

Darwin Initiative: Half Year Report

(due 31 October 2013)

Project Ref No	20-013
Project Title	Medicinal root trade, plant conservation and local livelihoods in southern Morocco
Country(ies)	Morocco
Lead Organisation	Global Diversity Foundation
Collaborator(s)	High Atlas Foundation; Institut Scientifique, Université Mohammed V-Agdal, Rabat; Regional Herbarium and Ecology & Environment Laboratory, Cadi Ayyad University; Department of Environment, Ministry of Energy, Mines, Water and Environment;
Project Leader	Dr. Gary Martin
Report date and number (eg HYR3)	31 October 2013; HYR1
Project website	A general description of the project is available on GDF's UK website, http://www.global-diversity.org/north-africa/projects/medicinal-root-trade and periodic updates are posted on the GDF North Africa news page http://www.global-diversity.org/north-africa-news

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

The project was successfully launched via a kick-off workshop that took place on 31 May and 1 June 2013 in the High Atlas mountains. The workshop was held in Kasbah Angour near the city of Tahanaout, and was attended by thirty participants representing government agencies with jurisdiction over natural resources, environmental and conservation NGOs, scientific and academic institutions, and horticultural organisations.

All participants were asked to reflect on individual efforts and institutional commitments to ensure the conservation and sustainable use of medicinal plants in order to support local livelihoods in Morocco. The workshop provided them with a vital platform both to engage in mutual learning about current initiatives and to explore potential collaboration between institutions and projects. The workshop featured short 15-30 minute presentations with Q&A's and small working group discussions of 6 to 7 people on the topics of "Assessing conservation status", "Ensuring *in situ* sustainability", "Implementing conservation policy", "Optimizing *ex situ* production" and "Sustaining local livelihoods".

Following this launch, the following items – listed per project output – were planned for the first 6 months of the project according to the project schedule: (1) Baseline studies of medicinal roots produced and initial plant surveys completed (Activities 1.1 and 1.2); (2) Socio-economic and environmental assessments compiled (Activity 2.1); (3) Nurseries established and supervisory visits begun (Activities 3.1 and 3.3); and (4) Steering committee established and presentations at academic conferences made (Activities 4.2 and 4.3). We are making good progress towards the objectives despite initial unforeseen scheduling delays (see section 2a).

(1) Baseline studies of medicinal roots produced and initial plant surveys completed.

Training in herbarium and red-listing techniques at the Herbarium of Cadi Ayyad University

Between 30 September and 5 October 2013, project partners Hassan Rankou, Stephen Jury (University of Reading) and Ahmed Ouhamou (Cadi Ayyad University, Marrakech) organised a training course in herbarium and red-listing techniques at the Herbarium of the Cadi Ayyad

University for masters students. The training included the following elements:

(a) a full day's field trip to Imegdale, Ouirgane and the Oued N'fiss valleys to practice plant collection techniques *in situ*;

(b) a seminar and practical session to install and teach BRAHMS (Botanical Research and Herbarium Management System). During this session, the students imported the old Herbarium database to BRAHMS after some adjustments. We also started a new separate database for the Darwin Initiative project with the collections made in the Imegdale valley, in order to create a checklist of species present in both project sites with the participation of students.

(c) IUCN Plants Conservation Assessments and Red List Assessor Training, an open seminar and workshop including practical sessions held in the university on the topics of IUCN Red List Categories and Criteria and how to use them to assess the conservation status of a species. Project leader Dr. Gary Martin gave an overview of the Darwin Initiative project, and Emily followed up with a message to the students inviting them to apply for remunerated internships linked to the project, starting in early 2014.

This training provides essential grounding for the students who, under the leadership of Dr. Ahmed Ouhammou, will begin plant surveys *in situ* in the communes of Imegdale and Ait M'hamed. Concomitantly, baseline studies of medicinal roots in these communes will be launched. Following the training, the next step in the production of these baseline studies and plant surveys will be forming a 'biodiversity team' including Cadi Ayyad University interns – following interviews with Masters student candidates in December – and the launch of field activities in early 2014 as the early spring flora emerges.

(2) Socio-economic and environmental assessments compiled

Socio-economic baseline studies

Our partners at the High Atlas Foundation have already compiled some socio-economic assessments from both rural communes of Imegdale and Ait M'hamed. These baseline studies are currently being updated, and will be completed by early 2014.

Conservation assessments

Hassan Rankou (IUCN certified Assessor and Trainer), the conservation assessment specialist on our team, has completed the first draft of twenty endemic species, according to IUCN categories and criteria, from the project areas. Each species has a complete monograph, distribution map and range, ecology of the species, population trends, current or projected threats and conservation measures proposed. The assessments are under review by Prof. Mohammed Sghir Taleb and Prof. Mohamed Fennane (Institut Scientifique Rabat), Dr Stephen Jury (Reading University) and Prof Ahmed Ouhammou (Cadi Ayad University). This was a good experience to launch our Moroccan Plant and Livelihoods Specialist Group.

Hassan is currently working specifically on ten species whose medicinal roots are harvested for trade: *Ammoides pusilla* (Brot.) Beistr.; *Anacyclus pyrethrum* var. *pyrethrum* (L.) Link; *Aristolochia paucinervis* Pomel; *Bunium bulbocastanum* L.; *Carlina gummifera* (L.) Less.; *Corrigiola telephiifolia* Pourret; *Corrigiola litoralis* L.; *Ferula communis* L.; *Mandragora autumnalis* Bertol.; *Silene vulgaris* (Moench) Garcke; *Valeriana tuberosa* L.). He is collecting data to produce monographs and the first draft of the conservation assessments by March 2014.

(3) Nurseries established and supervisory visits begun

The process for establishing the nurseries in both communes is well underway. Following initial interactions with authorities and community members in Imegdale, a follow-up meeting was organized on 11 October by GDF's Director of Projects for North Africa, Mohamed El Haouzi and Larbi Didouquen, Vice President of The High Atlas Foundation. During this visit, they confirmed the site of the nursery and organised a formal meeting with community members at Douar Ighrm. After first presenting the project to all participants, they visited the 1.5ha parcel of

land chosen for the nursery, the water tower and the pump that brings rain water to the water tower. The 20 people present at the meeting – all from different douars (hamlets) of Imegdale – provided an exhaustive list, in order of priority, of specific fruit trees and medicinal and aromatic plants they wish to plant in the nursery.

All those present at the meeting agreed that the first step in the creation of the nursery would be to arrange for water to be pumped from the water tower to the nursery via a piping system and an electrical substation. A list of all necessary equipment was established. A team of local volunteers will implement these infrastructural activities, supervised by two community members who were elected during the meeting. These same community members will then be in charge of maintaining the nursery. Another three formally educated members of the community (2 men and 1 woman) were selected to lead the field research activities. All of these activities were launched after the Aid festival, which took place on the 15th of October 2013.

The establishment of the plant nursery at Ait M'hamed is even more advanced, because HAF had conducted participatory planning exercises and in-depth discussions with local authorities about development projects there. The infrastructure of the nursery will be finished by December and the first plants – starting with walnut seedlings – will be set out in January.

Since the Darwin Initiative grant was awarded, our partner HAF received confirmation of \$47,075 from the US Department of State (Bureau of Oceans and International Environmental and Scientific Affairs) to fund specific actions in Ait M'hamed, including elements of water infrastructure and use (reservoir construction; drip and pressure irrigation supplies) that will support the medicinal plant and fruit and nut tree nurseries (equipment and maintenance; fencing; walnut trees, plants and grafting; soil, stones and natural fertilizer; caretaker and training) and that will allow outplanting on terraced plots and marketing (organic certification audit fees).

The National Endowment for Democracy recently awarded \$45,000 to HAF to meet the critical need for cooperatives and a federation of agricultural, developmental, and environmental associations that will promote organic cultivation and commercialization of walnuts, almonds, figs, and other fruit trees and medicinal plants. The grant will allow HAF to train local people, including in Imegdale and Ait M'hamed, in management skills, including project-related financial accounting, consensus-building, and strategic planning.

(4) Steering committee established and presentations at academic conferences made

The Steering committee of the project was established at the outset of the project. It is composed of:

- Mohamed Ribí of the Moroccan High Commission of Water and Forests
- Ali Chafai Elalaoui of the UNDP Medicinal and Aromatic Plants Project
- Mostafa Madbouhi of the Department of Environment
- Yossef Ben-Meir of the High Atlas Foundation
- Ahmed Ouhammou of Cadi Ayyad University in Marrakech
- Mohamed Fennane of the Institut Scientifique of Rabat; and
- Gary Martin of the Global Diversity Foundation

The first meeting of the steering committee took place during the Kick-off workshop held in late May, when all of the above people – or representatives from their institutions – met for two days in the High Atlas mountains.

Furthermore, during the Kick-off workshop, we organised a final plenary session at which the *Moroccan Plant and Livelihoods Specialist Group* (MPLSG) was created. The main role of the MPLSG will be to contribute to documenting, conserving and sustaining plant diversity use in Morocco, thereby leading to a measurable improvement in local livelihoods and a reduction in the loss of biodiversity. The group will also provide information to the general public on the conservation of plants in Morocco and on the inherent value of species to ecosystem health and functioning, the provision of ecosystem services and support of human livelihoods. Its

members will form a highly-regarded and influential network of species experts that is able to influence conservation and livelihood outcomes at local, national and global scales, by engaging with each other and collaborating with the CBD Secretariat and IUCN.

Hassan Rankou, who is acting as focal point of this group, interacted extensively with IUCN Species Survival Commission Network officers and Prof. Bertrand de Montmollin, the chair of the Mediterranean Plant Specialist Group, to discuss the hosting of our MPLSG group within IUCN. He received full agreement from IUCN on the 28th of October for this proposal. The MPLSG is an essential project outcome, as it is this group that will ensure legacy of the work after the project's completion and beyond the group of actors currently involved in the day-to-day activities and steering committee.

Among other presentations made, we would like to call attention to a TedxMarrakech talk on the Darwin Initiative project presented by Gary Martin. He was introduced by Clive Alderton, the British Ambassador to Morocco. The talk went online on 18 November (see www.youtube.com/watch?v=BXOXBx5LVw0) and has already been viewed nearly 500 times.

2a. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

GDF raised co-funding (from the Critical Ecosystem Partnership Fund) for the project kick-off workshop allowing it to proceed as planned. However, the launch of project fieldwork was set back a few months for a number of reasons: (1) the first transfer of project funds arrived in the GDF account on 19 June 2013, over 2 and ½ months after the start of the project and (2) within a few weeks of the monies arriving, Ramadan started in Morocco – a religious festival that lasts about 1 month. Given that it currently falls during the hot summer months it is a time of relatively limited work activities in Morocco. Following Ramadan, it is traditional for Moroccans to take their holidays, meaning effectively that project field activities began in earnest in mid-September. Since then, all project partners have been very active and the project is progressing rapidly as indicated in section 1: these delays have not had any impact on the smooth running of the project itself.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: No

Formal change request submitted: No

Received confirmation of change acceptance No

3a. Do you expect to have any significant (eg more than £5,000) underspend in your budget for this year?

Yes No

3b. If yes, and you wish to request a carryforward of funds, this should be done as soon as possible through the formal Change Request process. However, it would help Defra manage Darwin funds more efficiently if you could give an indication now of how much you expect this request might be for.

Estimated carryforward request: £

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

No

