

## Darwin Initiative/Darwin Plus Projects Half Year Report (due 31<sup>st</sup> October 2021)

<b>Project reference</b>	26-023
<b>Project title</b>	Bridging agriculture and environment: Southern African crop-wild-relative regional network
<b>Country(ies)/territory(ies)</b>	Malawi, Tanzania, Zambia
<b>Lead organisation</b>	Bioversity International
<b>Partner(s)</b>	University of Birmingham (UoB); Southern African Developing Community (SADC) Plant Genetic Resources Centre (SPGRC), Lusaka, Zambia; Malawi Plant Genetic Resources Centre (MPGRC), Lilongwe, Malawi; National Plant Genetic Resources Centre (NPGRC) Tropical Pesticides Research Institute (TPRI), Arusha, Tanzania; Zambia Agricultural Research Institute (ZARI), Lusaka, Zambia.
<b>Project leader</b>	Mohammad Ehsan Dulloo
<b>Report date and number (e.g. HYR1)</b>	31 October 2021, HYR3
<b>Project website/blog/social media</b>	<a href="http://www.cropwildrelatives.org/sadc-cwr-net/">http://www.cropwildrelatives.org/sadc-cwr-net/</a>

### 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).

#### Activity 1 – Establishment of regional SADC CWR network

The White paper on the establishment of a regional SADC crop wild relatives (CWR) network was submitted and was endorsed by the Joint meeting of SADC ministers of agriculture and food security, and fisheries and aquaculture in May 2021. The survey results among key stakeholders on access and benefit sharing (ABS) of *in situ* genetic resources in SADC and Eastern African region were analysed and a draft document on harmonisation of ABS of *in situ* genetic resources was completed and submitted for review by the policy unit of Bioversity. Preparations are underway for holding an ABS virtual workshop in early 2022.

#### Activity 2 – Enhanced SADC *in situ* CWR conservation Malawi, Tanzania and Zambia.

National partners in the three countries carried out in-depth field activities assessing CWR species populations in the selected reserve sites. Thus, in Malawi, the Zomba and Mulanje Mountain Forest Reserves, and Nyika National Park were explored for identifying CWR populations for future monitoring. Preparations are ongoing to officially launch the first CWR genetic reserve at Zomba, Malawi. In Zambia, three national parks (Kafue, Kasanka and south Luangwa) were visited, while in Tanzania, the Morogoro region, Mrimba district, and Udzungwa Mountain were visited. Malawi and Tanzania are still working on the elaboration of their National Strategy and Action Plan. The 'SADC Strategic Action Plan for the Conservation and Use of CWR' is currently being prepared. A scientific paper on regional assessment and conservation planning of CWR in southern Africa was submitted in July 2021 to the peer-reviewed journal of Diversity and Distributions.

#### Activity 3 – Enhanced SADC *ex situ* CWR conservation

The upgrading of the SADC Regional Genebank at SPGRC was completed with the installation of an electronic temperature monitoring alarm system which is now fully functional. National partners collected and multiplied seed samples of the targeted CWR for *ex situ* conservation and duplication at SADC genebank. Malawi collected seed samples of 11 taxa (from Mulanje and Nyika National Parks) and coffee seedlings were planted in field genebanks at Chitedze Research Station. In Zambia 61 accessions of rice wild relatives were planted and 25 samples of seeds were harvested and conserved in the Zambian genebank and also will be shared with breeders of their rice breeding programme for further evaluation. In Tanzania, 26 accessions of five priority CWR were collected including *Coffea kihansiensis* (10 accessions), *Penisetum* sp. (6 accessions), *Oryza* sp. (3 accessions), *Gossypium longicalyx* (4 accessions), *Sorghum* sp. (3 accessions).

#### **Activity 4 – Enhanced SADC CWR use in crop improvement**

The predictive characterization tasks to be carried out in Malawi and Tanzania were postponed to the second half of the year due extensive field work being carried out in Activity 2. National partners in Malawi and Zambia have engaged with breeders in their respective countries and shared CWR accessions of rice and eggplants showing drought tolerance and resistance to pest and diseases for further evaluation and use in breeding programmes.

#### **Activity 5 – Enhanced farmers benefits from CWR conservation and use**

Project team members in Tanzania were trained virtually on hosting focus group discussions with farmers for implementing incentive mechanisms for CWR-derived benefits. Field visits among identified target communities were carried out in Malawi and Tanzania. In Malawi, a draft plan to finalise a tender bidding exercise and farmer training was produced. The CWR cost-benefit breeding model was tested in Malawi through a survey among 30 breeders across Africa.

#### **Activity 6 – Capacity building**

Implementation of the training activities (checklist, priority list and methodology description) by trainees continued virtually through emails with support from by UoB and Bioversity staff, but limited feedback has so far been obtained. A plan for second phase of the training programme was prepared and will be rolled out in the next few months. In Malawi, two educational visits were conducted in reserve areas with students from three universities. MPGRC participated in a regional training on conservation of CWR. Regarding the final dissemination conference, two international conferences were identified – the Second Agrobiodiversity Congress (15-18 November 2021) and the African Protected Areas Congress (APAC) – 7<sup>th</sup> to 12<sup>th</sup> March 2022. A concept note was submitted to the Steering Committee of the Second Agrobiodiversity Congress for a side event led by SPGRC, the Alliance and UoB. A proposal has been submitted to the APAC, after two consultation meetings with SPGRC and UoB to draft a proposal for a side event (a conservation clinic and posters from the partner countries) where the project's results would be disseminated among the protected area community and build a linkage with the protected areas authorities in the African region.

#### **Management and coordination**

New Letters of Agreements were entered with the project partners. Since April 2021, two coordination meetings were held to review and monitor progress on activities, which were captured in the project's Monitoring and Evaluation tool.

#### **Communication and visibility**

The project's [webpage](#) has been updated with regular short stories, including a newspaper article in Malawi on launching a genetic reserve at Zomba reserve was published, and a presentation on the project was also made by UoB and Bioversity at the online [Farmer's Pride International Conference](#) in June 2021. A policy brief for the establishment of a SADC-CWR network was produced, and two articles relating to the project published in Issue 11 of the CWR newsletter.

**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**

<b>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.</b>	
The major problems were related to the lack of engagement of the trainees of the training programme on CWR conservation planning, specifically to prepare the deliverables (CWR checklist, list of priority CWR, occurrence dataset for priority CWR and written methodologies). In Zambia, the Department of National Parks and Wildlife (DNPW) suspended the update of the game management plans due to financial limitations and COVID-19 restrictions.	
<b>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.</b>	
COVID-19 has impeded travelling of international staff to properly provide support and training to the national partners for most of the activities. These had to be made by virtual communications using Teams and WhatsApp. Specific activities most affected include the revision of game management plans in Zambia due to government restriction; and the preparation of the Tool kit/ How to manual for informing the farmer-benefit mechanism design and assessment training programme due to the reduced capacity of trainees, who are forced to work from home, and thus unable to effectively carry out the exercises.	
<b>2c. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?</b>	
Discussed with LTS:	No
Formal change request submitted:	No
Received confirmation of change acceptance	No
<b>3a. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this year?</b>	
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Estimated underspend: £	
<b>3b. If yes, then you need to consider your project budget needs carefully.</b> Please remember that any funds agreed for this financial year are only available to the project in this financial year. <b>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.</b>	
<b>4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?</b>	
Nothing to raise.	

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](mailto: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