



*PLACING THE
HIGH ATLAS ON THE
GLOBAL MAP*

A VISUAL JOURNEY



GLOBAL
DIVERSITY
FOUNDATION



MOROCCAN
BIODIVERSITY
AND LIVELIHOODS
ASSOCIATION

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Front Cover: All roads lead to the agdal. During the summer migration, families and their herds often travel for days to greener pastures in the highlands of the High Atlas. © Inanc Tekguc.

Back Cover: Cosmos as the commons. Eyes of the goats sparkle like stars. The night is the only time to see the whole herd at a standstill; almost. © Inanc Tekguc.

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Kids in their migration to the High Atlas. © Inanc Tekguc.

Collaboration is essential during transhumance. © Inanc Tekguc.



INTRODUCTION

The High Atlas Cultural Landscapes Programme is a conservation and development programme in the Moroccan High Atlas that supports rural communities to revitalise traditional practices, sustain livelihoods and restore nature. Established in 2013 by Global Diversity Foundation and the Moroccan Biodiversity and Livelihoods Association, the Programme collaborates with over 35 municipalities, associations and cooperatives in the High Atlas, as well as 35 national and 30 international partners.

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Further information is available at:
www.global-diversity.org/programmes/mediterranean/

This visual journey showcases stunning landscapes of the High Atlas, complex cultural practices of the Amazigh people, remarkable fauna and flora of the region, as well as some of our unique programme activities. We thank the MAVA Foundation for supporting the production of this booklet.





The High Atlas Mountains are a 650 km long mountain chain that spans 50-100 km along their width.

They run from the Atlantic Ocean to the limit of the Jurassic outcrops to the east, close to the Algerian border.

Home of the Tashelhit, Tamazight and other minor groups, they are very rich in biological and cultural diversity. © Inanc Tekguc.

CULTURAL LANDSCAPES AND DWELLINGS

Cultural landscapes are at the centre of our work in the High Atlas. Here we take you on a journey through traditional agricultural terraces, the highland summer pastures, as well as the sparse forests and shrublands surrounding Amazigh hamlets. These landscapes have been shaped through millennia of mutually reciprocal relationships between people and nature. Our aim is to maintain and restore them to ensure they continue to sustain communities and environments for generations to come.

The distinct manifestations of cultural landscapes often reflect specific techniques of sustainable land use that have been developed by local and indigenous communities through an ongoing, age-old dance between the physical environment, human ingenuity and the spiritual relationships between them.

There is a growing body of evidence demonstrating that the continued existence of traditional forms of land-use supports biodiversity and healthy ecosystem function the world over. Protecting cultural landscapes is increasingly valued as a means to ensure that the relationships between people and nature are maintained, thus ensuring the continuity of both cultural and biological diversity.



High Atlas communities depend significantly on wild medicinal plant collection, small scale agriculture and extensive livestock rearing for their livelihoods. Supporting the cultural landscapes they maintain through these practices is key for both conservation and development. © Inanc Tekguc.





Valleys and other lowland areas located near water courses are often used for human settlements, locally known as *douars*.

Agricultural fields and terraces are also located in these areas, and are planted with herbaceous and woody plants requiring irrigation.

Rain-fed lands, where cereals are grown, are located higher up the mountain sides. © Ugo D'Ambrosio.



In agricultural terraces, water is managed at the *douar* (hamlet) level, while the choice of crops and inputs is done at the household level. In these terraces, soils tend to be well structured and rich in nutrients. © Inanc Tekguc.



Barley and wheat are essential for local livelihoods and constitute the basis of many local dishes. Barley and wheat straw is used to feed livestock during seasons of scarcity, particularly the winter months.
© Inanc Tekguc.



Amazigh cultural practices include collective actions to manage soil, water and grazing.

These include physical barriers such as stone protections (*astour*) (left, © Inanc Tekguc) and stone walls (*imarine*) (top, © Soufiane M'sou).

Other agricultural practices, such as threshing cereals, are still carried out traditionally with the help of donkeys (*tawala n'anrar*) © Inanc Tekguc.





Transhumance - the practice of moving livestock from the lowlands in winter to the highlands in summer and back again - is essential for Amazigh life and High Atlas biodiversity. © Inanc Tekguc.



While some tribes practice seasonal transhumance in pastures located near their douars, others, such as the Ait Atta shown here, have to travel for several days to reach the summer grasslands. © Inaric Tekguc.



Over the course of the transhumance, Ait Atta families and thousands of sheep and goats - and sometimes some camels - travel north to reach the *agdal*, a communally governed pasture land where age-old rules of collective use ensure the regeneration of the grasses and flowers every year. © Inanc Tekguc.

The Ait Atta and their ancestors have practiced these migrations for centuries, if not millennia. Its survival into the future depends on the next generation taking up the baton. © Inanc Tekguc.





This annual, centuries-old migration to the *agdal* has allowed the Ait Atta and other transhumant groups to build up invaluable knowledge about the landscape, weather patterns and biodiversity of the regions they travel through and to.

This knowledge stands at the precipice, as the practice of transhumance is decreasing dramatically...
© Inanc Tekguc.

The future of Amazigh cultural practices lies in the hands of upcoming generations, and their capacity and willingness to continue with them. Intergenerational transmission of knowledge, practices and beliefs lies at the heart of this continuity.
© Inanc Tekguc.





Through our collaborations with local communities such as that of Zaouiat Ahansal, shown here, we support actions to revitalise traditional practices, sustain livelihoods and restore nature. © Pommélien Da Silva Cosme.

Having faced wave after wave of change and challenge over the centuries, High Atlas communities continue to rely on their traditions, adaptability and resilience as they navigate modernity. © Inanc Tekguc.





In clear sky nights, the Milky Way takes over the firmaments, as local communities prepare for a new day to start. © [Inanc Tekguc](#).

FLORA, FAUNA AND PRODUCTS

The rich biodiversity of the High Atlas Mountains plays a vital role in the Moroccan economy both at regional and national scales. Plants and animals are central to Amazigh life in the High Atlas, from wild plants to cultivated herbs and trees, and from camels to small ruminants and bees. Many of the products derived from plants and animals are sold in local markets or cooked in household kitchens.

Cooperatives in the High Atlas region produce a wide range of high-quality and sought-after local products, yet they face significant challenges as they seek to promote and sell their goods. We help communities and cooperatives design actions and initiatives that support them in this endeavour with a view to enhancing their incomes, thereby helping them protect the cultural landscapes they depend on.



The High Atlas mountain chain is one of the most biodiversity-rich areas of the Mediterranean biodiversity hotspot.
© Pommelien Da Silva Cosme.

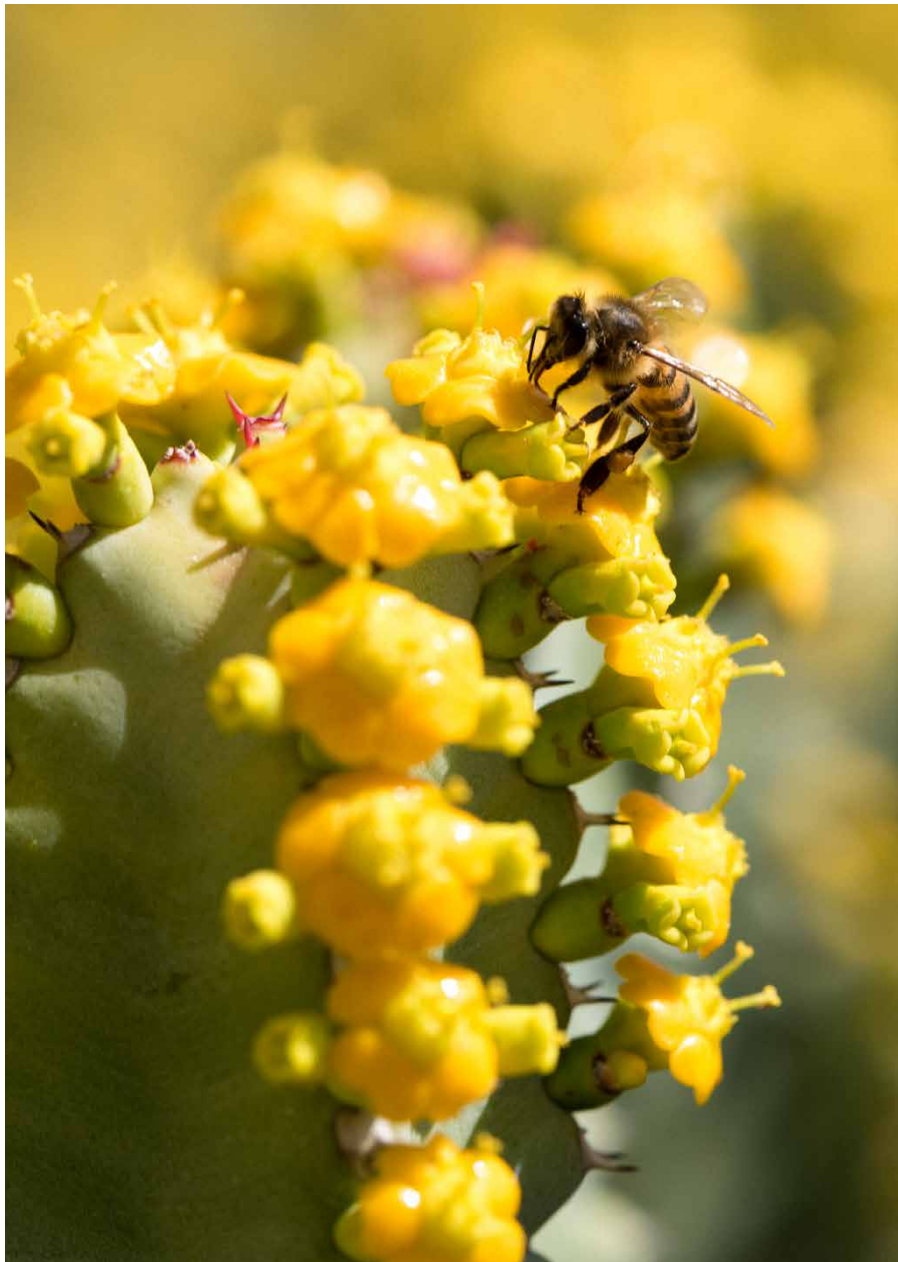


A high number of endemic species of plants and animals are found in the region. © Pommélien Da Silva Cosme.



Local plants are well adapted to thin and poor soils, extreme temperatures and regular grazing. © Irene Teixidor-Toneu.





Plant species provide multiple resources to local communities. Shown here, *Euphorbia resinifera* (opposite, © Inanc Tekguc) can be used to produce honey (left, © Inanc Tekguc) and to treat diabetes (top, © Giada Bellia).

Another local plant with multiple uses is caper (*Capparis spinosa*) (left, © Giada Bellia), which can be pickled and eaten (centre, © Giada Bellia) or dried and used as medicine for multiple ailments including diabetes, inflammation and others (right, © Giada Bellia).







Rural markets, locally known as souks, are places where plant and animal products are traded on a weekly basis.
© Meryem Aakairi.



Pulses (previous picture) and cereals are staples in Amazigh cuisine. © Ibtissam Bouseta.

Amazigh cuisine boasts a great diversity of breads, made either with wheat flour or barley flour.
© Inanc Tekguc.



Livestock, especially goats and sheep, are an essential resource for High Atlas communities, and constitute core economic assets for many families. © [Inanc Tekguc](#).





Other animals such as dromedaries are used as pack animals, especially on long journeys. © [Eda Elif Tibet](#).



Water sources along the transhumance routes allow animals and humans to rehydrate and continue the journey. © Inanc Tekguc.

Kitchens are where wild and domestic High Atlas produce is converted into food and culture. © Inanc Tekguc.





Amazigh women are experienced cooks and bakers, transmitting traditional recipes from generation to generation © Inanc Tekguç.



Food is most often consumed collectively. Here, hard wheat couscous with chicken and vegetables is accompanied with sour milk (lben). © Giada Bellia.



Another traditional dish of the High Atlas is barley couscous (*toummite*) with boiled eggs.
© Louisa Aarrass.



The High Atlas Cultural Landscapes programme supports the conservation of local biocultural diversity through community-based actions such as the creation and management of school gardens and nurseries.
© Pommélien Da Silva Cosme.

PEOPLE AND ACTIONS

The final leg of our journey takes us to a gallery of the people we work with and the collective actions we have taken over time to achieve our vision of a thriving High Atlas that is vibrant with life and culture.



The ethnobotanical garden at Dar Taliba Ourika has become an excellent example of how the programme implements knowledge transfer, awareness-raising and education to support its biocultural diversity conservation efforts. © Fabien Touran.



The creation and management of community plant nurseries is also an important component of our Programme. In these nurseries, we support the growth of locally endangered, ethnobotanical and economically-valuable species as well as traditional varieties. © Pommélien Da Silva Cosme.



Rosemary (*Rosmarinus officinalis*) is one of the many medicinal and aromatic plants grown in local nurseries.
© Pommélien Da Silva Cosme.

At maturity, the plants grown in the nurseries are either used for ecological restoration purposes in conservation areas or distributed to local community members for their use, sale and reproduction.
© Pommelien Da Silva Cosme.





Interviews with elders are a vital component of our work. These allow for the information to be recorded and transmitted to younger generations. © Inanc Tekguc.

Learning-by-doing is another essential tool used by our team to record traditional practices, such as how and for what medicinal plants are used. © Inanc Tekguc.





Food-related activities implemented with teenagers (top, © Ibtissam Bouseta) and adults (right, © Ibtissam Bouseta) foster spaces for lively discussion and collective reflection on the topics of nature, culture and conservation.

We promote rural-urban exchanges and solidarity, including through food markets, fairs and festivals (left, © Ibtissam Bouseta; right, © Ibtissam Bouseta).







High Atlas cooperatives benefit from these exchanges. The Programme also supports the marketing of products, online commercialisation and entrepreneurship training (left, © Ibtissam Bouseta), (right, © Ibtissam Bouseta).







Local and regional community researchers are key to our work and represent the link between communities, GDF and MBLA (opposite and top, © [various authors](#)), and Gatherings and exchanges are a central part of our collective work (bottom, © [Inanc Tekguc](#)).

To increase the impact of our work, our team actively participates in fairs (left, © Ibtissam Bouseta) and field activities (right, © Pommelen Da Silva Cosme).









Team members have also participated in national (left, © Inanc Tekguc) and international meetings (right, © Inanc Tekguc), expanding our networks beyond the High Atlas.




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