



Darwin Initiative: Half Year Report

(due 31 October 2014)

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; Moroccan Biodiversity and Livelihoods Association
Project Leader	Dr. Gary Martin
Report date and number (eg HYR3)	31 October 2014; HYR2
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 to end September).

The project continued in its second year with the Global Strategy for Plant Conservation (GSPC) in Morocco Stakeholder Workshop held on 31 March – 1 April 2014. The second of three workshops primarily funded by the Darwin Initiative, it brought together 26 plant conservation practitioners, primarily from Morocco, for presentations by specialists such as Maité Delmas of the Natural History Museum of Paris and Suzanne Sharrock of Botanical Gardens Conservation International (BGCI), accompanied by small working group activities. The workshop was co-organized by GDF and BGCI, with co-funding from the CBD Secretariat. The full report of the workshop will be included as an annex of the year 2 annual report. In the meantime, we are updating the practical case studies on plant conservation activities in Morocco to inform government agencies and other stakeholders responsible for implementation of the GSPC, NBSAP, National Strategy on MAPs and other instruments related to the environment and sustainable development. Following recommendations received in the final evaluation of the event, we plan to host the third and final workshop on best practices in access and benefit sharing, community research, plant harvesting and other topics. This is now scheduled for early in year 3 of the project, rather than at the end of year 2. We now plan to finish the community evaluation of participatory planning by the end – instead of the middle – of year 2, so it can be reviewed by steering committee at the time of the best practices workshop.

Given the relative paucity of available socio-economic baseline data discovered in the first year of the project, we have been exploring innovative ways of assessing the potential impact of the project on livelihoods. We sponsored Laura Boyd-Clowes, an MSc student in ethnobotany at the University of Kent, to conduct her masters' research in Imegdale. Her thesis on "Land, Inequality and Community: livelihoods and the transition toward fruit arboriculture in a Moroccan High Atlas Village", completed in September 2014, provides insights on using ethnographic approaches such as household surveys, rankings of livelihood strategies over time, participant observation and semi-structured interviews to document the change in a

community that benefitted from distribution of fruit trees by the High Atlas Foundation before the Darwin project started. We plan to build on this methodological approach in both Ait M'hamed and Imegdale over the next 18 months of the project, replacing our proposed focus on simply measuring annual income increase with a more insightful ethnographic assessment of poverty alleviation and livelihood improvement. In particular, we plan to further test Laura's conclusion that Morocco's nascent fruit tree industry, at least in one village, has been fairly well-incorporated into household livelihood strategies and community farming practices, while at the same time magnifying inequalities between villagers. She found that households that cannot engage with the cultivation of income-producing fruit trees because of lack of land or water do receive some benefits through community wealth-sharing mechanisms – but they have also needed alternative livelihood diversification (such as migrating for wage labour) to adapt to the changing conditions of life in the High Atlas. This observation, if borne out, would underscore the importance of promoting income-earning activities related to the cultivation and harvest of medicinal and aromatic plants – as well as supporting community water projects – in order to avoid exacerbating inequalities in the rural communes where we work.

We also made progress in disseminating project results in international academic and policy venues. In May, project leader Gary Martin travelled to Bhutan for the International Society of Ethnobiology Congress. He chaired a session (S53: Ethnomedicine and socioeconomic implications) on “Medicinal plant itineraries: new analytical approaches on the production, trade and use of herbal remedies.” Martin gave a presentation (acknowledging the Darwin Initiative) on ‘Plant itineraries – how species and associated knowledge and classification move in time and space,’ drawing on the Moroccan project. He was invited to an additional conference, “Plants and People: material and immaterial resources in trans-regional flows” at Cambridge University to present a paper on ‘Medicinal herb flows, plant conservation and local livelihoods in Morocco’, in which the Darwin Initiative was also acknowledged. We decided that it was too early in the project to attend the CBD Conference of Parties or the World Parks Congress, but we will explore other policy venues where it would be appropriate to present our case studies and results, especially as related to the emerging sustainable development goals that will be negotiated internationally in 2015. Hassan Rankou led an effort to finalise a manuscript on “Conservation Assessments and Red Listing of the Endemic Moroccan Flora (Monocotyledons)” after it was accepted for the *Botanical Journal of the Linnean Society* with minor revisions. His assessments of the conservation status of eleven wild-harvested medicinal roots have also been accepted with minor revision by the IUCN, and we will continue to integrate perspectives of diverse stakeholders throughout the project.

A particularly exciting development is the consolidation of a Moroccan non-profit organisation focused on botanical resources, traditional ethnobotanical practices and livelihoods. In the initial Workshop on Plant Conservation and Livelihoods in Morocco we formed the Moroccan Plant and Livelihoods Specialist Group (MPLSG), later recognized officially as part of the Mediterranean Plant Specialist Group, which is part of the IUCN Species Survival Commission. Two young Moroccan botanists profiled in the original proposal – Hassan Rankou and Abderrahim Ouarghidi – have joined forces to incorporate MPLSG as a local NGO that will be registered with the Moroccan authorities in November 2014. Called the Moroccan Biodiversity and Livelihood Association (MBLA), it will help to ensure the legacy of the project and responds to GSPC Target 16, establishing and strengthening institutions, networks and partnerships for plant conservation nationally. An interesting aspect of the Association is its encouragement of members of the Moroccan diaspora – especially university-educated Moroccans who have resided in Canada, the United States and the United Kingdom – to return to spend extended periods of time to participate in the Darwin project and other conservation initiatives. The MBLA plans to issue a newsletter that will provide periodic updates and publicise case studies on plant conservation in Morocco, which can be further developed and submitted to the Department of Environment, High Commission for Water and Forest and Institut Scientifique for inclusion in CBD reports and reviews of the GSPC.

Our efforts to document the overall plant diversity of communal lands, forest domains and protected areas near two rural townships is proceeding well, as the community researchers in Ait M'hamed and Imegdale have made more than 800 collections of local plants and have growing ‘free lists’ of plants used locally. Community researcher coordinator Fadma Ait Ilich is entering the collection data in a Brahms database, following instructions from Hassan Rankou.

Of the 20,000 seeds (10,000 almonds and 10,000 walnuts) planted in the Ait M'hamed plant nursery, just over 78% survived the first year. Some 4,000 to 5,000 new seeds will be planted this year to achieve the number of trees promised to the community. Saplings will be grafted in coming months using grafts from healthy and optimally productive trees. Community members have identified a parcel of 800 m² for a second plant nursery. Tilling, building terraces and installing a drip system is expected to take place over coming months, to enable planting of some 60,000 walnut seeds (especially for future distribution to more remote villages in the valley) and medicinal plants. Three stakeholders have been chosen to help collect seeds and extract fresh roots of pellitory (*Anacyclus pyrethrum*) for transplantation by March. Abderrahim Ouarghidi notes that it has been very hard to collect mature seeds of pellitory, as the species continues to dramatically decline in the wild. In the full year report, we will provide an update on the Imegdale nursery and a fuller account of the overall initiative to create community nurseries to produce and distribute plants and trees that enhance local livelihoods. Our current projection is that we will largely exceed the number of plants expected in the original proposal.

We will also use the occasion of the full year report to comment on community exchanges that we are organising among key participants from target rural townships, but can give two examples here. Mohamed Allaoui, president of the Ait M'hamed commune and his collaborators Malika Ankes and Abdelmaled Oukdim, along with selected farmers and elected members of the commune, have visited the Imegdale area four times, including during the walnut festival in Asni, to exchange ideas regarding the trade and value chains of almonds, walnuts and other tree crops. The three community researchers in Ait M'hamed were invited by the High Atlas Foundation to observe and practice participatory method and activities, with the aim of further training them in applied research approaches as they work on agroforestry, biodiversity and hydrology projects, and assist in collecting socioeconomic data.

We have noted the request by the external reviewer to provide, in the second annual report, more information on potential markets, allocation of tree seedlings, correct harvesting from the wild, enrichment planting and project management structure. We look forward to elaborating on these topics at the end of the second year of the project.

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.

The last six months went relatively smoothly, even with the predictable slow-down of activities during the hot dry summer, the fasting month of Ramadan and the festivities that follow it. Abderrahim Ouarghidi began collaborating with the project a few months later than first anticipated, but he is now fully on board and activities are continuing apace.

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 currently expect to have any significant (eg more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully as it is unlikely that any requests to carry forward funds will be approved this year. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project and would like to talk to someone about the options available this year, please indicate below when you think you might be in a position to do this and what the reasons might be:

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

I was pleased to participate in a spot audit requested by Darwin finance after the first year of the project, the first occasion since I started receiving Darwin funding in 2004. As Director of a small organization that has received 9 scoping grants, main projects and post-projects on three continents, the spot audit offered a unique opportunity to understand how Darwin interprets and applies its Reporting and Finance Instructions. We are still awaiting feedback from the audit, and I am keen to hear if my understanding and assumptions about bookkeeping and financial reporting are assessed to be correct. For my part, I found that the instructions were clear, and it was relatively easy to comply with the spot audit, especially since I was given flexibility with the time frame. Some budget lines are more open to interpretation than others but it appears that grantees are given the latitude to use common sense in spending funds, and in providing their own rationale for each expense and budget line. For example, we are currently using 'Fieldwork Operating Costs' to renovate and equip a 'field research centre' in Marrakech that will host researchers collaborating with GDF and the Moroccan Biodiversity and Livelihoods Association in achieving the objectives of our Darwin project. I imagine this and other allocations will be validated by any further spot audit or the final audit. This flexibility gives our team the confidence to embrace emerging opportunities that were only partially foreseen when we wrote the proposal.

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request.

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 20-035 Darwin Half Year Report**