Jewish, Christian and Muslim Communities Partnering to Restore Ecosystems through Fruit Tree Growing in Morocco

Founded in 2000 by former Peace Corps Volunteers in Morocco, the High Atlas Foundation (HAF) has grown over 4 million fruit trees with farming families, schools and other groups – with a 78% survival rate - and aims to grow 1 billion trees in Morocco by 2030. This constitutes a significant contribution to Morocco's restoration goal of planting 1 billion fruit trees and billions of medicinal plants. HAF embraces an interfaith approach that brings the Muslim majority and the Christian and Jewish minority communities together to work for their common good while restoring degraded landscapes through tree growing. HAF's "House of Life" project is an example of inter-religious partnerships for constructing fruit tree nurseries. Using participatory approaches, House of Life builds community capacities in organic agriculture while establishing tree and plant nurseries to benefit neighboring Muslim farming communities. The House of Life project also promotes interfaith collaboration among youth through regular interfaith dialogues at significant sacred religious sites.

The <u>High Atlas Foundation</u> (HAF) is a non-profit organization based in Marrakech, Morocco, founded in 2000 by former Peace Corps Volunteers committed to furthering grassroots sustainable development. HAF is dedicated to promoting sustainable development through partnerships with Jewish, Muslim, and inter-religious groups that target women, youth, and the farming community.

HAF is dedicated to local initiatives that community beneficiaries determine and manage:

- Sustainable agriculture: Nurseries of fruit trees and wild medicinal plants, irrigation infrastructure and efficiency, organic certification, technical skillsbuilding, carbon sequestration, and commercialization
- Education: School infrastructure, gardens, and environmental stewardship
- Health: Clean drinking water and waste management
- Women's and youth empowerment: Self-discovery, human rights, and cooperative development
- **Capacity-building:** Participatory planning and project, organizational, and environmental management

Local communities are both the initiators and the beneficiaries of any given HAF initiative and they are fully engaged throughout the process. As such, the timing of meetings, project implementation, and of the overall development process rests with the people—acting in communities—who identify problems, find and implement solutions, and benefit from the initiatives thus created. HAF supports water, energy, food, and ecosystem management with tree monitoring and data analysis and builds farmers' capacities to grow, monitor, and sell trees and manage. HAF pioneers an adaptive management system (AMS) for sustainable agriculture to improve food and economic security and mitigate climate challenges among farming families.

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Fruit Tree Growing is a key focus to HAF

Establishment and Management of Tree Nurseries

The <u>House of Life</u> Intercultural Organic Fruit Tree Nursery Initiative upholds the notion that Morocco's multicultural past and present, and the preservation of it, should advance the sustainable development of the country by providing a tangible and vital pathway for the social and economic benefit of generations of Moroccans. An essential aspect to achieving this opportunity is that House of Life trees are monitored for carbon offsets, whose value is reinvested into local people's development projects that advance.

House of Life denotes a traditional name for a Jewish cemetery. House of Life facilitates the free loan of land adjoining Jewish burial sites, in order to establish organic tree and medicinal nurseries for the benefit of neighboring Muslim farming communities. Small-land holders often cannot designate nursery plots for tree seeds to mature because they must harvest every season to maintain their livelihoods.

The organic fruit tree nursery near the sacred tomb of Rabbi David Ou Moche in Ouarzazate has generated 145,000 trees, planted with 540 farming families in 5 provinces. The High Atlas Foundation with the National Initiative for Human Development are beginning two nurseries, in Telouet of Ouarzazate (Rabbi Haroon Abou Hassira) and Kelaa Sraghna (Rabbi Moul Almay). Altogether, with the Al Haouz sustainable pilot (Rabbi Raphael Hacohen), 1 million trees will be planted annually.

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HAF relies on her own tree nurseries to raise millions of seedlings for planting

HAF's current 15 nurseries have 2.2 million saplings, and more than one million were transplanted this year with 5,519 farming families in 52 provinces. HAF's 2023 secured investments in new nurseries for carbon offsets increases our annual tree production to 4 million. The National Agency for Water and Forests and the Moroccan Jewish Community provide nursery land in-kind.

Tree Growing for Restoration and Economic Empowerment

Since its establishment, HAF has grown over 4 million fruit trees with farming families, schools, and other groups and is striving to plant 1 billion trees in Morocco by 2030. The focus is to support the achievement of four of the United Nations' sustainable development goals (SDGs): no poverty, zero hunger, decent work and economic growth. HAF hopes to reduce inequalities through partnership for the completion of these goals.

HAF's contribution to Morocco's restoration ambitions aligns with the Ministry of Agriculture's goal of planting 1 billion fruit trees and billions of medicinal plants. This initiative aims to alleviate poverty in rural areas, where approximately 80% of the population is afflicted. By establishing nurseries and providing tree seedlings, HAF is improving household incomes by supporting the transition from traditional growing of barley and corn to planting <u>fruit trees</u> in farming communities of Morocco.

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Community nurseries jumpstart a new development path toward economic and environmental sustainability. The Akrich House of Life pilot tree nursery, for example, led to Imagine empowerment workshops and the nearby Achbarou Women's Carpet-Making Cooperative; a paved road now being built between the nursery/cemetery and the Cooperative, allowing visitors to easily visit both sites; and a clean drinking water system in Achbarou village. It, therefore, is incumbent that agencies partner with these communities as land contributors to catalyze human development projects

beyond the agricultural sector.

Carbon Sequestration and Low-cost Carbon Offsets

HAF is a catalyst in using verified carbon offset credits to support its partners' sustainability goals. By doing so, and by training community members in managing nurseries and related projects, the sustainable impact of House of Life increases substantially.

Through tree planting, HAF and carbon offset experts estimate that the <u>Carbon Offset Program</u> to grow <u>10 million fruit trees</u> annually will generate approximately 425,000 verified carbon units (VCUs). VCUs are usually stored up to 150 years in living trees, but storage could be up to 1,000 years due to the unique climatic conditions of Morocco. HAF provides tree planting and monitoring data to secure CO2 offsets at a low cost of \$0.55 per tree because:

- i. It grows the saplings, which allows for significant retention, spending only about 16 to 25 percent of the private sector price per tree.
- ii. Lending of free land by public and civil agencies further reduces costs and price-per-tree units.
- iii. The utilization of local fruit seed varieties not only significantly enhances biodiversity, but enables seed procurement in close proximity to the nurseries, reducing transportation costs and increasing survival rates.
- iv. Nurseries are maintained by local community members who receive a fair salary plus benefits from HAF, with modest labor costs.
- v. Trees are distributed to the farmers who receive training on effective tree planting, resulting in maintaining HAF's outstanding tree survival rate, currently averaging at about 78%.

Type of Trees for Growing

HAF promotes the growth of fruit tree species native to Morocco, including 10 endangered varieties of figs, as well as varieties of apple, carob, pear, and date. The organization plans to plant 18 different fruit and forest tree species¹ with cross-sectoral partners.

Activities

HAF engages in the following activities:

- 1. Establishing and managing tree nurseries in partnership with local farming communities, and protecting springs that provide water to nurseries.
- 2. Distributing tree saplings to farmers who are the sole beneficiaries of the revenue they generate.
- 3. Planting trees with schools and promoting health and maintenance of educational environments.
- 4. Conducting training workshops with children of all ages to raise environmental consciousness.

¹ Almond: *Prunus amygdalus*, Argan: *Argania spinosa*, Avocado: *Persea Americana*, Carob: *Ceratonia siliqua L.*, Cedar: *Cedrus atlanica*, Cherry: *Prunus avium*, Cyprus: *Cupressus atlantica*, Date: Phoenix dactylifera, Eucalyptus: *Torquata, gonphocephala, sideoxylon, camaldulensis, viminalis* and *auttes* Fig: *Ficus carica*, Grape: *Vitis vinifera L.*, Jujube: *Ziziphus jujube*, Lemon: *Citrus limon*, Olive: *Olea europea*, Pines: *Pinus halepensis, canariensis et pinaster*, Pomegranate: *Punica granatum or Safri* Prickly pear: *Ficus indica*, Quince: *Cydonia oblonga*, Walnut: *Juglans régia*.





Some of the fruit tree species grown by HAF

The Approach

HAF geographically and culturally embraces Morocco's rich, multicultural mosaic of languages, ethnicities and religions in an interfaith approach that brings together the Muslim majority and the Christian and Jewish minority communities.

The "House of Life" project (which denotes a traditional name for a Jewish cemetery) is an example of how we manifest this approach through inter-religious partnerships for constructing tree nurseries. Using participatory development, House of Life builds community capacities in organic agriculture while establishing tree and plant nurseries to benefit neighboring Muslim farming communities. So far, HAF has preserved three cemeteries — one Muslim, one Christian and one Jewish — including clearing, tree planting and other restoration activities.

HAF fosters cooperative building particularly for rural women, for whom it implements empowerment programs. To date, HAF has supported the development of 50 women's cooperatives in food production, fruit tree agriculture, medicinal plants, and nursery management. Through investments in rural women and agribusiness, HAF assists farmers in developing a better market position through processing, commercialization, and marketing of their products.





Women are empowered and involved throughout the development cycle at HAF

Through HAF's implementation of the Dakira program in Morocco, our team has also conducted dialogues at significant religious sites, especially for youth to learn about their nation's rich interfaith history. For instance, HAF has led a number of events at the Akrich nursery (built in 2012) adjoining the Jewish cemetery and 700-year-old shrine to Rabbi Raphael HaCohen to discuss universal topics, such as leadership and identity. Mr. Abderrahim Beddah, a third-generation guardian who looks after

the cemetery and nursery, brings visitors closer to this historical site from a personal perspective and shows them the positive effect of this project on the people living in the area, especially local women who have formed a business cooperative. HAF believes it is vital to demonstrate how members of different faith communities can work collaboratively toward improving the lives of all citizens.

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Participatory Interfaith Dialogue

Morocco's policies encourage intercultural dialogue and communication for human development. Different faith communities in Morocco are brought together to share their historical narratives, which can lead to improved livelihoods and health through a participatory development approach by leveraging underutilized capacities. However, these necessary experiences to empower and promote sustainable growth are too infrequent to impact social transformation. House of Life cements the continuity of interfaith collaboration, which is key for achieving scale and social change, by providing needed trees and support for new community projects.

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On the one hand, while multicultural memory and consciousness in the country create opportunities, combining these factors has yet to reach the level of self-reliant development and a <u>circular economy</u> that the people urgently need. Through the <u>USAID Dakira</u> (or "Memory" in English) program, civil society organizations and public administrations seek to redress the lack of such participatory community dialogues in which people discuss the past and the future together and create a shared vision forward.

The most significant challenge for participatory planning is the need for more training on community dialogue facilitation to empower all voices and express all priorities. While manifold methods and activities can be used to explore personal and collective identity and create plans for the future, most people, including Moroccans, have never experienced these approaches and are, therefore, unable to initiate and steward the process.

Interfaith dialogue - the opportunity to voice our histories - can deepen understanding and provide reconciliation between historically antagonistic groups if sought. When this process is maintained and integrated with supporting projects, defined and managed by the people, it can become a basis for achieving sustainable and prosperous societies. Taking this Moroccan approach to succeed across religious differences, we could inspire other nations of Africa, the Islamic World, and the Middle East.