



**Darwin Initiative Main/Post/D+ Project
Half Year Report
(due 31st October 2018)**

Project reference	24-010
Project title	Mobilising useful plant conservation to enhance Atlas mountain community livelihoods
Country(ies)/territory(ies)	Morocco
Lead organisation	Global Diversity Foundation (GDF)
Partner(s)	Moroccan Biodiversity and Livelihoods Association (MBLA); High Commissariat for Water and Forests and Desertification; Faculté des Sciences Semlalia Marrakech, Université Cadi Ayyad; Institut Agronomique et Vétérinaire Hassan II, Rabat; Ressources Ingénierie (RESING); International Center for Agricultural Research in the Dry Areas and Agropolis Resource Center for Crop Conservation, Adaptation and Diversity (ARCAD); Association Friends of the Mohamed VI Hospital Centre (Amis du CHU).
Project leader	Gary Martin
Report date and number (e.g., HYR3)	31 October 2018, HYR2
Project website/blog/social media etc.	A general description of the project is available on GDF's UK website and periodic updates are posted on the news page .

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).

Concerning **Output 1**, which focuses on **developing conservation action plans for 12 regionally threatened and culturally important species**, excellent progress has been made collecting baseline data through floristic and ecological studies and completing conservation assessments (the initial step in the process). We submitted the remaining seven assessments to IUCN for publication following the completion of fieldwork during this reporting period; these will complement the five already published on the IUCN Red List of Threatened Species.

We are now cultivating 2,000 plants of each of 12 target species in both our partner community nurseries in Imegdalen and [Ait M'hamed](#). These plants are distributed to local communities for enrichment planting in designated areas, thus enhancing community incomes as well as wild plant populations. We will carry out the Year 2 cycle of plant distribution to communities of Imegdalen and Ait M'hamed in December 2018 and January 2019 – the optimal season for successful enrichment planting. This also contributes to Output 2 on local livelihoods.

During the last six months, we have collected seeds of the final 5 of the 12 target species for storage, alongside the other 7 species collected in Year 1, in community [seed banks](#) in Imegdalen, Ait M'hamed and the MARK Regional Herbarium built in Year 1. Through this process of seed saving, we are helping to preserve the quality and availability of seed of valuable local varieties that support local livelihoods.

We are preparing the launch of our plant commercialisation programme, aimed at supporting communities to improve their livelihoods while conserving their valuable biodiversity by commercialising it sustainably and effectively. This will kick off with a 'Mediterranean Roundtable on Local Product Commercialisation' in early November, as part of our Mediterranean Environments Regional Academy (see below), where experts will join us and share their experiences in plant and local product trade in Morocco and beyond. These experts form part of our newly established 'High Atlas Cultural Landscape Local Product Commercialisation Expert Committee', set up to provide expert advice, feedback and strategy support to ensure that our commercialisation process is of a high standard, ethically sound and achieves the goal of providing sustainable incomes to High Atlas communities. The Panel members currently include:

- Gonzalo Oviedo, Manager of the Mediterranean Programme, MAVA Foundation
- Nicola Bradbear, Director, Bees for Development;
- Dena Freeman, Senior Visiting Fellow, Department of Anthropology, London School of Economics and Political Science;
- Jalal Charaf, CEO of Atlassence, a Marrakech-based supplier of essential oils
- Kamal El Baroudi, entrepreneur and owner of Ayaso, a high-end local product boutique in Marrakech
- Rachid Jaafari, naturopath and creator of Terre d'Eveil a natural healing center that hosts a farmers market and natural foods store.
- Youssef Benaissa, an agritourism operator active in commercialisation of local products from the High Atlas

On 22nd October 2018, Sifeddine Ouahdani (a Moroccan agronomist) joined the team as our new Local Product Commercialisation (LPC) Officer who will lead the design of a protocol and procedure for data consolidation and product selection, feasibility studies for selected products, value chain analyses, and creation and implementation of business plans. He will also serve as a liaison between local communities and national retailers and organise capacity building sessions for local Amazigh entrepreneurs and cooperatives aimed at strengthening their product development, marketing and sale capacities.

Abdellah Aghraz, GDF's Moroccan Field and Laboratory Scientist, has continued plant quality testing by conducting comparative analyses of the chemical composition and essential oils of all 12 species to better understand 1) the difference between wild and plant nursery cultivated plants and 2) explore difference in quality between plants grown in the two community nurseries. He has completed analyses of 6 species with the remaining due to be completed by the end of Year 2.

Regarding **livelihoods improvement (Output 2)**, GDF has continued its support to Dar Taliba, an all girls' boarding house that provides Amazigh girls from remote villages of the Ourika Valley an opportunity to obtain a high school education. Our support ensures the continued operation of the boarding house which has granted access to education to an additional 117 girls from remote villages (65 in Year 1 and 52 in this reporting period), far exceeding the three-year target of 75 girls.

With co-funding from a Replenish Africa Initiative project secured by our local partners [Moroccan Biodiversity and Livelihoods Association](#) (MBLA), we have been collaborating with local partner RESING, a Marrakech-based hydrology engineering firm, and have successfully installed irrigation to Imegdal, Ait M'hamed and Dar Taliba nurseries to support the cultivation of all plant species. In the case of Dar Taliba, the new water source also provides free and clean drinking water to the school and its residents. We have completed design consultations for the repair of existing infrastructure (including *sequias*, traditional water canals) and work has begun. Local community members have been provided with equipment and training to repair infrastructure which will provide irrigation of large tracts of land currently with insufficient water for cultivation in our partner communities.

Following the highly successful medical caravan organised in Ait M'hamed in Year 1, we organised a follow-up caravan on 28 and 29 July 2018. The principal goals of this event were to carry out tests and visits with 100 patients with chronic conditions identified during the first caravan as requiring further support and to provide referrals to the Mohamed VI hospital in Marrakech if necessary. The community took the opportunity to form a local committee for

awareness-raising about chronic diseases (principally diabetes and hypertension). Our partners for this activity, the Association Amis du CHU, are organising a capacity-building programme to support the work of this committee. Annual health caravans and food distribution will be carried out in the community of Imegdjal in December 2018 and February 2019 respectively.

Capacity building (Output 3): we hosted a number of [interactive learning sessions at local primary schools](#) on the topic of local plants and their uses. Students produced drawings of local plants and crops to create a “local household basket booklet” – which will feature 50 local and useful plant products – to be used for outreach activities in High Atlas. We continued our weekly training programme in Dar Taliba boarding house and, during this reporting period, 126 girls participated in permaculture trainings on sustainable harvesting, vegetable planting, composting and making anti-parasite treatments and organic fertiliser. With the girls now back to school after the summer break, the team are developing a [new programme of weekly trainings](#) for the current academic year which will include expanding the plant nursery to increase cultivation of aromatic and medicinal plants and constructing a new seedbank.

We held a [series of workshops](#) over three days in the rural commune of Imegdjal in September 2018 and were joined by longstanding partners RESING, Radiant Design and MBLA who delivered interactive workshops and field visits on the following topics:

- 1) Sustainable water management and water harvesting techniques: 22 community members from 8 different villages (16 men + 6 women) received training
- 2) Value-adding and marketing of aromatic and medicinal plants: 21 community members from 7 different villages (14 men + 7 women) received training
- 3) Sustainable harvesting practices and seed collection: 22 community members from 8 different villages (16 men + 6 women) received training

We also trained 8 community leaders (4 men and 4 women) from surrounding villages to become focal points on the above topics. This approach enables us to target the wider community, including those living in remote villages who are unable to travel the distances to attend workshops (a significant challenge when working in the High Atlas). We are on target to respond to Darwin’s comments on our Year 1 project report and ensure an adequate number (50%) of woman leaders receive capacity building. We will host similar workshops with community members in Ait M’hamed during Year 2. A separate report on these workshops is available upon request.

Our team of six community researchers (3 men and 3 women) have continued to receive on-the-job training in nursery management and new skills. Two additional community researchers will be locally recruited in 2019 to support the expansion of our programme into a third partner community of Oukeïmeden. To build the capacities of the full GDF-MBLA team, we are organising a week-long workshop on biocultural diversity monitoring techniques in the High Atlas in Spring 2019, with co-funding from the MAVA Foundation. We will invite both community and academic experts to this event with the intention of (a) bringing community-based ecological monitoring approaches and techniques into dialogue with scientific monitoring methods within our programme and (b) establishing the foundations for our monitoring system to be fully participatory.

The final element of our Year 2 capacity building activities involves the delivery of a Community Exchange on wild plant species conservation, community seed banks and nurseries. Given that in September 2017 GDF hosted a [European Community Exchange on Seed Diversity and Sovereignty in Barcelona](#) with funding from other sources, we have directed Darwin funds for the exchange to another Global Environments Network event, the Mediterranean Environments Regional Academy (MERA 2018), which will take place 2-11 November in Morocco. Under the theme of “[Community-based management in the Mediterranean: innovations in socio-environmental research and action](#)”, MERA will gather 25 emerging environmental change makers from the Mediterranean region who will be joined by a wide range of experts and practitioners from the region for intensive peer-learning, mentoring and exchange. Topics of focus include local product commercialisation, agrobiodiversity, gender and agricultural

research, communal territorial governance and environmental policy-making in the Mediterranean region.

Objective 4: We have finalised a Memorandum of Understanding with the national office of the High Commissariat for Water and Forests and Desertification. With this in place, Mohamed El Haouzi, GDF field coordinator, who is leading the revision of the database of fauna and flora commercialized in the markets (souks) of Marrakech and its rural hinterland, will begin the repatriation of data to the Regional Directorate - Haut Atlas-Marrakech of the High Commissariat. During this reporting period Mohamed has gathered additional information from local herbalists in the Marrakech souks (marketplaces) on plants that were not yet identified to a species level, and on species of special interest, such as endemic species of oregano and thyme.

Finally, efforts to **identify and document additional species of useful plants (Output 5)** have proceeding well over the last six months and we remain on target to deliver according to our proposed schedule. We have now completed ethnobotanical surveys on over 50 species (100% of Year 2 target) and conservation assessments for an additional 30 species (60% of Year 3 target of 50 species). We are carrying out final analyses of our ethnobotanical database before proceeding with interpretation. The next steps include the completion of a scientific article with the information of the overall database (including more than 200 species) and another article combining floristic and ethnobotanical information on the 50 key species selected (jointly with the Conservation Programme).

2a. Give details of any notable problems or unexpected developments/lessons learnt 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.

None

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: Yes/No

Formal change request submitted: Yes/No

Received confirmation of change acceptance Yes/No

3a. Do you currently expect to have any significant (e.g., 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. 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, please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

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

None

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. Additionally, if you were funded under R24 and asked to provide further information by your first half year report, please attach your response as a separate document.

As requested during Darwin's review of this project's first year of implementation, we attach to this report the following documents:

1. MoU with the National Office of the High Commissariat in Rabat (Annex 1)
2. TOR for newly created Local Product Commercialisation Expert Committee (Annex 2)

The Darwin Initiative logo has been added to GDF's [High Atlas Cultural Landscape Programme](#) and dedicated [project](#) webpage.

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 e.g. Subject: 22-035 Darwin Half Year Report**