

ANNEX VI

INTERIM NARRATIVE REPORT

- This report must be completed and signed by the Contact person.
- The information provided below must correspond to the financial information that appears in the financial report.
- Please complete the report using a typewriter or computer (*you can find this form at the following address <Specify>*).
- Please expand the paragraphs as necessary.
- *Please refer to the Special Conditions of your grant contract and send one copy of the report to each address mentioned.*
- The Contracting Authority will reject any incomplete or badly completed reports.
- The answer to all questions must cover the reporting period as specified in point 1.6.

List of acronyms used in the report

ACP	<i>African, Caribbean and Pacific</i>
ARC	<i>Agricultural Research Council</i>
CGFRA	<i>Commission on Genetic Resources for Food and Agriculture</i>
CWR	<i>crop wild relatives</i>
DAFF	<i>Department of Agriculture, Forestry and Fisheries, Directorate Genetic Resources (South Africa)</i>
FAO	<i>Food and Agriculture Organization of the United Nations</i>
FAREI	<i>Food and Agricultural Research and Extension Institute</i>
GERMINATION	<i>Genetic Resources Management in Action towards an Indian Ocean Network (a complementary project)</i>
MSIRI	<i>Mauritian Sugarcane Industry Research Institute</i>
NSAP	<i>National Strategic Action Plans</i>
PGR	<i>plant genetic resources</i>
SADC	<i>Southern African Development Community</i>
SANBI	<i>South African National Biodiversity Institute</i>
SC	<i>steering committee</i>
SPGRC	<i>SADC Plant Genetic Resources Centre</i>
STI	<i>science, technology and innovation</i>
TNA	<i>training needs assessment</i>
UNEP/GEF	<i>United Nations Environment Programme/Global Environment Facility</i>
UoB	<i>University of Birmingham</i>
UoM	<i>University of Mauritius</i>
ZARI	<i>Zambia Agriculture Research Institution, Ministry of Agriculture and Livestock, Zambia</i>

1. Description

1.1. Name of **beneficiary of grant contract**: Ehsan Dulloo

1.2. Name and title of the **Contact person**: Ehsan Dulloo

- 1.3. **Name of partners in the Action:** International Plant Genetic Resources Institute (IPGRI, Bioversity International) Italy; University of Birmingham (UoB) UK; University of Mauritius (UoM), Mauritius; Directorate Genetic Resources (DAFF), South Africa; Ministry of Agriculture and Livestock, Zambia (ZARI).
- 1.4. **Title of the Action:** *In situ* conservation and use of crop wild relatives in three ACP countries of SADC region
- 1.5. **Contract number:** FED/2013/330-210
- 1.6. **Start date and end date of the reporting period:** 1 January – 31 December 2014
- 1.7. **Target country(ies) or region(s):** Mauritius, South Africa, Zambia, and SADC region
- 1.8. **Final beneficiaries &/or target groups¹ (if different) (including numbers of women and men):** Final beneficiaries: Farmers; Target groups: scientists working with crop wild relative (CWR) conservation and use, breeders, policymakers.

The final beneficiaries of the Action are the men and women farmers who face the effects of climate change and who need access to new, adapted seeds for sustainable, cost-effective agricultural production. In each country women and men farmers will be invited to participate in stakeholder workshops in the preparation of the National Strategic Action Plan and share their different knowledge bases and skills regarding their needs.

The target groups involve national agricultural (including breeders) and environment scientists who are responsible in countries for implementing activities related to conservation and use of agricultural biodiversity and who undertake research in the area of agricultural biodiversity. Capacity for the prioritization of CWR and sites for conservation is low and innovative tools for characterization and identification of adapted traits are lacking. One major constraint is a lack of knowledge of the option values and benefits which CWR offers. Defining areas for CWR conservation as genetic reserves and improving management of CWR *in situ* imply a need for new linkages between environmental and agricultural scientists; Breeders also need innovative technologies of pre-breeding for tapping into genetic diversity of CWR for breeding new climate-resilient varieties.

In the first year of the project a survey was undertaken among 85 people from the target group to understand their knowledge about CWR and their needs for capacity building. During the first year 26 scientists (13 men and 13 women) from 14 SADC countries were trained in *in situ* conservation techniques. Another 25-30 scientists including breeders will also be trained in the predictive characterisation and pre-breeding using CWR in year 2.

- 1.9. **Country(ies) in which the activities take place (if different from 1.7):** n.a

¹ “Target groups” are the groups/entities who will be directly positively affected by the project at the Project Purpose level, and “final beneficiaries” are those who will benefit from the project in the long term at the level of the society or sector at large.

2. Assessment of implementation of Action activities

2.1. Executive summary of the Action

Please give a global overview of the Action's implementation for the reporting period (no more than ½ page)

The main objectives of the project are to: (i) to enhance the scientific capacities within the partner countries (Mauritius, South Africa and Zambia) and the Southern African Development Community (SADC) region to conserve crop wild relatives (CWR) and identify useful potential traits for climate change adaptation and (ii) to develop National Strategic Action Plans (NSAP) for the *in situ* conservation of CWR in Mauritius, South Africa and Zambia, as a means of underpinning regional food security and mitigating the adverse effects of climate change. During the first year of the project, a first step has been to carry out a training needs assessment (TNA) of the capacities of stakeholders in the *in situ* conservation and use of CWR in the three project countries as well as in the SADC region in order to design the regional training workshops of the project. The inception workshop of the project was held in Zambia in April 2014 during which the results of the TNA were presented and work plans for the project jointly developed with the project partners. A steering committee was established and its first meeting was held jointly with the inception workshop to allow steering committee members to get a deep understanding of the objectives of the project. The project countries started to compile their national CWR checklists and inventories in preparation for the development of NSAPs, with the support from Bioversity and UoB. Development of the guidelines for preparation of national plans for conservation of CWR was initiated by UoB, with active contribution from the project partners.

The first regional training workshop on *in situ* conservation and diversity assessment techniques was held in November 2014 in Mauritius, and was attended by 27 trainees from 14 SADC countries. The second regional training workshop on predictive characterization and pre-breeding, scheduled to take place in the first year was postponed to April 2015 in Pretoria, South Africa. A project website, a project leaflet and a visual identity for the project were developed and a project short name (SADC Crop Wild Relatives) was selected. Awareness about the project was raised on various occasions within the partner countries, such as broadcasting news about the inception workshop and regional training workshop in Mauritius. A communications and visibility strategy was also prepared and submitted to EU ACP.

2.2. Activities and results

Please list all the activities of the contract implemented during the reporting period as per Annex 1.

Activity 1.1 Conduct a needs assessment of the capacity of stakeholders in the conservation and use of CWR (R1)

Topics/activities covered: A detailed training needs assessment (TNA) of the capacities of different national stakeholders in the SADC region, especially with regard to scientific and technological capacities existing within the countries for the conservation and use of CWR was carried out at the beginning of the project. Bioversity International in consultation with UoB and the national project teams developed an online questionnaire using the Survey Monkey application to carry out the assessment.

Before implementing the online survey, stakeholder analyses were undertaken in each partner country to identify key stakeholders that could participate in the survey. This enabled: (i) the identification of groups and organizations that are of importance to the

project's implementation and to the longer-term use of project results; (ii) the development of a shared understanding of the roles of stakeholders in the implementation of the CWR project and (iii) the identification of institutions and individuals to participate in the training needs assessment survey. A regional stakeholder list targeting the 12 SADC countries which are not partners in the project was compiled by Bioversity in consultation with the SADC Plant Genetic Resources Centre (SPGRC).

The national project coordinators shared the link to the survey with the identified key stakeholders in their respective countries. Bioversity invited the stakeholders identified in the other SADC countries to participate in the survey. A total of 85 people responded to the survey, of which 72 completed most of the questions, while 13 considered it not to be related to their activities and did not complete it.

The survey results at national and regional level were presented and discussed at the project's inception workshop, which took place in Zambia 14–16 April 2014. The national and regional survey results were consolidated in the 'baseline report on capacities to conserve and use CWR within the SADC region' (Annex 2).

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

All three countries reported gaps in stakeholder participation in the survey. In an effort to narrow the gap, follow-up stakeholder consultations were made in each country through individual meetings with identified key stakeholders from whom no reply had been received through the online survey. During the follow-up stakeholder consultation meetings, additional information related to conservation and use of CWRs was obtained.

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

R1 – National capacities in the three ACP countries on conservation and use of CWR of SADC region are improved

1.1 Indicator 1: Baseline report is prepared analysing the capacity of SADC member states in *in situ* conservation and capacity to use CWR in breeding programmes (R1)

The results of the TNA survey have been summarized in national TNA reports for each project country. Based on these three national reports and the regional results, the 'baseline report on capacities in SADC member states on conservation and use of CWR' has been prepared (Annex 2). The TNA found that capacities in *in situ* conservation and use of CWR are indeed lacking in the partner countries. The conclusion section in the baseline report provides a summary of the findings.

A1.2 Conduct two thematic regional training workshops on in situ conservation and use of CWR, based on identified capacity building needs (R1)

Topics/activities covered: The two regional training workshops that are to take place address *in situ* conservation of CWR and diversity assessment techniques in the first workshop, and predictive characterization and pre-breeding of CWR in the second workshop. The first workshop was held in Mauritius, 10–13 November 2014, and the second workshop was postponed to take place 13–16 April 2015, in South Africa.

For the first workshop, UoB and Bioversity developed a detailed curriculum on *in situ* conservation and diversity assessment techniques, based on the training needs identified in the three partner countries and in the SADC region in Activity 1.1. The SPGRC secretariat

co-ordinated the identification and nomination of participants from SADC countries. The workshop was co-organized and hosted by the University of Mauritius (UoM). The workshop was attended by 27 participants from 14 SADC countries, two participants funded by the GERMINATION project and one participant funded by SPGRC. UoB and Bioversity staff delivered the training and three lectures were provided by local experts from UoM and the Mauritian Wildlife Foundation. The full workshop report is annexed (Annex 3). All participants were provided with a certificate of attendance, lecture notes of the 23 lectures provided and additional background documentation.

During the first year, a draft outline has been prepared for the second regional training workshop on predictive characterization and pre-breeding and initial discussions held with resources people from FAO. This outline was shared with SPGRC, to support the nomination of participants from SADC countries for the second workshop.

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

The second regional training workshop was originally planned to take place in the first year. However during the inception workshop, the work plan was redefined and it was decided that the predictive characterization and pre-breeding is best done in the first quarter of second year because the partners will be busy undertaking compilation of the CWR and deciding which priority crops they will be working on. This will determine which traits for predictive characterisation they will focus on in the training workshop. It was decided that the training workshop will be hosted by DAFF in South Africa.

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

R1 – National capacities in the three ACP countries on conservation and use of CWR of SADC region are improved

1.2 Indicator 2: Capacity of at least 30 people from SADC Member States in *in situ* conservation and use of CWR has improved by the end of project (R1)

The first subregional workshop on *in situ* conservation of CWR and diversity assessment techniques, held in Mauritius 10–13 November 2014, was attended by 27 trainees from 14 SADC countries. A detailed workshop report is available (Annex 3).

A1.3 Support on-the-job training in the three ACP countries (R1)

Topics/activities covered: Support has been provided by Bioversity and UoB to the project countries in the preparation of the checklist and inventories. In Mauritius, a meeting with the national stakeholders was held in August 2014, where national project staff received on-the-job training for the preparation of their national checklist. In both South Africa and Zambia, UoB supported the countries, through regular skype meetings, in the preparation of the checklist and inventories.

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

Nothing to report

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

R1 – National capacities in the three ACP countries on conservation and use of CWR of SADC region are improved

1.2 Indicator 2: Capacity of at least 30 people from SADC Member States in *in situ* conservation and use of CWR has improved by the end of project (R1)

The first subregional workshop on *in situ* conservation of CWR and diversity assessment techniques, held in Mauritius 10–13 November 2014, was attended by 27 trainees from 14 SADC countries. A detailed workshop report is available (Annex 3).

A2.1 Develop science, technology and innovation toolkits for the conservation and use of CWR (R2)

Topics/activities covered: Activity 2.1 and activity 2.2 are closely related and will run in parallel. We therefore report jointly on both activities

A2.2 Pilot test the draft toolkits in each participating partner country (R2)

Topics/activities covered: A toolkit tailored to address the needs identified in Activity 1.1 and to help the partner countries (as well as the other countries in the SADC region) in the development of their NSAP for the conservation and use of CWR will be produced based on the existing resource book developed by the UoB and published by FAO (the *Resource Book for the Preparation of National Plans for Conservation of Crop Wild Relatives and Landraces* available at: <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/seeds-pgr/resource-book/en/>). The resource book includes sections on:

- overall context of the importance of agrobiodiversity for food security
- planning and managing CWR conservation
- production of CWR checklists and inventories
- setting CWR conservation priorities
- genetic data analysis of priority CWR
- ecogeographic data analysis of priority CWR
- novel threat assessment of CWR
- gap analysis
- establishment and implementation of *in situ* conservation priorities and goals
- establishment and implementation of *ex situ* conservation priorities as a backup to *in situ* conservation
- monitoring of CWR diversity
- promoting the use of conserved diversity
- information system and data management for CWR conservation.

Each of these sections includes background information, description of the methodologies, various case studies, relevant bibliography, additional materials, and resources that provide the countries with practical examples of the actions required and help them to visualize and understand how to undertake that particular step of the NSAP.

The development of the toolkit will be carried out in parallel with the testing. The current version of the resource book (as well as other relevant references) has been distributed among the partner countries. They have been asked to provide feedback on this document to inform the development of a toolkit tailored to meet the SADC region needs in developing NSAPs. The feedback shall be provided either in track changes directly in the document, in a separate file, or via email. Partners have also been requested to document in detail the single steps and decisions they go through for each activity. The Skype meetings held so far

have proved to be very useful in sharing the partners' experiences in the use of the resource book when developing the CWR checklist and prioritization, thus giving good feedback on how the toolkit can be adapted and improved. In addition, a 'crop and crop genus list for national CWR checklists and checklist prioritization' has also been produced by the UoB in order to help the country partners generating national CWR checklists. This Excel file presents multiple lists of crop genera used for various purposes (major and minor food crops, forestry, ornamental, medicinal and aromatic, etc.), and provides economic value data of crops grown in the SADC region. UoB is using an existing helpdesk created as part of the FP7 project 'Novel characterization of crop wild relative and landrace resources as a basis for improved crop breeding (PGR Secure)' (www.pgrsecure.org/helpdesk) to help the partner countries with the development of their NSAPs. UoB has also provided several bibliographic references that were included in the project intranet that will help further support the country partners to prepare their CWR checklist, undertake species prioritization as well as develop their NSAPs.

The tailored, interactive and online toolkit is being conceived and a test version is expected to be made available by the end of 2015. UoB has prepared a document detailing the basic structure of the online toolkit, how it can work interactively, and describing the elements needed. This document has been sent to IT experts for technical advice on how to implement it.

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

The use of the resource book by some of the partner countries and its subsequent feedback to the UoB has been slightly delayed, initially due to communication challenges between the UoB and the partner countries and later due to delays in the partner countries finalizing the national CWR checklists and carrying out the subsequent prioritization steps (see Activity 3.1 below). The communication issue has been addressed by sending regular emails and arranging regular Skype meetings to monitor work progress. In addition, some of the members of the South African and Zambian teams have been having limited Internet access which makes interaction more challenging. However, we hope that this has now been solved by sending all emails to the partner coordinator who then ensures that the team members receive them.

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

1.1 Indicator 1: A tested toolkit for conservation and use of CWR is available in partner countries (R2)

The resource book *Resource Book for the Preparation of National Plans for Conservation of Crop Wild Relatives and Landraces* developed by UoB and published by FAO, available at <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/seeds-pgr/resource-book/en/> will be used to develop the STI tools. The resource book has been made available to countries for use in project activities. It was used during the first regional training workshop on *in situ* conservation of CWR. Feedback and documentation about the implementation of guidelines from the resource book is collected that will feed into the targeted development of the toolkit for the SADC region.

A2.3 Publish and distribute widely the CWR toolkits (R2)

Topics/activities covered: Activity not started yet

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

Nothing to report

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

Nothing to report

A3.1 Compile baseline information on distribution, diversity, conservation status and threat of targeted CWR in the three partner countries into web-accessible national registries, with linkages to the global Crop Wild Relatives web portal (R3)

Topics/activities covered: The baseline data collection started with the development of a CWR checklist in each country and the subsequent prioritization of CWR in the checklist in order to develop respective national CWR inventories. Countries were advised to follow the guidelines in the resource book in producing the checklists and undertaking CWR prioritization for conservation. UoB has been in regular contact with the partner countries in order to clarify any issues on potential ways of producing the CWR checklist. Additional sources of information needed to complete the checklist have been provided which include the ‘Crop and crop genus list for national CWR checklists and checklist prioritization’ produced by UoB (see Activity 2.1 above). Potential criteria for prioritization have been discussed and UoB has advised on the most commonly used criteria: (i) economic value of the crops, (ii) threat status of the wild relative, and (iii) potential use of the wild relative in crop improvement programmes. Additional data need to be collated and included in the checklist according to the selected prioritization criteria for subsequent prioritization of the checklists. Progress in each country is reported in the following.

Mauritius: Initially produced a preliminary CWR checklist. Further clarification and guidance on what a checklist of CWR is and how it can be created were provided in the ‘Mauritius CWR checklist and prioritization workshop’ held in Mauritius 4–5 August 2014. At the workshop, the Mauritius team, in collaboration with UoB also identified potential criteria to prioritize the CWR checklist which include: economic importance based on national, regional and global economic value and food security/nutrition statistics, utilization potential (gene pool / taxon group concepts), relative threat (using existing Red List data), occurrence status, and whether species are invasive or not. The checklist needs to be completed and prioritized in the beginning of the second project year.

South Africa: South Africa produced a list of crops based on the SPGRC mandate crop list for southern Africa, a crop list from the FAO website from the ‘World Programme for the Census of Agriculture 2010’, crop lists from assessment of activities on underutilized crops, FAOSTAT data for the SADC region and the list of Mansfeld² Genera. The final list contained 441 species of food crops, ornamental, wild edible fruits and nuts, vegetables, industrial crops, forage and fodder crops. The South African National Biodiversity Institute (SANBI) matched this crop list with the South African National Plant checklist to produce the national CWR checklist. Five criteria to prioritize CWR were selected based on their national importance in South Africa. The national CWR checklist contains 2,262 taxa. The final list of prioritized CWR consists of 98 taxa.

² Mansfeld's World Database of Agricultural and Horticultural Crops
January 2012
Technical Reporting Bioversity International Jan-Dec 2014 - FinalRev27apr.doc

Zambia: The Zambia Agriculture Research Institute (ZARI) organized a two day national stakeholder consultative meeting 14–15 October 2014 at Mount Makulu Research Station. The meeting had 12 participants from Zambia Wildlife Authority (ZAWA), Department of Forestry (DoF), the Departments of Biological Sciences and Agricultural Sciences of the University of Zambia (UNZA), Community Technology Development Trust (CTDT), Biodiversity Community Network (BCN), SPGRC and ZARI. The purpose of the consultative meeting was to bring the stakeholders to a common understanding of the SADC Crop Wild Relatives project, to discuss the methodology adopted for generation of two national checklists of CWR and to agree on the criteria for prioritization of the CWR and come up with a general frame of priority CWR species for national conservation. The stakeholder meeting selected 59 crops (29 genera) for the development of the CWR checklist. Two national checklists of CWR were then developed through (i) a global approach in which the list of Zambian vascular plants was matched with the Mansfeld Genera list and (ii) a national approach where the list of Zambian vascular plants was matched with the 59 crops selected by the stakeholder group. Zambia is collating the information needed in order to proceed with prioritization.

The development of the CWR registries was started. Bioversity and UoB have developed Excel templates for the creation of the CWR checklists and inventories to be used by partner countries. These templates will serve as the basis for the information system that will gather and compile all the information from the three countries for the *in situ* conservation and use of CWR. The descriptors for CWR conservation and monitoring used in the templates had been developed by Bioversity and UoB in previous projects, such as the EU funded PGR Forum, and the UNEP/GEF funded global CWR *in situ* conservation project. The Excel template format was developed in the EU funded PGR-Secure project.

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

The development of the CWR checklists and subsequent prioritization has been slightly delayed. This is partly due to technical and partly to administrative reasons. Initial difficulties in Mauritius in defining the scope of the checklist and agreeing on the approach to be undertaken led to delays in starting the activities. Collation of the additional data needed for subsequent prioritization of the final checklists in Zambia and South Africa took longer than expected as criteria for prioritization had first to be agreed upon at national level. Changes in the project teams in Mauritius (late hiring of project assistant and subsequent resignation of the same after one month) and South Africa (change of national project coordinator) slowed down progress.

The ‘Mauritius CWR checklist and prioritization workshop’ was held in Mauritius with the Mauritian project partner 4–5 August 2014 to support the project partner in starting the checklist development. It served in particular to: (i) explain in detail what a CWR checklist is, (ii) determine and agree on a methodology for the creation of a CWR checklist for Mauritius, and (iii) establish and agree on criteria for prioritizing the CWR checklist for Mauritius (see Annex 3). In addition, the ‘*In situ* conservation of CWR and diversity assessment techniques’ workshop held 10–13 November 2014, provided an opportunity to hold individual country sessions to clarify and discuss any issues that the country partners needed help with.

Frequent emails were exchanged and Skype meetings held with the South African and Zambian partners in order to address any difficulties regarding the scope of the checklist, approach to be undertaken as well as to identify sources of the additional data needed to complete the checklist template and hence proceed with CWR prioritization. Zambia convened a national stakeholder meeting to advance the task based on decisions and common understandings of all stakeholders. In South Africa, there were also delays in

finalizing the contracts with SANBI and the Agricultural Research Council (ARC) to carry out the studies necessary for the preparation of the checklists and the identification of conservation sites, due to the need to undertake a budget revision and the change in the national project coordinator.

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

1.1 Indicator 1: Three Exemplar CWR NSAPs developed and published (R3)

During this reporting period, the preparatory work for the development of NSAPs has been implemented. This has involved as discussed above the development of a national checklist and inventory of CWR in each of the participating countries. Further prioritization of the target CWR species and eco-geographic analysis will be carried out in subsequent years. The information obtained from the studies will be used to prepare the NSAPs (see A3.4 below).

A3.2 Identify regional and national in situ CWR hotspots and priority sites for in situ conservation and ex situ collection validated through expert interviews and field visits using innovative GIS technology (R3)

Topics/activities covered: Activity not started yet

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

Nothing to report

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

Nothing to report

A3.3 Predict which CWR in situ populations and materials from ex situ collections have traits adapted to extreme climate conditions (e.g. heat, drought) using Focused Identification of Germplasm Strategy (FIGS) or other GIS approaches (R3)

Topics/activities covered: Activity not started yet

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

Nothing to report

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

Nothing to report

A3.4 Develop exemplar Strategic Action Plans (NSAP) on in situ conservation and use of priority CWR in three participating countries

Topics/activities covered: The implementation of the TNA has led in each country to a comprehensive list of stakeholders that will be involved in the development of the NSAP.

Baseline data on CWR will be collated that are required to develop conservation activities for priority CWR for inclusion in the NSAP.

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

Nothing to report

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

Nothing to report

A4.1 Facilitate the mainstreaming of CWR NSAP into national and regional policies

Topics/activities covered: Activity not started yet

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

Nothing to report

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

Nothing to report

A4.2 Develop a range of communication and public awareness materials to promote the conservation and use of CWR among target groups of stakeholders including the general public

Topics/activities covered: During the Steering Committee meeting, it was recommended that a short name for the project be established to brand the project. The project short name, 'SADC Crop Wild Relatives', has been agreed by all project partners. A project leaflet has been developed as well as a project website, available at <http://www.cropwildrelatives.org/sadc-cwr-project/>. A visual identity has been created for the project, which is reflected in the project leaflet and website. Further a Communication and Visibility strategy was prepared with the support from the project partners and a communication plan elaborated.

An application for a side event on the project at the FAO 15th Regular Session of the Commission on Genetic Resources for Food and Agriculture (CGRFA), planned for 21 January 2015 was made and accepted by the CGRFA secretariat. The project leaflet was to be launched on that occasion. [Note: this meeting took place successfully, but, being outside the reporting period, will be reported in the 2015 report].

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

Nothing to report

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

A Communication and Visibility Strategy was prepared with the support from the project partners and a communication plan elaborated and was submitted to the ACP secretariat.

A5.1 Coordinate and manage all aspects of project implementation

Topics/activities covered: Letters of agreement (LOA) have been signed between Bioversity and all four project partners in the first months of the project. They serve to transfer funds to the partners and also establish reporting requirements of the project partners to Bioversity as global project coordination agency.

The project inception workshop was held 14–16 April 2014 at the Protea Hotel Safari Lodge in Chisamba, Zambia. The inception workshop served also as the venue for the constitution and first meeting of the project steering committee (SC). Holding both meetings together provided a good introduction for the SC members to the project content and work plan. The objectives of the workshop were to: i) discuss and develop a work plan for implementing the work packages, ii) present and discuss results of the Training Needs Assessment Survey, and iii) clarify administrative and management procedures of the project.

National work plans have been developed based on a template developed and shared at the inception workshop. These work plans allow definition of country specific activities, staff responsible for the single activities and support required from Bioversity and UoB to carry out the specific tasks. They are used to monitor progress in the partner countries.

The project website includes a password protected project intranet, where project relevant documentation is made available. The intranet currently includes the following four sections: project documents, reports and guidelines; project meetings; public awareness materials; NSAP development.

Monthly meetings are held online with the project coordinators via GoToMeeting where the progress and implementation of the project is discussed.

Mauritius has established a National Committee with members from the University of Mauritius, the Plant Genetic Resources Unit, Department of Agronomy, Ministry of Agro-Industry and Food Security, Food and Agricultural Research and Extension Institute (FAREI), Mauritian Sugarcane Industry Research Institute (MSIRI) and the National Herbarium. The Committee met several times during the year to coordinate the activities of the project. They were particularly involved in developing the national work plan for the project.

Reason for modification for the planned activity <please elaborate on the problems - including delay, cancellation, postponement of activities- which have arisen and how they have been addressed> (if applicable):

One of the academic staff in Mauritius who was planned to carry out the work of collecting the baseline information for the development of the National Strategic Action plan in Mauritius is now no longer available and cannot be replaced by another staff member. A consultant will now be recruited to undertake this study. This required making an amendment to the budget, which was approved by the EU/ACP in August 2014.

The project partner UoB noted that only one project staff member was allocated for all three years of the project and that the remaining two were committed to the first year only. The time of these two members of the team is expected to be spread out to years 2 and 3.

The DAFF deemed it necessary to collaborate with two state-owned enterprises, i.e. the Agricultural Research Council (ARC) and the South African National Biodiversity Institute (SANBI), since the team within DAFF require the guidance, support, skill and technology within these institutes. The team in DAFF thus far has dealt only with *ex situ* and on-farm conservation of landrace crops and does not have sufficient information and technological resources to fulfil all of the activities on its own. The SANBI has over a number of years collected various plant species nationally and already has in place appropriate organization structures and functions to achieve some of the objectives of the project. The ARC specifically has skills and knowledge in crop breeding which are relevant to the project and hence would play a vital role in extending the use of CWR in future breeding programmes. Part of the budget initially allocated to DAFF salaries has therefore been reallocated to enter into research contracts with SANBI and ARC. This has required making an amendment to the budget which was approved by the EU/ACP.

Results of this activity <please quantify these results, where possible; refer to the various assumptions of the Logframe>:

Refer to activities undertaken.

2.3. Please list activities that were planned and that you were not able to implement, explaining the reasons for these.

See ‘Reasons for modifications for planned activity’ within each activity in section 2.2

2.4. What is your assessment of the results of the Action so far? Include observations on the performance and the achievement of outputs, outcomes and impact in relation to specific and overall objectives, and whether the Action has had any unforeseen positive or negative results (please quantify where possible; refer to Logframe Indicators).

The two major workshops that were held during the first year (i.e. the inception workshop and the first regional training workshop) both had positive outcomes and were important events to facilitate and enhance project work within the countries and collaboration among partners. The inception workshop, held jointly with the steering committee (SC) meeting, allowed the SC members to get a good overview of the project activities and hence constituted a solid basis for their advisory activities within the project. The inception meeting also triggered the development of individual national work plans, which are being used for monitoring activities at national level. The regional training workshop on *in situ* conservation was of major interest to the region, which led to the participation of three externally funded participants. The regional cooperation project GERMINATION (Genetic Resources Management in Action towards an Indian Ocean Network) sponsored the participation of two scientists from Madagascar and Comoros. The SADC Plant Genetic Resources Centre (SPGRC) in Zambia sponsored the participation of its Senior Programme Officer for *in situ* conservation.

Existing scientific capacities have been surveyed in the three partner countries and at SADC level. The survey results show that there is a need for skills and capacity development in the field relating to conservation and use of CWR. Training needs emerging from the survey have been taken on board during the development of the training curricula of the regional training workshops. The results further pointed to existence of knowledge gaps and lack of awareness among most of the technical staff and policymakers on the importance of CWR and the need for their conservation.

The partner countries have been provided by UoB with detailed guidelines and day-to-day support to develop their national CWR checklists and identify prioritization criteria for selecting CWR for inclusion in conservation actions and the NSAP development. Challenges in communication, due to slow and limited Internet and email access, particular in South

Africa and Zambia, changes in project coordination responsibilities in South Africa and administrative problems between project partners and stakeholders in Mauritius have slowed down progress in these tasks and we will be reviewing how to get these tasks back on track.

Please list potential risks that may have jeopardized the realisation of some activities and explain how they have been tackled. Refer to logframe indicators.

A1.1 - Lack of timely participation of the identified stakeholder institutions has been delaying the completion and completeness of the survey. Stakeholders were contacted individually and specific meetings in each countries were organized to collect their input.

A1.3 - Due to the long administrative procedures in South Africa, there was a high risk that South African participants could not participate in the first regional training workshop. The project coordinator had to intervene by calling upon the Chief Director of DAFF to get permission for its staff to travel to Mauritius for the training workshop.

A3.1 - In Mauritius work on preparing the checklist of CWR was challenging as stakeholders had differing views about the definition of CWR. The technical backstopping from UoB was helpful in clarifying this and helped to establish clear criteria for preparing the checklist. Administration difficulties in getting permission of key staff from some stakeholder organizations such as the Ministry of Agroindustry delayed the work. Communication with the Deputy Permanent Secretary of the Ministry helped to resolve the problems and obtain support from the Ministry in their collaboration.

In South Africa the lack of a memorandum of agreement between the main national stakeholders (SANBI and ARC) regarding their participation in the project was a major risk in getting access to the information for preparation of the checklist and inventories. Agreements were reached and a service letter of agreement is now being signed by both parties.

A5.1 - The production of the financial reports at country level has been extremely difficult. None of the countries had previous experience in providing the amount and detail of supporting documentation required by the EU, and country partners had major difficulties in understanding exactly what type of documentation is required and obtaining the required documents from their financial departments. It required a huge investment of the project coordination team's staff time to ensure adequate financial documentation. This has required delaying the audit and the submission of the technical and financial report to April 2015.

If relevant, submit a revised logframe, highlighting the changes.

Please list all contracts (works, supplies, services) above 10.000€ awarded for the implementation of the action during the reporting period, giving for each contract the amount, the award procedure followed and the name of the contractor.

Nothing to report

2.5. Please provide an updated action plan ³

Activity	Year 2												Implementing body	
	Month 1	2	3	4	5	6	7	8	9	10	11	12		
Submission of report and workplan for 2015														Bioversity
Activity 1.2: Thematic regional training workshops on predictive characterization														Bioversity, Countries
Activity 1.3: To support on the job training in the SADC region														Bioversity, UoB
Activity 2.2: To pilot test the draft toolkit in each participating country in SADC region														UoB
Activity 3.1 Deployment of CWR database and population of database with country information														Bioversity
Activity 3.2 : Identification of CWR hotspots and priority sites for <i>in situ</i> conservation														All Countries
Activity 3.3: Implementation of Predictive characterization activities														Bioversity
Activity 3.4: Development of exemplar National Strategic Action Plan (NSAP) initiated														Bioversity
Activity 4.2: Communication and public awareness materials														Bioversity and countries
Activity 5.1: Midterm review and Steering Committee meeting														Bioversity

³ This plan will cover the financial period between the interim report and the next report.
January 2012
 Technical Reporting Bioversity International Jan-Dec 2014 - FinalRev27apr.doc

3. Partners and other Co-operation

3.1. How do you assess the relationship between the formal partners of this Action (i.e. those partners which have signed a partnership statement)? Please provide specific information for each partner organisation.

Bioversity has a long history of fruitful and successful collaboration with UoB, namely in collaborating in two EC-funded European projects ‘European Crop Wild Relative Diversity Assessment and Conservation Forum (PGR Forum)’, and ‘Novel characterization of crop wild relative and landrace resources as a basis for improved crop breeding (PGR Secure)’, both coordinated by UoB; and co-developing and co-publishing *in situ* conservation methodologies. This successful collaboration is being continued in the current action.

Collaboration with all three national partners has been positive and fruitful. Due to staff changes in DAFF, South Africa, the national project coordinator has changed, which has required more frequent interactions with South Africa.

Bioversity is hosting monthly meetings with responsible coordinators from all partners, via online meeting tools such as Skype and GoToMeeting, which support the strengthening of the collaboration and relationships.

3.2. How would you assess the relationship between your organisation and State authorities in the Action countries? How has this relationship affected the Action?

In this Action, the buy-in of the state authorities is very important, as they are the main target and beneficiaries of the action. The Action will allow the partner countries to build and improve relationships with the State authorities by facilitating the mainstreaming of CWR NSAPs into national and regional policies. State authorities in the partner countries are made aware and get involved in the project through the national project coordinator and its team.

The Ministry of Agroindustry and Food Security (MOAFS) of Mauritius has been involved in the project since the start of its implementation. Representatives from the Ministry were invited to be part of the national Steering Committee in Mauritius. The deputy Permanent Secretary of the MOAFS was invited to attend the inception workshop in Zambia. This helps greatly in raising the awareness of the Ministry about the project.

In South Africa, the project partner is the State Authority. Memoranda of understanding for collaboration with other research organisations such as SANBI and ARC are being developed.

The Zambia Agriculture Research Institution (ZARI) is a public research institution within the Ministry of Agriculture and Livestock. Being a research institution, ZARI is responsible for the development and improvement of technologies such as crop varieties of different crop species for addressing food and nutritional security. Consistent with the overall national agricultural policy, ZARI is mandated to conserve and promote sustainable use of plant genetic resources for food and agriculture which include crop wild relatives, whose conservation and use is the focus of the Action. It is for this reason that national endorsement of the Action received overwhelming support.

3.3. Where applicable, describe your relationship with any other organisations involved in implementing the Action:

- **Associate(s) (if any)**
- **Sub-contractor(s) (if any)**
- **Final Beneficiaries and Target groups**
- **Other third parties involved (including other donors, other government agencies or local government units, NGOs, etc)**

In the course of the implementation of the action, we have collaborated with the Species Survival Commission of the International Union for Conservation of Nature's (IUCN SSC) Sub-Committee for Species Conservation Planning, as well as with the IUCN SSC Mascarene Island Plant Specialist Group and the Mauritian Wildlife Foundation in order to jointly develop conservation strategies for CWR in Mauritius.

3.4. Where applicable, outline any links and synergies you have developed with other actions.

The tailored toolkit that will be used to improve capacity in conservation and use of CWR and to help project countries developing their NSAP will be produced based on an existing resource book produced by the UoB and published by FAO (available at: <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/seeds-pgr/resource-book/en/>).

The descriptors used in the templates for collating the checklist and inventory of CWR have been produced in two previous projects, the 'European Crop Wild Relative Diversity Assessment and Conservation Forum (PGR Forum)' project and the UNEP/GEF 'In situ conservation of crop wild relatives through enhanced information management and field application' project. The template formats based on the descriptors have been developed within the FP7 funded 'Novel characterization of crop wild relative and landrace resources as a basis for improved crop breeding (PGR Secure)' project.

Zambia, through ZARI, is one of the six SADC countries that participated in a regional project through the SADC Plant Genetic Resources Centre (SPGRC)/Food and Agriculture Organization (FAO) for the development of the national strategy for conservation of PGRFA focusing on six priority crop species, namely sorghum, pearl millet, cowpea, beans, groundnuts and cassava. The strategy is a framework for developing and implementing policies that promote PGRFA conservation and its sustainable utilization, streamlining and prioritizing activities, addressing capacity needs, identifying relevant stakeholders, leveraging complementarities and assigning responsibilities given limited human and financial resources. This project aims at addressing this identified gap through the development of national strategies for PGRFA and enhancing linkages with seed systems and extension delivery services. The anticipated outcome of implementation of the strategies developed will be increased food production and security, thereby helping to mitigate the anticipated adverse impacts of climate change on agriculture and food production. There is a complementary relationship between this project on *in situ* conservation and use of CWR and the FAO supported project that developed the national strategy with focus on six priority crop species. The *in situ* conservation and use project will address the existing gap that relates to the national strategic action plan for the conservation and use of CWR for enhanced food security.

GERMINATION is a regional project on genetic resources in the South West Indian Ocean region, funded by EU/CIRAD of Reunion. GERMINATION funded the participation of two people from Comoros and Madagascar to participate in the first regional training workshop on *in situ* conservation of CWR.

Mr Didier Slachmuylders of the Indian Ocean Commission made a presentation at the first regional training workshop on the EU programme for Biodiversity in the Indian Ocean region and on a call for proposals that would be launched in March 2015 for which all member countries present at the workshop would be eligible to apply.

3.5. If your organisation has received previous EU grants in view of strengthening the same target group, in how far has this Action been able to build upon/complement the previous one(s)? (List all previous relevant EU grants).

4. Visibility

How is the visibility of the EU contribution being ensured in the Action?

EU, ACP and S&T logos together with written acknowledgement of the funding and the grant contract number are included on all public awareness materials, such as the project leaflet and the project website.

The project has been promoted among the members of the IUCN SSC Crop Wild Relatives Specialist Group as an EU-funded project.

During the joint project inception and steering committee meeting held in Zambia, 14–16 April 2014, the National Agricultural Information Services (NAIS) were invited to cover the official opening session. Both the print and video media sections of NAIS were available and provided coverage of the occasion. The footage of the project inception workshop was made public through the Zambia National Broadcasting Corporation on both national television and radio.

A symposium took place at the Mauritius Sugarcane Industry Research Institute on 6 August 2014 to raise awareness about the project among the various stakeholders and the scientific community in Mauritius.

During the first regional training workshop in November 2014, Dr Ehsan Dulloo (Bioversity, project coordinator) and Dr Nigel Maxted (UoB) gave an interview to the national television (Mauritius Broadcasting Corporation) which was broadcast on Monday 1 December 2014 on the MBCNewsChannel.

South Africa has included collaboration with the SADC Crop Wild Relatives Project in their national action plan to achieve Target 9 of the Global Strategy for Plant Conservation.

The European Commission may wish to publicise the results of Actions. Do you have any objection to this report being published on the EuropeAid website? If so, please state your objections here.

We do not have any objections.

Annexes

Annex I: Workshop report about the first regional training workshop “*In situ* conservation of CWR and diversity assessment techniques”. See separate PDF file

SADC_CWR_Regional_training_workshop_in_situ_conservation_report_final.pdf

Annex II: Baseline report on capacities in SADC member states on conservation and use of CWR.

See separate PDF file SADC_CWR_baseline_report_conservation_capacities.pdf

Annex III: Inception workshop report. See separate PDF file

SADC_CWR_Inception_workshop_report_FINAL2.pdf



Name of the contact person for the Action: Ehsan Dulloo.....

Signature:

Location: Rome - Italy

Date report due: 16/04/2015

Date report sent: 27/04/2015