

Transitioning to **AGROECOLOGY**

NUTRITION & HEALTH
ECONOMY
ENVIRONMENT
SOCIETY

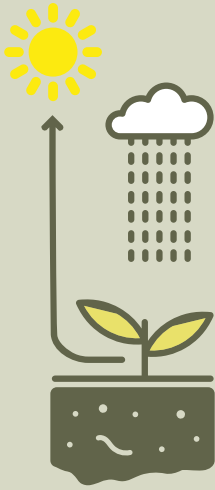
CULTURE

Agroecology
is both a science
and a movement.



As a **science**, agroecology entails the application of ecological concepts and principles to the design and management of agricultural systems. Based on the interactions between plants, animals, soils and climate, agroecology seeks to optimize the productivity, sustainability and resilience of agroecosystems; promote positive ecological interactions; minimize or eliminate the use of external inputs; conserve natural resources through efficient usage and recycling; and enhance the functional biodiversity of farming systems.

As a **movement**, agroecology has expanded from being solely a set of agricultural practices, to being a principles-based approach to agricultural development, one grounded on equitable and just food systems, that valorize traditional, local knowledge and culture, and preserve the natural environment.



Mada is committed to supporting smallholder farmers in Akkar transition to agroecology. Through material and technical support, **Mada** focuses on minimizing risks for the farmer, maximizing yield, and showcasing the various benefits of agroecology: nutritional, economic, environmental, social and cultural. This factsheet is the fifth in a series to be developed under the project *Wielding Agroecology to Transition Agriculture for Development (WATAD)*—under the Shabake II project supported by the Agence Française de Développement – AFD and the Centre de Crise et De Soutien and implemented by the French Public Agency for International Technical Cooperation - Expertise France. Under this project, **Mada** is building the individual and collective capacities of smallholder farmers in Akkar to transition to agroecology, and fostering the enabling environment for agroecology to prosper.

Agroecology & Culture

Agriculture and food are core to human heritage. Cultural identity is tied to landscapes, food systems, and our natural surroundings, as peoples and ecosystems evolve together. Cultural practices and indigenous knowledge of the land, weather, and local biodiversity, have historically contributed to traditional agricultural practices and culinary customs. However, increasingly, conventional food systems have created a disconnection between food habits and culture, often contributing to two extremes - hunger and obesity. Agroecology can re-balance tradition and food habits, and nurture a healthy, positive relationship with food. In Lebanon, food is an integral part of culture, with the making and sharing of food with friends, family and strangers, undeniably playing a key role in overcoming divisions in a highly segregated society, as different neighborhoods, regions and communities, come together around common culinary traditions. From ancient agricultural terraces to diverse local mezze dishes, the promotion and revival of traditional agricultural and culinary practices is one of the foundational pillars to an agroecological transition. As part of Mada's efforts to contribute to food system change, we are encouraging the following indigenous, traditional practices among smallholder farmers in Akkar:

1 Intercropping

This was practiced for thousands of years by Lebanese farmers before monocultures became prevalent. Through intercropping, farmers optimize land use, boost biodiversity, and improve soil health, leading to higher crop yields and reduced reliance on chemicals. Intercropping enables farmers to diversify production, growing a variety of crops across seasons that can also cover their own needs.

2 Vegetable Extracts

Reintroducing this practice is key to pest management. Using vegetable extracts such as garlic, neem, and chili, reduces reliance on chemical pesticides, and enhances the health and productivity of farms while preserving cultural heritage.

3 Seeds Extracts

This practice reflects an ancient tradition whereby Lebanese farmers saved and exchanged seeds, ensuring the continuation of diverse and resilient crop varieties suited to local conditions. This practice not only preserves cultural heritage but also plays a crucial role in promoting food security, and reducing dependency on commercial seed suppliers.

4 Soil Preparation and Non-Tillage Methods

Lebanese farmers historically practiced terrace farming and soil conservation techniques to preserve fertility and prevent erosion in mountainous terrains and highlands. Non-tillage methods, such as direct seeding and mulching, align with these traditions by maintaining soil structure, organic matter, and beneficial microbial communities. By reducing erosion and improving water retention, non-tillage practices support Lebanon's diverse agricultural landscapes and promote long-term soil health.

5 Collaboration

This is an ancient practice as much as any agricultural technique, as farmer-to-farmer resource and knowledge exchange reflects Lebanon's rich history of community and solidarity. Traditionally, Lebanese farmers have relied on collective wisdom and community networks to overcome agricultural challenges and maximize productivity, exchanging inputs and experiences, and sharing risks and successes.