.

MMCT plan to meet TAs to explain the project and to start the selection process in November 2019. The slight delay is due to the need for the essence marketing and use consultant report, which was delayed by the funds transfer from Darwin Initiative, but delivered in October 2019.

4.1 Conduct survey to identify other plant species of Mount Mulanje and their potential uses and commercial value in year 2

MMCT and BGCI have identified experts to do the plant survey before the end of year 1 (UK ethnobotanist based in Malawi and botanists from South African National Biodiversity Institute).

2a. 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.

The delay in receiving funds from the Darwin Initiative has led to some delays to activities. The main impact into year 2 is with “hedge planting and management training” and “to plant hedges in community areas”. A change request was submitted, and some funding for these activities has been transferred to Year 2. There is also a delay to the plant survey to investigate the plant communities at planted sites and to identify potential uses and commercial value to other plant species (Activity 4.1); however, we are working to ensure this is undertaken in year 1.

2b. 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

Received confirmation of change acceptance Yes/No

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.

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

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. Additionally, if you were funded under R25 and asked to provide further information by your first half year report, please attach your response as a separate 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: 25-035 Darwin Half Year Report**