Darwin Initiative Main Project Annual Report

Important note: *To be completed with reference to the Reporting Guidance Notes for Project Leaders: it is expected that this report will be no more than 10 pages in length, excluding annexes*

Submission Deadline: 30 April

Darwin Project Information

Project Reference	27-003
Project Title	Safeguarding Mesoamerican crop wild relatives
Host Country/ies	El Salvador, Guatemala, Honduras, Mexico
Contract Holder Institution	IUCN
Partner institutions	Comisión Nacional para Conocimiento y Uso de la Biodiversidad (CONABIO; Commission for the Knowledge and Use of Biodiversity) and Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP) Mexico, Instituto de Ciencia y Tecnología Agrícolas (ICTA) Guatemala, Centro Nacional de Tecnología Agropecuaria y Forestal "Enrique Álvarez Córdova" (CENTA) El Salvador, Comité Nacional de los Recursos Fitogenéticos de Honduras (CONAREFIH), Oficina Regional de la UICN para Mexico, Centro América y el Caribe (ORMACC), University of Birmingham and IUCN
Darwin Grant Value	£297,401
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Start/end dates of project	01 August 2016/31 July 2019
Reporting period	August 2016 – Mar 2017. Annual Report 1.
Project Leader name	Richard Jenkins
Project website/blog/Twitter	www.psmesoamerica.org/en/
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1. Project Rationale

Crop wild relatives (CWR) are wild plants that are the ancestors and close relatives of crop species and to which they can transfer adaptive traits required by breeders and farmers in particular to help to mitigate the adverse impacts of climate change. They are therefore of direct socio-economic importance to people across the globe. Mesoamerica is one of the world's most important centres of origin and diversity of crops and harbours numerous wild relatives of globally and regionally important crops, such as maize, beans and squashes. Many of these species, whose inherent genetic diversity represents insurance for the future of food security, are currently both threatened by habitat loss, degradation, invasive species and introgression with genetically modified organisms and are not subject to any dedicated conservation action, either *in situ* or *ex situ*. Although there is significant CWR diversity in Mesoamerica, according to EURISCO (European Cooperative Programme for Plant Genetic Resources) only 10% of CWR taxa in the region have any germplasm held *ex situ* in European gene banks (this number still remains unknown for the Mesoamerican region) and there is very limited active *in situ* maintenance of CWR genetic diversity in protected areas or other area-based conservation measures.

Governments in the region, currently led by Mexico, recognize the importance of CWR for future food security and the need to actively and systematically conserve them, especially species of restricted distribution and those threatened by anthropogenic disturbance. IUCN invited a government institution of Mexico (CONABIO) and The University of Birmingham to combine their respective expertise and existing initiatives in Mexico to enhance knowledge and capacity to directly address the lack of active *in situ* and *ex situ* conservation action for CWR in the wider region.

Because Mexico currently has the greatest momentum of Mesoamerican countries in CWR conservation, this project will concentrate on transferring expertise and processes from Mexico and the UK to other Mesoamerican countries. The project also builds on existing bi-lateral relationships between the various project partners, including an initiative between the National Centre of Genetic Resources, of the National Institute for Agricultural, Livestock and Forestry Research (INIFAP-CNRG) and the University of Birmingham. Results of the project will be a first step to formulate national and regional conservation strategies for CWR in a participatory manner, including national project partners, national and international experts, local communities, NGOs and other governmental agencies.

2. Project Partnerships

The project harnessed various ongoing initiatives between project partners into a single, coordinated effort. This new initiative, builds on projects during the last decade by CONABIO, which generated agrobiodiversity baseline information on CWR such as maize, cotton, squashes and beans in Mexico. It also builds on INIFAP's, ICTA's, CENTA's and CONAREFIH's goals to increase the number of important CWR in their respective national collections for inclusion in breeding programs**.** IUCN and the University of Birmingham were already collaborating on projects to assess the extinction risk of CWR for the IUCN Red List. A University of Birmingham PhD student, from INIFAP-CNRG, is conducting doctoral research on a strategy for CWR conservation in Mexico in a collaboration that started in 2013. The project application was developed following in depth discussions with senior scientific staff from Mexico's CONABIO in 2014 following face to face meetings with IUCN in Veracruz, Mexico. The other three countries involved in the project (Guatemala, El Salvador and Honduras) were invited after its conception and they have since been involved in the planning, monitoring and evaluating and decision making. The relationship of the lead organization (IUCN) with the collaborating institutions from host countries and the relationship between all collaborating institutions has evolved greatly in the first year and the inception meeting was a great opportunity to establish a common ownership of the project.

An advantage of the project partnership is that it is bringing together governmental interest in, and support for CWR conservation in the region with ongoing conservation research in Mexico. Going forward the project will therefore be able to deliver important results in the global context (e.g. conserving adaptive traits required by breeders for crops of worldwide economic importance) as well as conservation aimed at considering multiple values for local inhabitants of the Mesoamerican region (e.g. the maintenance and promotion of crop genetic resources by farmers). As both of these strands require effective site-based conservation of the key sites for CWRs, activities in Year 2 will focus on *in situ* conservation.

Both of the two main projects partners, CONABIO (with INIFAP-CNRG and the national Nagoya Focal Point) and

the University of Birmingham, have worked in close communication with IUCN, since the beginning of the project in regards to planning, monitoring and evaluation and decision making. Communication in two languages and across time zones was facilitated by the use of the 'Ryver' online tool, in addition to regular Skype calls and emails (Annex 4 SM1). Consensus on scientific, logistical and technical decisions was achieved through discussion and any differences of opinion among partner institutions, were always amicably resolved.

Among the achievements of the partnership are the results of the Regional Red List Workshop for 251 taxa, as CONABIO helped gather data and information needed for many of the assessments (Annex 4 SM2), had personnel to help during the development of the workshop and had a high capacity to convene experts on CWR due to their good relationship built over the last 10 years. Partners in El Salvador and Guatemala helped identified national species experts with the required profile on a timely manner and IUCN brought its vast expertise and convened skilful facilitators to conduct the Red List assessments in an efficient manner.

The project experienced some initial delays due to administrative and legal issues pertaining to the agreement of implementing partner contracts with CONABIO and the University of Birmingham. IUCN's standard contract could not be signed straight away by CONABIO, as it treated this institution as a Consultant, which was not legally possible. CONABIO made amendments to the standard legal contract, based on their other international projects that both legal offices had to review again before sign-off. This process significantly delayed the official start of the project (Annex 4 SM3). During contract negotiations, CONABIO hired the Research Assistant for three months so that any further delays would be minimised.

In general, IUCN and the two main project partners have collaborated extremely well in Year 1, overcoming some initial delays and other occasional issues, and are well-set to deliver the next two years. The partnership with a representative institution in Honduras was the main problem the project faced in Year 1 but we hope to overcome this in the coming months (see section 3.4 Monitoring assumptions for more details).

3. Project Progress

3.1 Progress in carrying out project activities

The overall plan in Year 1 was to convene all project stakeholders before conducting assessments of extinction risk and vulnerability to climate change of CWR in the region to identify species / site combinations for conservation. These assessment data will then feed into conservation planning and dissemination activities scheduled for Year 2, with further site-based activities planned for Year 3. In this way, the project is harnessing regional expertise and interest in CWR and building on it using additional global expertise and standards to deliver a heightened awareness and coordinated conservation response at multiple scales.

All of the activities planned for Year 1 were completed. The project benefitted from substantial engagement from all the implementing partners. CONABIO contributed significantly more in-kind support from their staff than was envisaged in the original application and organized two extremely professional workshops. The University of Birmingham provided valuable intellectual input into both of the projects meetings and help to keep the project on track.

In October 2017, we held a two-day inception meeting for stakeholders from the four participating countries in the region where planning, design, implementation, logistics, reporting and the ethical and legal compliance of the project were discussed and agreed (Activity 1.1 under Output 1; Annex 4, SM4, SM5, SM6). Criteria to select the species for inclusion in the project were discussed in the inception meeting and thereafter electronically (Annex 4 SM7). Under Output 2, we completed Activity 2.1 and 2.2 based on work conducted collaboratively with CONABIO, IUCN and the University of Birmingham to generate a list of CWR taxa agreed by stakeholders. The University of Birmingham provided a list of global priorities that was considered in the process to select taxa of CWR for the Regional Red List workshop and it was made available for the inception meeting (Annex 4 SM8, Column K "Vincent et al. 2013"). CONABIO systematized information on criteria identified to select the species and provided an additional list of CWR species of interest to the region. Based on this work a consensus list of 516 taxa was agreed by stakeholders (Annex 4 SM8). This species list was further reduced to 269 taxa by selecting those for which there were experts and also to come to a manageable number of species to assess during the Regional Red List workshop, Annex 4 SM2).

Activities 2.3 and 2.4 under Output 2 which relate to preparing data for the regional Red List workshop, were also conducted collaboratively. Draft Red List assessments were prepared by staff from CONABIO, IUCN staff in the US and UK offices and staff and a PhD student from the University of Birmingham. Information on the distribution, population trends, ecology, threats, conservation actions, use and trade was collated in IUCN's online database

(Species Information Service (SIS)) for a total of 269 taxa (Annex 4 SM2). A total of 45,987 occurrence point data were obtained from different sources, including the National Biodiversity Information System of Mexico (SNIB) managed by CONABIO, Kew Royal Botanical Gardens database, El Salvador Natural History Museum database, Atlas of Guatemalan Crop Wild Relatives, and online data repositories (e.g. tropicos, GBIF) and personal databases from experts, to generate the preliminary distribution maps of species. In February 2017, the Regional Red List workshop was held, which trained 22 species experts (two from El Salvador, one from Guatemala and 19 from Mexico; Activity 1.2, under Output 1), on the assessment of extinction risk and climate change vulnerability of Mesoamerican crop wild relatives (Annex 4, SM9). The workshop was held in Mexico because it was more cost effective due to the high numb of CWR experts based in the country. During the Regional Red List workshop we conducted extinction risk assessments of 251 crop wild relative taxa native to Mesoamerica (Activity Annex 4, SM10), following The IUCN Red List Categories and Criteria methodology and we also assessed climate change vulnerability of the taxa using the IUCN guidelines, therefore successfully completed Activity 2.5, under Output 2. We started the peer review process of assessments related to Activity 2.6 during the Regional workshop, so far a total of 98 assessments have been reviewed and we are expecting to publish them on the IUCN Red List of Threatened Species this year.

3.2 Progress towards project outputs

Output 1:	Improved in-country human capacity and knowledge for identifying and establishing conservation priorities for CWR to improve human livelihoods, through the evaluation of the extinction risk of species, including climate change vulnerability, identification of important areas for biodiversity and raising awareness of their importance			Comments (if necessary)
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 1.1 Attendance of at least 2 identified key stakeholders from each of the partner countries at the initial inception meeting (beginning of year 1)	0 Honduras 0 El Salvador 0 Guatemala 0 Mexico	Number of stakeholders per country: 2 Honduras 2 El Salvador 1 Guatemala 13 Mexico 14 female out of 20 participants who filled in the form (2 people did not fill it in)	Annex 4, SM5 and SM6.	
Indicator 1.2 At least two national CWR experts from each of the four partner countries trained to conduct species extinction risk assessments using The IUCN Red List Categories and Criteria and climate change vulnerability assessments using IUCN guidelines (by end of year 1), and identification of sites of global significance for the persistence biodiversity areas based on the IUCN's globally approved standard (end of year 2)	0 Honduras 0 El Salvador 0 Guatemala 0 Mexico (species experts) 5 Mexico (CONABIO) 0 Honduras 0 El Salvador 0 Guatemala	Number of national CWR experts trained to conduct species extinction risk: 0 Honduras 2 El Salvador 1 Guatemala 19 Mexico (species experts) 13 Mexico (CONABIO) Number of national CWR experts trained to conduct climate change vulnerability assessments: 0 Honduras 2 El Salvador 1 Guatemala	Annex 4, SM11	See section 3.2 for an explanation on the lack of participants from Honduras.

	0 Mexico	19 Mexico 9 female out of 22 experts		
Indicator 1.3 At least two botanists from El Salvador, Honduras and Guatemala trained in seed bank collection and preservation by Mexican experts (end of year 2)	0	No change was expected by 2016. However, progress to achieve this by Y2 is on track.	N/A	
Indicator 1.4 Key stakeholders use the knowledge generated through this project on CWR species, key sites for conservation and their importance for food security to create a video for a general public awareness and plan a strategy for a media campaign (starting in year 1, revisited and finalised in year 3)	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	
Indicator 1.5 Key stakeholders use the knowledge generated through this project on CWR species, key sites for conservation and their importance for food security to create an informative poster (2,000 copies) and plan a dissemination strategy to distribute poster to targeted audiences such as rural agronomy schools, meeting centres for landowners and managers, NGO's, government offices related to the environment and agriculture making sure woman and young audiences are included (starting in year 1, revisited and finalised in year 3)	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	
Indicator 1.6 National agencies responsible for conserving CWR and for reporting against the relevant conventions are informed about the results in a dedicated regional event convened by IUCN (year 3)	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	
Indicator 1.7 Publication for the scientific community on a regional analyses on the conservation of CWR (year 3)	0	No change was expected by 2016. However, progress to achieve this by	N/A	

		Y3 is on track.		
Indicator 1.8 Face to face communications in each country with the local authority representatives for sites identified as important areas for the conservation of CWR (year 3)	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	
Output 2	Areas to safeguard threatened and vulnerable crop wild relatives identified and information shared to assist in future conservation of sites			
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 2.1 Regional workshop to assess the extinction risk of at least 250 species of CWR attended by at least 2 participants from each of the four partner countries, including civil society, academia and governments (year 1). Making sure female experts are invited (if there are any)	0 Guateamala 0 El Salvador 0 Honduras 0 Mexico	251 Mesoamerican CWR taxa evaluated for the IUCN Red List 1 Guateamala 2 El Salvador 0 Honduras 30 Mexico 9 Females out of 22 experts	Annex 4, SM10 Annex 4, SM11 Annex 4, SM11	
Indicator 2.2 Four national consultations workshop (one in each country) to identify important sites for the conservation of CWR a) *in situ* and b) *ex situ* (year 2).	0	No change was expected by 2016. However, progress to achieve this by Y2 is on track.	N/A	for details on progress see text under Activity 2.8
2.3 Technical report that identifies the sites, prioritise and proposes management strategies written for national stakeholders in Spanish (year 3)	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	for details on progress see text under Activity 2.8
Indicator 2.4 Key sites for *in situ* CWR conservation identified in each of the 4 partner countries	0	No change was expected by 2016. However, progress to achieve this by Y2 is on track.	N/A	for details on progress see text under Activity 2.8
Indicator 2.5 At least one key site proposed as a genetic reserve in each partner country	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	

Output 3	Priority Mesoamerican CWR conserved *ex situ* in national seeds banks			
3.1 At least 3 field expeditions in each of the partner countries to collect seed samples of priority CWR (year 3)	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	for details on progress see text under Activity 3.1
3.2 Representative seed samples of a maximum of 30 priority species accessioned on four national seed banks (year 3)	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	
3.3 Duplicate samples of at least 50% of material collected from 3 signatory countries to the ITPGRFA sent to international collections (year 3)	0	No change was expected by 2016. However, progress to achieve this by Y3 is on track.	N/A	

3.3 Progress towards the project Outcome

Much progress towards the Outcome and its Indicators have been made and it is summarized in Annex 1. The Indicators are adequate but they will be completed towards the end of the project.

Outcome:	National governments of the four countries are aware of the importance of conserving CWR and start to implement policies and actions to promote their conservation *in situ* and *ex situ* including the CBD and its Nagoya Protocol and the ITPGRFA (Max 30 words)			Comments (if necessary)
	Baseline	Change by 2016	Source of evidence	
Indicator 0.1 Developing of national plans for the conservation of CWR using information from this project are underway in the four partner countries		No change was expected by 2016. However, progress to achieve this by the end of the project is on track.	N/A	
Indicator 0.2 Partner countries include the results of this project in their national reports to the CBD and its Nagoya Protocol and the ITPGRA		No change was expected by 2016. However, progress to achieve this by 2018 is on track.	N/A	
Indicator 0.3 Breeding and research programs on CWR are improved in the four partners countries through better		No change was expected by 2016. However, progress to achieve this by 2018 is on track.	N/A	

national seed collections (a maximum of new important CWR incorporated in collections and at least 50% used in breeding programs) and inter-country exchange of genetic material, so supporting the ITPGRA (with the exception of Mexico) and Nagoya Protocol (with the exception of El Salvador)				
Indicator 0.4 *In situ* conservation of CWR improved through a better understanding of the importance of CWR by stakeholders in proposed genetic reserves		No change was expected by 2016. However, progress to achieve this by the end of the project is on track.	N/A	

3.4 Monitoring of assumptions

Assumption Output 1: Staff who attend the inception meeting remains in the institutions

Comments: Significant changes happened to the partner organization CONAREFIH in Honduras since the original project was submitted. CONAREFIH is the Honduras National Commission on Plant Genetic Resources and it is formed by several Honduran institutions including MiAmbiente, Lancetilla Botanical Garden of the University of Forestry Sciences of Honduras (UNACIFOR), the Biology Department of the National Autonomous-University of Honduras, Institute of Forestry Conservation, and the Foundation for Participatory Research with Honduran Farmers (FIPAH). Its principal mandate is to "contribute to food security and sovereignty for the well-being of Honduran society while promoting the management, conservation and use of plant genetic resources for food and agriculture." By the time the project started, both the institutional CONAREFIH members, and its President, with whom IUCN had been working closely with, had left the organization.

Two other members of CONAREFIH therefore represented the organisation in the October project inception meeting. Informal meetings were held between IUCN and CONAREFIH's member institution, MiAmbiente, in the margins of the Convention on Biological Diversity COP13 in Mexico to find a solution to the participation of a partner from Honduras. By December, when planning for the Regional Red List workshop commenced, we were informed by the CONAREFIH participants who attended the inception meeting that the organization was undergoing structural changes and was unable to agree who should attend the workshop. We received no further communications until two weeks before the Regional Red List workshop, but because of administrative and logistic reasons, it was too late to make arrangements for them to attend. In this communication, we also received a further request for more time to deliver on the project and more funds to complete the activities. Conversations on how best to overcome these issues continue.

In addition, our main contact person in partner institution Institute of Agronomic Science and Technology (Instituto de Ciencia y Tecnología Agrícola, ICTA), Guatemala, also left the institution after the inception meeting. We were able, however, to identify a Guatemalan CWR expert to participate in the Regional Red List workshop who works for the National Commission on Protected Areas (CONANP) and is the National Focal Point (NFP) of the Nagoya Protocol. Our original contact person at ICTA indicated who to follow up with matters related to the project and since the project manager has been in contact with the new contact point. Now, both ICTA and CONANP, are working together to respond to project needs, complementing each other.

Assumptions Output 2: All experts are able to attend the workshop

Comments: We had last minute cancellations from two experts and we were unable to complete the extinction risk assessments of 12 species of *Sechium*. We are aiming to conduct these assessments remotely with the experts. Overall, the participation rate of experts in the Regional Red List workshop was high and this enabled us to complete the activity on time and in budget.

Assumptions not accounted for on the initial proposal

We did not consider the UK deciding to leave the European Union (Brexit) as a risk to the project, however, this has impacted it greatly as the value of the British pound dropped significantly following the referendum result, reducing from 25 to 22 pesos to the pound. This effectively reduced the amount of funding the project was able to provide to its implementing partners. During Year 1, additional funding (grants and in-kind) was raised by IUCN and CONABIO to overcome the deficit but we do not know how this will continue to affect the project in Years 2 and 3.

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

The project will have a positive impact on biodiversity through the assessment of the extinction risk of CWR species (Indicator 2.1) and will feed into the process of prioritisation conservation and identification of areas to preserve them *in situ* and will aid to identify those species in more need of *ex situ* conservation (Indicator 2.2) .

The project will have an impact on poverty alleviation additional positive impacts towards biodiversity and steps towards equitable sharing of benefits of crop wild relative species will be reached towards the end of the project.

4. Contribution to SDGs

Three of the Sustainable Development Goals are relevant to our project, below we detail the contribution made for each goal over the past year:

Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

Our project supports the conservation of wild relatives of crop plants that are the staple food at local, national, regional and global levels (e.g. maize, beans). Protecting these wild relatives ensure the maintenance of

adaptive traits for crop improvement to tolerate a wider range of climatic and soil conditions and achieve food security. In 2016 our project began by consolidating a list of crops of relevant economic and nutritional value, and their wild relatives in the participating countries: El Salvador, Guatemala, Honduras and Mexico. This list will be included in the national reports.

Goal 13. Take urgent action to combat climate change and its impacts.

In February 2017, we carried out climate change vulnerability assessments of 251 CWR taxa. The climate change vulnerability assessment will help to identify traits in taxa that are more or less adapted to future environmental changes (e.g. increased drought or precipitation, increased fire frequency, increased temperatures, sea level rise) to support the design of climate adaptation strategies and prevent the loss of vulnerable taxa. All necessary data to assess taxa vulnerability to climate change were gathered during the Regional Red List workshop (Annex 4 SM13) and the analysis is underway by IUCN.

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

The IUCN Red List of Threatened Species is designed to determine the relative risk of extinction of a species in the wild, and it is a global reference and tool to guide actions to reduce biodiversity loss. During the Regional Red List workshop in February 2017 where a total of 22 experts participated, we assessed the extinction risk and climate change vulnerability of 251 crop wild relative taxa native to Mesoamerica, including some of the most widely used crops in the world, such as maize, squashes, beans, avocados, cotton and vanilla, among others. Our preliminary results show a total of 75 taxa are categorized as threatened (6 Critically Endangered, 48 Endangered and 21 Vulnerable), 11 Near Threatened, 131 Least Concern and 34 Data Deficient. All these assessments will be published in The IUCN Red List of Threatened Species in 2017 and will be the baseline to monitor the improvement or deterioration of the extinction risk of the CWR species assessed.

5. Project support to the Conventions, Treaties or Agreements)

The project will contribute to the Convention on Biological Diversity, its Nagoya Protocol (with the exception of El Salvador which is not signatory) and the International Treaty on Plant Genetic Resources for Food and Agriculture (with the exception of Mexico which is not signatory).

Strategic Plan for Biodiversity 2011–2020 (Aichi Targets):

Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

- The project will have run a public awareness campaign on the importance of CWR; some of this work has already been done through the project's leaflet (Annex 4 SM17).

Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

- In order to achieve this target we first need to know which species are threatened and in need of targeted conservation action. Assessing the extinction risk of species will help us set conservation priorities and move towards this Target. In this project so far we have assessed the extinction risk of 251 crop wild relatives' taxa and will assess another 13 species in the following months.

Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

- The project will help move towards this target by identifying important areas for the conservation of wild relatives of globally, regionally and nationally important crops in Mesoamerica and by collecting and depositing germplasm samples in national gene banks (Year 2, Activity 2.8, Year 3 Activity 3.3).
- The project has been invited by the Mexican Ministry of the Environment, SEMARNAT, through the Nagoya Protocol Focal Point to formally collaborate in the Cancún Coalition "Towards the Implementation of Aichi Target 13 in Centers of Origin of Food and Agriculture Crops" proposed by Mexico and Peru. See Annex 1, progress towards Outcome section for more information.

CBD's Global Strategy for Plant Conservation,

Target 2: An assessment of the conservation status of all known plant species, as far as possible, to guide conservation action.

- The project has conducted the first ever global assessments on the conservation status of the 251

stakeholder-identified crop wild relatives' taxa (Annex 4 SM10) and is in the process of assessing an additional 71 species.

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Target 7: At least 75 per cent of known threatened plant species conserved in situ.

- In Year 2, we will identify priority sites and populations for in situ conservation of important CWR in Mesoamerica, including threatened and Near Threatened taxa. These conservation planning activities will result in recommendations being put forward for the establishment and long-term management of CWR genetic reserves by the relevant national agencies.

Target 8: *ex-situ* conservation of threatened species in national seed banks.

- In Year 3 we will conduct field expeditions to collect seeds that will be accessioned in seed banks and many of these will be of threatened CWR.

Nagoya Protocol.

- This project will build capacity for plant conservation and sustainable use, leading to improvements in human livelihoods.

ITPGRFA

- During Year 3, signatory countries to the ITPGRFA (Guatemala, El Salvador and Honduras) will exchange plant genetic resources.
- We have assessed the extinction risk of many of the crops included under the multilateral system of the ITPGRFA (Annex 4 SM8).

The project will also assist four Mesoamerican countries to respond to the CBD notification of August 2015 (Ref.: SCBD/SAM/DC/DCo/84808), which encourages Parties (to CBD and ITPGRFA) to "review, develop or strengthen, national strategies for *in situ* conservation of CWR through protected areas and integrated approaches that link conservation to sustainable use and Goal 2.5 of the Second Global Plan of Action for Plant Genetic resources for Food and Agriculture: to end hunger by improving food security, nutrition and sustainable agriculture through maintaining the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species".

Since the beginning of the project we have been and continue to be in communication with the CBD, Nagoya Protocol and ITPGRFA NFPs in each of the host countries (Annex 4 SM14). Through matching funds provided by IUCN, the project manager attended CBD COP13 in Mexico (December 2-17, 2016), which was an important opportunity to meet with the Nagoya Protocol NFPs and other relevant collaborating institutions of El Salvador, Guatemala, Honduras and Mexico (Annex 4 SM15). All focal points and project partners were invited to attended a side event #2221 "The Darwin Initiative - Protecting Biodiversity for 25" organised by Defra (Annex 4 SM16) in which this current Darwin Initiative project was featured and the project leaflet (Annex 4 SM17) was distributed to participants. Project partners CONABIO, INIFAP and IUCN took this opportunity to further discuss national compliance of the Nagoya Protocol in Mexico with the representative of the NFP for the fieldwork component of the project, this discussion included our project partners in Mexico, CONABIO and INIFAP.

The representative of the Nagoya Protocol Focal Point for Mexico (Alejandra Barrios Perez in representation of Edda Fernandez Luiselli from the Ministry of the Environment, SEMARNAT) and the ITPGRFA Focal Point for El Salvador (Aura Jazmín de Borja) attended the Inception Meeting (Annex 4 SM5). The representative of the Nagoya Protocol Focal Point for Mexico (Alejandra Barrios Perez) and the Nagoya Protocol Focal Point Guatemala (César Azurdia) participated in the Regional Red List workshop to assess the extinction risk of Mesoamerican CWR (Annex 4 SM11). The three Focal Point mentioned above have been invited to the first Y2 conservation planning workshop to be held in Mexico in 2017.

6. Project support to poverty alleviation

Food Security is one of the major global challenges of the 21st century. Today there are 7.49 billion humans, 78% live in developing countries, by 2050 there will be 9.6 billion with 86% living in developing countries (http://www.worldometers.info/world-population/). Delivering food security for all these people will require by 2050 food supplies to increase by 60% globally, and 100% in developing countries (FAO, 2008). While at the same time climate change is predicted to reduce agricultural production by 2% each decade this century (IPCC, 2014).

Agriculture will require an unprecedented transformation to increase production while mitigating the impact of climate change. For farmers and plant breeders to deliver the necessary enhanced cultivars or landraces they will need access to significantly greater breadth of adaptive genetic resources. The historic process of crop domestication is associated with the loss of the majority of genetic diversity from crops, such diversity is now only available in CWR, the original crop progenitors. The dual problems of human population increase and climate change will result, unless action is taken now, in increased poverty in Mesoamerica. Therefore, the project has focused on conserving the genetic diversity associated with key species related to regionally important crops e.g. beans, maize, squashes, vanillas. The conservation and provision of the genetic diversity found within these wild species to farmers and breeders will help provide food security which is directly linked to poverty alleviation.

In Mesoamerica, CWR are utilised in traditional production techniques known as *milpas* where crops and their CWR grow in close proximity and the genetic flow from wild relatives to crops is 'naturally' sustained. The maintenance of these resources *in situ* (in-garden, on-farm and within formally designated protected areas) not only ensures the long term survival of the species it also sustains the associated traditional knowledge within local communities. This provides CWR users with production independence and empowers them as "owners" of these resources. The publicity campaign will aim to link local *in situ* conservation with local use by resident communities. *In situ* conservation efforts will be complemented by sampling and conserving CWR *ex situ* in seed banks, so making the genetic resource available to broader farmer and scientific breeding programs to improve crops and underpin future national and regional food security.

By combining *in situ* and *ex situ* conservation techniques, improving the breadth of genetic diversity availability to farmers and breeders, combined with local, national and Mesoamerican regional application to alleviate poverty in the Mesoamerican region. Under-pinning food security is an issue that will impact all in the Mesoamerican region but perhaps most notably the rural farming communities that generate the majority of the food supply, the ability to maintain a continuing food supply will ensure there income and prevent poverty.

We expected in the long term to have an impact on poverty alleviation by enhancing human capacity for the identifying of conservation priorities through the use of tools like the IUCN Red List Categories and Criteria and systematic conservation planning.

7. Project support to Gender equity issues

We have made sure that when possible (i.e. when they exist) female experts are invited to the projects events. We monitored gender and age at the projects meetings and workshops (Annex 4 SM5 and SM11) and are following IUCN's Gender Policy (http://cmsdata.iucn.org/downloads/gender_policy.pdf), recognising that gender is an essential component in the sustainable use, management and conservation of natural resources. At the Inception meeting we had a total of 20 responses to the anonymous questionnaire out of 22, 14 were female and six were men. For the Regional Red List workshop 41 out of 44 participants responded the questionnaire, there were 22 female participants and 19 male participants.

8. Monitoring and evaluation

We have been monitoring the project against the indicators used in the logical framework making sure it is feasible to reach our targets (e.g. inviting our target number of experts expected to be trained and included in the meeting and workshop agendas activities expected to be covered). CONABIO who has been in charge of organizing and coordinating events has generated reports which are used to monitor progress.

For the Regional Red List workshop to assess species extinction risk we circulated a survey to participants with the aim to monitor their satisfaction with the workshop and its outcomes (Annex 4 SM18).

Project manager holds weekly meetings with the project's Research Assistant to monitor progress towards activities and she also participates in the monthly meetings held with IUCN and the University of Birmingham.

The financial status of the project (e.g. exchange rates and total funds received in each payment in Mexican pesos) is closely monitored by CONABIO and IUCN.

In January 2016 IUCN visited the lead researchers at the University of Birmingham (through additional travel funding provided by IUCN) to discuss the activities to be carried out in Year 2 and revise the logical framework of the project. CONABIO also joined for part of this meeting to start conversations on the approach to take for the conservation planning workshops.

9. Lessons learnt

The implementing partner contracts took longer than expected to be in place mainly because working with genetic resources is a very sensitive and complex topic for national governments. Changes to IUCN's procurement and contracting procedures coincided with the beginning of this project and this also contributed to a slightly delayed start.

Because not all the regional experts speak English and the region's official language is Spanish, meetings and workshops were held in this language. We were able to ensure full participation by non-Spanish speakers (from IUCN and the University of Birmingham) by simultaneously translating presentations. Going forwards, we are exploring the costs of using professional translator to provide simultaneous translations to both non-English and non-Spanish speakers.

10. Actions taken in response to previous reviews (if applicable)

Not applicable

11. Other comments on progress not covered elsewhere

Enhanced project design

Red List Assessment Review process - the peer review process of IUCN Red List assessments commonly starts after the workshops in which species are evaluated. This process is coordinated by the Red List Authority Coordinators (RLAC) of the IUCN SSC Specialist Groups and it can become a bottleneck in the publication because the number of assessments to review after a workshop is usually high. Benefitting from presence of the RLAC of the IUCN SSC CWR Specialist Group, the reviews were conducted simultaneously and this significantly assisted in the timely completion of the assessment phase.

After several meetings and based on CONABIO's experience, partners came to the conclusion that the most effective way to run the conservation planning workshops in Year 2, would be to break the workshop in two parts. The first part to focus on discussing with the species experts about the criteria to select conservation targets for CWR. The second part focussed on reviewing the results of the analyses generated using the criteria identified and agreed in the first part. During these conversations a second important change to the methods was agreed: even though the conservation planning workshops are at the national level, it would be important for at least one expert from partner countries El Salvador, Guatemala and Honduras to attend the first meeting planned in Mexico so the same model is easily replicated and also with the aim of having a regional view from the beginning.

Other obstacles relate to the schedule of payments from IUCN to CONABIO whereby delays made it difficult for CONABIO to meet national legal requirements for employment (i.e. entire funds must be in place for the whole contract length of an individual) and necessitated more time dedicated to other aspects. Thus, the way money is received at CONABIO, and the delays of the payments have put on a strain on the project and have forced key project personnel to dedicate more time on administrative aspects, rather than technical aspects of the project to try to solve the problem in a time where CONABIO has little funds to make anticipated payments as loans. This has also delayed buying flights from Honduras, Guatemala and El Salvador for project partners, which increased the money spent on air travel. The way the payments of Y2, Y3 are scheduled and the withholding of the final payment cannot guarantee the continuous work of the Research Assistant work, key for the successful delivery of the project. Also, CONABIO cannot guarantee in the future that it will be in a position to lend the resources until funding is received.

12. Sustainability and legacy

Sustainably under-pinning food security and helping alleviate poverty is a significant legacy for any short-term project. But the combining *in situ* and *ex situ* conservation of the breadth of genetic diversity and making that diversity availability to farmers and breeders in Mesoamerica will achieve that goal and establish a permanent legacy in the Mesoamerican region. The conserved resource will be immediately available to farmers and breeders alike to sustainably increase crop production and mitigate the likely impact of climate change in the region. The fact that the resource will be conserved at many locations *in situ* and that the resource at each *in situ* site will have a safety back-up held ex situ in the national genebank means the long-term survival of the CWR resource. The projects efforts to record the associated traditional knowledge held within local communities will further secure the long-term applied value of the resource, as well as the farming systems, engendering independence and empowering the local community "guardians" of the resources.

The profile of the projected has been raised in all four host countries by involving the NFP of the different conventions in the project (Annex 4 SM14). Through the Regional Red List workshop we were able to involve more people in the project from government agencies, universities and institutions from three of the host countries than are directly involved in the project itself e.g. the Museum of Natural History in El Salvador and the Commission on Protected Areas in Guatemala (Annex 4 SM9).

The presentation of the project at Defra's side event at CBD COP13 also gave good exposure for the CWR and the project. The IUCN also discussed the project with staff of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in Honduras and El Salvador after the side event.

The exit strategy is still valid and the project is having the expected impact in terms of national government agencies related to conservation being involved and by leaving an enhanced human capacity and knowledge. The relationship between CONABIO, who has leadership and the most capacity in the region, and project partners and other national institutions involved in Guatemala and El Salvador will allowed a successful exit strategy.

13. Darwin Identity

The project has made every effort to publicise the Darwin Initiative, the logo is included in all communications, as shown in many of the documents attached in Annex 4 (SM4, SM6, SM12, SM16, and SM19). Banners with the Darwin Initiative logo, project partners' logos and the project name (in English and Spanish) were displayed in every project event or event that featured the project (Annex 4 SM3 and SM6). The Darwin logo also appears on the project's webpage (www.psmesoamerica.org). A leaflet with the project information and the Darwin Initiative logo was made to publicise the project during the 13th COP of the CBD that took place in Cancún, Mexico, 02-17 December 2016 (Annex 4 SM16). Prominent exposure of the Darwin Initiative logo at the side event was achieved through the project banners and a PowerPoint presentation (Annex 4 SM19, SM20), and both received positive feedback from Defra representatives at the event.

"Safeguarding Mesoamerican crop wild relatives" is recognised as a stand-alone project. Project partners fully understand how the Darwin Initiative works as they were involved in submitting the proposal. To make sure people who collaborates in the project understands Darwin funding, during project meetings the generalities of the Darwin Initiative are always explained, for example, what the Darwin Initiative is, how it operates, where funds come from, what its objective is, how many times a year the call is open, what kind of projects and where projects are funded (SM4, SM21).

14. Project Expenditure

Table 1 Project expenditure during the reporting period (1 April 2015 – 31 March 2016)

Project spend (indicative) since last annual report	2015/16 Grant (£)	2015/16 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			-7%	
Consultancy costs	0	0		
Overhead Costs				
Travel and subsistence			11%	Travel expenses were cheaper than anticipated for implementing partner UoB
Operating Costs			9%	

Capital items (see below)	0	0		
Others (see below)	0	0		
TOTAL			**2%**	

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2015-2016

Project summary	Measurable Indicators	Progress and Achievements April 2015 - March 2016	Actions required/planned for next period
Impact Important crop wild relatives (CWR) of Mesoamerica are safeguarded *in situ* and *ex situ*, delivering improved food-security for present and future generations.		We have made good progress towards the impact of the project through the selection of CWR species of economic importance and for human livelihoods in the region. The assessment of the extinction risk of CWR species will feed into the process of prioritisation conservation and identification of areas to preserve them *in situ* and will aid to identify those species in more need of *ex situ* conservation. Additional positive impacts towards biodiversity and steps towards equitable sharing of benefits of crop wild relative species will be reached towards the end of the project.	
Outcome National governments of the four countries are aware of the importance of conserving CWR and start to implement policies and actions to promote their conservation in situ and ex situ including the CBD and its Nagoya Protocol and the ITPGRFA	0.1 Developing of national plans for the conservation of CWR using information from this project are underway in the four partner countries 0.2 Partner countries include the results of this project in their national reports to the CBD and its Nagoya Protocol and the ITPGRA 0.3 Breeding and research programs on CWR are improved in the four partners countries through better national seed collections (a maximum of new important CWR incorporated in	Progress has been made towards generating the information to develop national plans, for example identifying threatened CWR species and those species which are more vulnerable to climate change. Food security for the future and conservation of plant genetic resources are still priority topics in the participating countries and in the international agenda. From the beginning of the project we have, and continue, to communicate with the NFPs of the relevant conventions of the project (see section 5 of this report). Within the framework	

	collections and at least 50% used in breeding programs) and inter-country exchange of genetic material, so supporting the ITPGRA (with the exception of Mexico) and Nagoya Protocol (with the exception of El Salvador) 0.4 *In situ* conservation of CWR improved through a better understanding of the importance of CWR by stakeholders in proposed genetic reserves	of the Cancun Coalitions for Enhanced Implementation adopted during COP 13 of the CBD, the project was invited by the Mexican Ministry of the Environment, SEMARNAT, through the Nagoya Protocol Focal Point to formally collaborate in the Coalition "Towards the Implementation of Aichi Target 13 in Centers of Origin of Food and Agriculture Crops" proposed by Mexico and Peru. The announcement of this coalition was made during side event #1873 (Annex 4 SM22) during which this Darwin project and Guatemala officially joined the Coalition (Annex 4 SM23).	
Output 1. Improved in-country human capacity and knowledge for identifying and establishing conservation priorities for CWR to improve human livelihoods, through the evaluation of the extinction risk of species, including climate change vulnerability, identification of important areas for biodiversity and raising awareness of their importance	1.1 Attendance of at least 2 identified key stakeholders from each of the partner countries at the initial inception meeting (beginning of year 1) 1.2 At least two national CWR experts from each of the four partner countries trained to conduct species extinction risk assessments using The IUCN Red List Categories and Criteria and climate change vulnerability assessments using IUCN guidelines (by end of year 1), and identification of sites of global significance for the persistence biodiversity areas based on the IUCN's globally approved standard (end of year 2) 1.3 At least two botanists from El	Good progress has been made towards this Output in Year 1 of the project, we have had two main activities in Year1 which have contributed to reach this Output, the Inception meeting and the Regional Red List workshop to assess the extinction risk and climate change vulnerability of selected CWR species. So far the indicators used have been appropriate to measure progress towards the Outcome.	

	Salvador, Honduras and Guatemala trained in seed bank collection and preservation by Mexican experts (end of year 2) 1.4 Key stakeholders use the knowledge generated through this project on CWR species, key sites for conservation and their importance for food security to create a video for a general public awareness and plan a strategy for a media campaign (starting in year 1, revisited and finalised in year 3) 1.5 Key stakeholders use the knowledge generated through this project on CWR species, key sites for conservation and their importance for food security to create an informative poster (2,000 copies) and plan a dissemination strategy to distribute poster to targeted audiences such as rural agronomy schools, meeting centres for landowners and managers, NGO's, government offices related to the environment and agriculture making sure woman and young audiences are included (starting in year 1, revisited and finalised in year 3) 1.6 National agencies responsible for conserving CWR and for reporting against the relevant conventions are informed about the results in a dedicated regional event convened by	

	IUCN (year 3) 1.7 Publication for the scientific community on a regional analyses on the conservation of CWR (year 3) 1.8 Face to face communications in each country with the local authority representatives for sites identified as important areas for the conservation of CWR (year 3)	
Activity 1.1 Inception meeting convene by IUCN hosted by CONABIO including participants from all four partner countries to discuss project planning, design, logistics, implementation, reporting, legal and ethical compliance.		The inception meeting convene by IUCN and hosted by CONABIO took place 13-14 October 2016 in the National Autonomous University of Mexico (UNAM), Seminar Unit, Mexico City, Mexico. Stakeholders representing the four countries involved in the project attended the meeting and also two members from UK partner University of Birmingham, a member from the IUCN Regional Office in Guatemala and the project manager from IUCN UK. The Nagoya Protocol Focal point for Mexico, Alejandra Barrios Pérez in representation of Edda Fernandez L., and Aura Jazmín de Borja ITPGRFA Focal Point for Guatemala attended the meeting (Annex 4, SM5). Representatives of the British Embassy in Mexico were invited but unfortunately we received no reply (Annex 4, SM24). The indicators selected were appropriate.
Activity 1.2 Five day training workshop including both, theoretical and practical, on the assessment of species extinction risk and climate change vulnerability assessments, as a tool for conservation planning followed by practical application of methods learned to the CWR selected by the stakeholders.		This activity has been completed, a very successful 5 day workshop was run 13-17 February in Cuernavaca, Morelos, Mexico. It was organised by CONABIO and convened by both, CONABIO and IUCN. A total of 22 experts representatives of universities, agronomy centres, museums and the government from El Salvador, Guatemala and Mexico participated. The workshop was aided by 7 IUCN facilitators and 8 CONABIO staff. Two representatives of implementing partner University of Birmingham attended the workshop, Shelagh Kell who is also the Red List Authority Coordinator of the IUCN Species Survival Commission, Crop Wild Relative Specialist Group, and Aremi Contreras, Mexican PhD student in this university. During the first day of the workshop an intensive induction course on the use of the IUCN Red List Categories and

	Criteria and on the methodology to identify traits that make plant species vulnerable to climate change was given to participants. During day 2-5 of the workshop, we assessed the extinction risk and climate change vulnerability of 251 crop wild relative taxa native to Mesoamerica, including CWR of some of the most widely used crops in the world, such as maize, squashes, beans, avocados, cotton and vanilla, among others. Our preliminary results show a total of 75 taxa are categorized as threatened (6 Critically Endangered, 48 Endangered and 21 Vulnerable), 11 Near Threatened, 130 Least Concern and 35 Data Deficient. We are completing the reviewing process and are aiming to get the assessments published on the IUCN Red List of Threatened Species this year. We will evaluate remotely another 13 species, Aremi Contreras (Mexican PhD in UoB) is working on a further 71 CWR assessments for her PhD, totalling 335 Red List assessments. During the workshop Shelagh Kell started the reviewing process of the assessments progressing Activity2.6.
Activity 1.3 Induction on identification of key biodiversity areas by practical application of methods learned to priority CWR.	Y2
Activity 1.4 Run a webinar for partner institutions carrying out field work and managing the collections in seed banks to exchange methodologies on seed collection and their preservation.	Progress was made towards this activity during the Inception meeting (Annex 4 SM4). The need for this webinar was established by the stakeholders and project partner CNRG-INIFAP agreed to lead on it. Dates to hold the webinar will be agreed at the beginning of Y2.
Activity 1.5 Information to be presented in the video selected by stakeholders.	Y3
Activity 1.6 Plan a strategy for a media campaign to broadcast informative video and selection of platforms where the video will be shown discussed with stakeholders in early stages of project and revisited after obtaining project results.	Some progress was made towards the strategic plan for a media campaign. For example, it was confirm by partners that the video could be uploaded on their institutional websites.
Activity 1.7 Broadcast video on national TV and websites of stakeholders.	Y3
Activity 1.8 Information to be presented on the poster to be selected to generate a draft design to be discussed with stakeholders.	Some progress was made towards this activity during the inception meeting (Annex 4 SM1, section 7) and will be revisited when we have the results from the first national conservation workshop.
Activity 1.9 Strategic dissemination plan for poster discussed with stakeholders in early stages of project and revisited after obtaining project results.	Progress on this activity was made during the inception meeting. The existing network of CONABIO Mesoamerican Corridor could be the ideal way of disseminating results, this discussion will be picked up again.
Activity 1.10 Distribute informative poster on crop wild relatives in relevant sites (e.g. rural agronomy schools, meeting centres for landowners and managers, NGO's, government offices related to the environment and agriculture) and	Y3

according to the dissemination plan.		
Activity 1.11 Generate list of key invitees and send out invitations to event to present the results of the project.		Y3
Activity 1.12 Hold event to present the project's results.		Y3
Output 2. Areas to safeguard threatened and vulnerable crop wild relatives identified and information shared to assist in future conservation of sites	2.1 Regional workshop to assess the extinction risk of at least 250 species of CWR attended by at least 2 participants from each of the four partner countries, including civil society, academia and governments (year 1). Making sure female experts are invited (if there are any). 2.2 Four national consultations workshop (one in each country) to identify important sites for the conservation of CWR a) *in situ* and b) *ex situ* (year 2). 2.3 Technical report that identifies the sites, prioritise and proposes management strategies written for national stakeholders in Spanish (year 3). 2.4 Key sites for *in situ* CWR conservation identified in each of the 4 partner countries. 2.5 At least one key site proposed as a genetic reserve in each partner country.	We have made good progress towards this Output through the evaluation of the extinction risk of 251 CWR taxa, i.e. species, subspecies, varieties and in some cases populations. During Year 1 we have also done all the planning for the first national conservation planning workshop that will take place 19-21 June in Mexico City. The indicators to measure progress toward the Output have been appropriate and easy to follow and measure.
Activity 2.1. Generate a preliminary species list based on global CWR		This list was generated based on research previously conducted by the University of Birmingham and a preliminary list of CWR species by country was

conservation targets.		generated (Annex 4 SM8).
Activity 2.2. Review preliminary list by stakeholders to allow a consensus list that includes global, regional, national and local CWR conservation priorities.		This activity took longer than expected as the selection criteria for species had to be established. The selection criteria were identified during the Inception meeting and once stakeholders agreed on them, the list of species was generated (Annex 4 SM8).
Activity 2.3 Collate spatial data provided by national experts to generate species distribution maps to be reviewed during extinction risk assessment workshop.		This activity was conducted collaboratively between, CONABIO, IUCN and University of Birmingham and some workshop participants contributed their personal databases. A total of 45,987 locality records were collated to generate preliminary species distribution maps (Annex 4 SM2).
Activity 2.4 Collate published data on CWR to be assessed and enter it onto the IUCN's, Species Information Service online database.		This activity was conducted collaboratively between, CONABIO, IUCN and University of Birmingham. A total of 269 draft assessment were collated on IUCN online database Species Information Service (SIS) (Annex 4 SM2).
Activity 2.5 Run 5 day expert workshop, including participants from each of the four partner countries and international experts, to assess the extinction risk of at least 250 CWR.		This activity has been completed. See text under Activity 1.2.
Activity 2.6 Peer review process of assessments of crop wild relatives including editing, consistency check and standards for publication on the red list.		Making the most of the participation of the Red List Authority Coordinator (RLAC) of the IUCN SSC Crop Wild Relative Specialist Group, Shelagh Kell (RLAC is the person in the red listing process in charge of coordinate all reviews of CWR submitted for publication to the Red List) at the Regional workshop.
Activity 2.7 Generate priority CWR species list based on the results from expert workshop.		Y2
Activity 2.8 Run 5 day expert workshop to identify important sites for the conservation of CWR a) *in situ* and b) *ex situ* in each country and to propose overall management strategies of genetic reserves.		Discussions about this activity have been taking place since the inception meeting. The design for this workshop has been enhanced, the changes are explained in section 11 of this report. The first part of this two part workshop will take place 19-21 of June, in Mexico City, and we are expecting 30 participants from universities, research institutions, and government agencies from El Salvador, Guatemala and Mexico.
Activity 2.9 Elaborate a report in Spanish summarizing the main findings of the project and necessary actions to promote the conservation of CWR.		Y3
Output 3. Priority Mesoamerican CWR conserved *ex situ* in national seeds banks.	3.1 At least 3 field expeditions in each of the partner countries to collect seed samples of priority CWR (year 3).	All activities under Output 3 will take place in Y3 of the project. We are however in the process of putting contracts and terms of reference together with partner institutions.

	3.2 Representative seed samples of a maximum of 30 priority species accessioned on four national seed banks (year 3). 3.3 Duplicate samples of at least 50% of material collected from 3 signatory countries to the ITPGRFA sent to international collections (year 3).	
Activity 3.1 Field expeditions conducted in all four countries to collect seed samples of CWR identified in earlier stages.		Progress was made towards this activity during the Inception meeting where discussions on legal and ethical compliance and health and safety compliance for field work and seed collection were discussed (Annex 4 SM4). Conversations on the kind of data and the importance of all institution gathering the same information was discussed and it will be picked up during Activity 1.4 (Webinar). We are starting to work on the contract with partner institutions doing the fieldwork.
Activity 3.2 Enter information from field expeditions into national databases.		Y3
Activity 3.3 Assertion of seeds in national seed bank.		Y3
Activity 3.4 Seed exchange between institutions.		Y3

Annex 2 Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: Important crop wild relatives (CWR) of Mesoamerica are safeguarded *in situ* and *ex situ,* delivering improved food-security for present and future generations.			
Outcome: National governments of the four countries are aware of the importance of conserving CWR and start to implement policies and actions to promote their conservation *in situ* and *ex situ* including the CBD and its Nagoya Protocol and the ITPGRFA	0.1 Developing of national plans for the conservation of CWR using information from this project are underway in the four partner countries. 0.2 Partner countries include the results of this project in their national reports to the CBD and its Nagoya Protocol and the ITPGRA. 0.3 Breeding and research programs on CWR are improved in the four partners countries through better national seed collections (a maximum of new important CWR incorporated in collections and at least 50% used in breeding programs) and inter-country exchange of genetic material, so supporting the ITPGRA (with the exception of Mexico) and Nagoya Protocol (with the exception of El Salvador). 0.4 *In situ* conservation of CWR improved through a better understanding of the importance of CWR by stakeholders in proposed	0.1 Draft plan and outputs of meetings convene to discuss it 0.2 National reports to the conventions 0.3 Updates from the partner institutions responsible for the curation and exchange of CWR genetic resources 0.4 Reports from consultation meetings held with stakeholders that outline	Momentum for this work is maintained after the life of the project

	genetic reserves.	intended CWR conservation actions	
Outputs: **1**. Improved in-country human capacity and knowledge for identifying and establishing conservation priorities for CWR to improve human livelihoods, through the evaluation of the extinction risk of species, including climate change vulnerability, identification of important areas for biodiversity and raising awareness of their importance	1.1 Attendance of at least 2 identified key stakeholders from each of the partner countries at the initial inception meeting (beginning of year 1) 1.2 At least two national CWR experts from each of the four partner countries trained to conduct species extinction risk assessments using The IUCN Red List categories and Criteria and climate change vulnerability assessments using IUCN guidelines (by end of year 1), and identification of sites of global significance for the persistence biodiversity areas based on the IUCN's globally approved standard (end of year 2) 1.3 At least two botanists from El Salvador, Honduras and Guatemala trained in seed bank collection and preservation by Mexican experts (end of year 2) 1.4 Key stakeholders use the knowledge generated through this project on CWR species, key sites for conservation and their importance for food security to create a video for a general public awareness and plan a strategy for a media campaign (starting	1.1 Project inception meeting report and group picture 1.2 List of workshop participants with signature, certificates of attendance and participation, group picture. Published assessments of species extinction risk will contained the trained staff names as authors. 1.3 Copy of emailed invitation and list of webinar participants. Botanists trained participate in the project's collection expeditions 1.4 Strategic plan for media campaign ad video widely available on multiple platforms (e.g. National TV, youtube and stakeholder webpages)	Staff who attended the inception meeting remains in the institutions Trained staff remains in the host institution Registered participants join the webinar. Botanists can participate in field expeditions in year 3

	in year 1, revisited and finalised in year 3)		
	1.5 Key stakeholders use the knowledge generated through this project on CWR species, key sites for conservation and their importance for food security to create an informative poster (2,000 copies) and plan a dissemination strategy to distribute poster to targeted audiences such as rural agronomy schools, meeting centres for landowners and managers, NGO's, government offices related to the environment and agriculture making sure woman and young audiences are included (starting in year 1, revisited and finalised in year 3)	1.5 Printed poster and dissemination strategic plan including list of sites, institutions, NGO's, rural agronomy schools to which the poster will distributed	
	1.6 National agencies responsible for conserving CWR and for reporting against the relevant conventions are informed about the results in a dedicated regional event convened by IUCN (year 3)	1.6 Copy of invitation to the event sent by email to stakeholders and convention focal points	Stakeholders attend the event
	1.7 Publication for the scientific community on a regional analyses on the conservation of CWR (year 3)	1.7 Draft version of peer review paper	Paper is accepted for publication
	1.8 Face to face communications in each country with the local authority representatives for sites identified as important areas for the conservation of CWR (year 3)	1.8 List of responsible authorities and feedback from communicators.	Local representatives for key sites for biodiversity are available and effective communication develops with this key stakeholder group

2. Areas to safeguard threatened and vulnerable crop wild relatives identified and information shared to assist in future conservation of sites	2.1 Regional workshop to assess the extinction risk of at least 250 species of CWR attended by at least 2 participants from each of the four partner countries, including civil society, academia and governments (year 1). Making sure female experts are invited (if there are any) and.	2.1 Workshop report that include a list of evaluated species and their respective extinction risk category and vulnerability to climate change and list of participants	All experts are able to attend the workshop
	2.2 Four national consultations workshop (one in each country) to identify important sites for the conservation of CWR a) *in situ* and b) *ex situ* (year 2).	2.2 Consultation workshop report including list of important sites for the conservation of CWR and list of participants	
	2.3 Technical report that identifies the sites, prioritise and proposes management strategies written for national stakeholders in Spanish (year 3)	2.3 Printed report	
	2.4 Key sites for *in situ* CWR conservation identified in each of the 4 partner countries	2.4 List of key sites and map showing them. Spatial data on sites fed to national and global databases.	
	2.5 At least one key site proposed as a genetic reserve in each partner country	2.5 List of key sites proposed as genetic reserves in each partner country, map showing them and overall recommendations for their management	

3. Priority Mesoamerican CWR conserved *ex situ* in national seeds banks	3.1 At least 3 field expeditions in each of the partner countries to collect seed samples of priority CWR (year 3) 3.2 Representative seed samples of a maximum of 30 priority species accessioned on four national seed banks (year 3) 3.3 Duplicate samples of at least 50% of material collected from 3 signatory countries to the ITPGRFA sent to international collections (year 3)	3.1 Field work report, including list of species and localities were seeds were collected 3.2 List of species and their accession number 3.3 List of the institutions duplicate specimens will be sent to and the list of duplicates, including name of species and accession number	Contractual agreements developed between lead institution (IUCN) and national seed banks in each country Acquisition of relevant permits received on time

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

1.1 Inception meeting convene by IUCN hosted by CONABIO including participants from all four partner countries to discuss project planning, design, logistics, implementation, reporting, legal and ethical compliance.

1.2 Five day training workshop including both, theoretical and practical, on the assessment of species extinction risk and climate change vulnerability assessments, as a tool for conservation planning followed by practical application of methods learned to the CWR selected by the stakeholders.

1.3 Induction on identification of key biodiversity areas by practical application of methods learned to priority CWR.

1.4 Run a webinar for partner institutions carrying out field work and managing the collections in seed banks to exchange methodologies on seed collection and their preservation.

1.5 Information to be presented in the video selected by stakeholders

1.6 Plan a strategy for a media campaign to broadcast informative video and selection of platforms where the video will be shown discussed with stakeholders in early stages of project and revisited after obtaining project results

1.7 Broadcast video on national TV and websites of stakeholders.

1.8 Information to be presented on the poster to be selected to generate a draft design to be discussed with stakeholders.

1.9 Strategic dissemination plan for poster discussed with stakeholders in early stages of project and revisited after obtaining project results

1.10 Distribute informative poster on crop wild relatives in relevant sites (e.g. rural agronomy schools, meeting centres for landowners and managers, NGO's, government offices related to the environment and agriculture) and according to the dissemination plan

1.11 Generate list of key invitees and send out invitations to event to present the results of the project.

1.12 Hold event to present the project's results.

2.1 Generate a preliminary species list based on global CWR conservation targets.

2.2 Review preliminary list by stakeholders to allow a consensus list that includes global, regional, national and local CWR conservation priorities.

2.3 Collate spatial data provided by national experts to generate species distribution maps to be reviewed during extinction risk assessment workshop.

2.4 Collate published data on CWR to be assessed and enter it onto the IUCN's, Species Information Service online database

2.5 Run 5 day expert workshop, including participants from each of the four partner countries and international experts, to assess the extinction risk of at least 250 CWR.

2.6 Peer review process of assessments of crop wild relatives including editing, consistency check and standards for publication on the red list.

2.7 Generate priority CWR species list based on the results from expert workshop.

2.8 Run 5 day expert workshop to identify important sites for the conservation of CWR a) *in situ* and b) *ex situ* in each country and to propose overall management strategies of genetic reserves.

2.9 Elaborate a report in Spanish summarizing the main findings of the project and necessary actions to promote the conservation of CWR.

3.1 Field expeditions conducted in all four countries to collect seed samples of CWR identified in earlier stages

3.2 Enter information from field expeditions into national databases

3.3 Assertion of seeds in national seed banks

3.4 Seed exchange between institutions

Annex 3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
Established codes								
4A 4B	Undergraduate student trained in generating Red List draft assessments and using the IUCN Red List Categories and Criteria 24	Female	Brazilian	1				1
6A	Field work and techniques to preserve seeds in germplasm banks		Guatemala El Salvador Honduras					
14A	Project presented at CBD COP13 side event #2221	Female	Mexican	1				3
23	Resources raised towards project implementation			15,800 USD				
23	In kind contributions from CONABIO			Being calculated				
23	In kind contribution from lead organization IUCN			16,463 GBP				
23	In kind contribution from UoB			Being calculated				

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g.weblink or publisher if not available online)

Annex 4 Supplementary Material

SM1 – Partners discussion history using an online communication tool
SM2 – Regional Red List workshop CWR taxa list
SM3 – Implementing agreement IUCN – CONABIO
SM4 – Inception meeting agenda and notes
SM5 – Inception meeting participants and gender survey
SM6 – Inception meeting photos
SM7 – CWR taxa selection criteria
SM8 – List of CWR taxa selected
SM9 – Red List workshop report
SM10 – List of CWR taxa evaluated during the Red List workshop
SM11 – Red List workshop participants and gender survey
SM12 – Red List workshop photos
SM13 – Data to assess taxa vulnerability to climate change
SM14 –Communications with the CBD-Nagoya Protocol and ITPGRFA National Focal Points in each of the host countries
SM15 - CBD COP13 photos
SM16 – CBD COP13 Side event "The Darwin Initiative – Protecting Biodiversity for 25" invitation to Nagoya Protocol and ITPGRFA National Focal Points in each of the host countries
SM17 – Project leaflet
SM18 – Red List workshop satisfaction survey
SM19 – Photo during CBD COP13 and Project banner
SM20 – Defra representatives' feedback on the presentation of the project "Safeguarding Mesoamerican crop wild relatives" during the CBD COP13
SM21 – Red List workshop agenda
SM22 – Announcement of coalition "Towards the Implementation of Aichi Target 13 in Centers of Origin of Food and Agriculture Crops"
SM23 – Information Note and Template of "Cancun Coalitions for Enhanced Implementation"
SM24 – Inception meeting and Red List Workshop invitations to British Embassy in Mexico

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	No
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	