

MEDAE network vision for sustainable food in the Mediterranean

This document is a framework document for the network.
It proposes a vision of sustainable food in the Mediterranean that is sufficiently broad for all members to identify with it.
It must be consulted and approved by members wishing to join.

Agricultural challenges in the Mediterranean

Characteristics of Mediterranean agriculture

Mediterranean agriculture is characterized by diversified and emblematic production (viticulture, livestock breeding, agro-pastoralism, arboriculture, olive growing, palm trees cultivation, market gardening, cereals and other field crops...), hosted within varied agro-ecosystems: cereal-growing plains, valleys or irrigated plains, mountainous areas, peri-urban zones, and oasis and peri-oasis zones.

Challenges facing Mediterranean agriculture

Mediterranean agriculture is facing a number of challenges, including exacerbated global warming with dwindling water resources, an increase in extreme weather phenomena and particularly increased droughts, as well as soil artificialisation and degradation and strong pressure on natural resources (Thiébaud and Moatti, 2016; Rastoin, 2009). Mediterranean agriculture is also impacted by strong demographic growth coupled with increased demand for agricultural production, an increase in urban population and land pressure, and the high dependence of several countries on food imports (Marty et al., 2015; Rastoin, 2009).

Faced with these environmental, economic and social challenges that threaten food security, it is urgent to rethink the Mediterranean food system.

The MEDAE network believes that the principles of agroecology can provide a relevant and multidimensional response to the need for a sustainable food system in the Mediterranean.

Agroecology principles to transform the Mediterranean food system

Definitions of agroecology and agroecological principles

Agroecology is a scientific discipline, a set of practices and a movement for social transformation (Wezel et al., 2009).

It adopts a systemic and interdisciplinary approach to agriculture, considering the ecological, social, political and economic dimensions of food production with a view to building resilient food systems and ensuring food and nutritional security (CEP, 2013).

Agroecology makes the most of traditional and local knowledge, and encourages the co-creation of knowledge between different stakeholders (farmers, researchers, development stakeholders).

It promotes a holistic, participatory approach involving a diversity of stakeholders and disciplines, to propose solutions adapted to local contexts and specificities.

In short, agroecology enables us to rethink food systems, from farm to fork, to achieve ecological, economic and social sustainability (Gliessman, 2016), by adopting a multi-actor, contextualized approach.

Due to the diversity of the stakeholders behind the concept and the diversity of approaches and contexts, there are many different definitions of agroecology (CEP, 2013). However, there are some common features that enable us to identify the main principles of agroecology.

For example, the High-Level Panel of Experts of the Committee on World Food Security (HLPE, 2019) and the Food and Agriculture Organization (FAO, 2018) have drawn up sets of 13 and 10 "principles of agroecology" respectively.

All these principles can be summarized in three main families:

- **Improve resource efficiency and preserve natural resources**

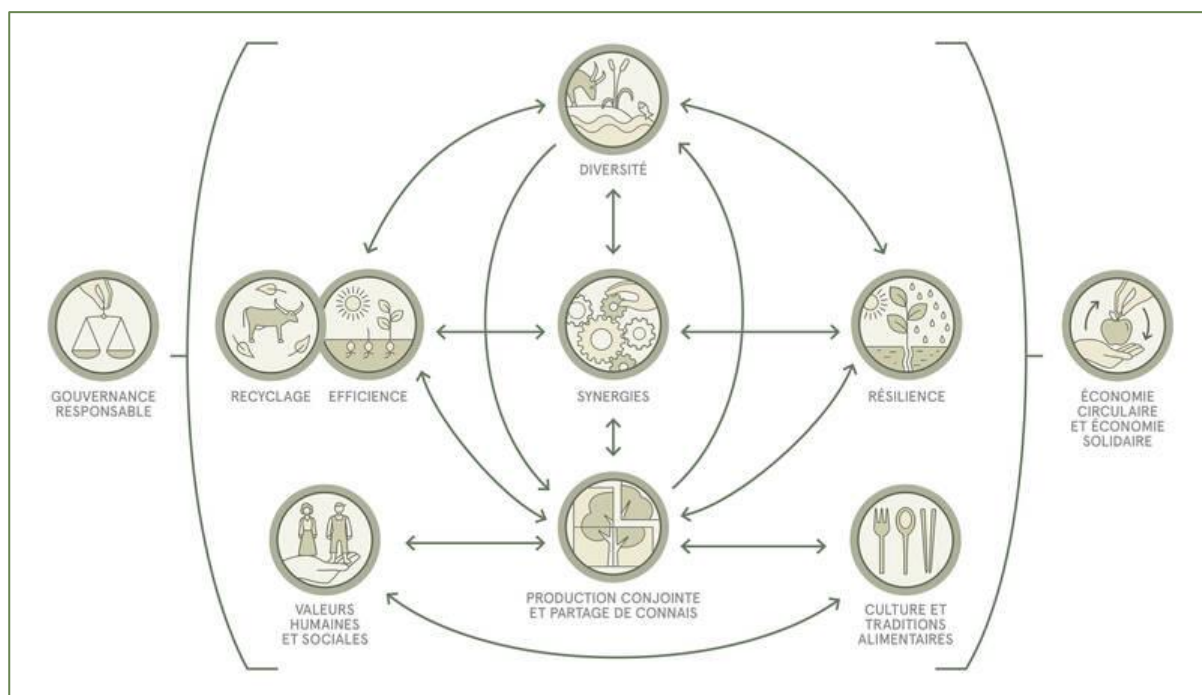
The biological processes and ecological functions of ecosystems can replace chemical or physical inputs, reduce the negative externalities arising from them, and preserve natural resources.

- **Strengthening resilience (ecological and economic)**

Biological diversity, positive ecological interactions and synergies enhance ecosystem services, help regulate ecosystem functioning and increase the resilience of agrosystems to change and crisis.

- **Ensuring equity/social responsibility**

The co-creation of knowledge and the involvement of different stakeholders in the transformation of the food system foster an equitable food system, integrated into local economies and traditions, and based on bonds of proximity and trust.



The 10 elements of agroecology proposed by the FAO (2018)

The MEDAE network: common principles for sustainable food in the Mediterranean

The MEDAE network recognizes and integrates, through the diversity of its members, the plurality of visions of agroecology. It maintains that the principles of agroecology can provide an integrated, sustainable response to the future challenges facing the Mediterranean region, by ensuring food security, protecting the environment and promoting economic development.

By bringing together different stakeholders (researchers, farmers, development stakeholders, public institutions, etc.) from different horizons (Europe, North Africa, Middle East) and acting on a local, national or regional scale, the MEDAE network fosters the co-construction of knowledge and the co-design of agroecological innovations adapted to specific contexts. In the MEDAE network, the various stakeholders collaborate, exchange and promote agroecological principles in their research work (technical and research institutes), agricultural practices (farmers), agricultural and development advice (NGOs), territorial planning and public policies (local authorities and government institutions), consumption habits (consumers), advocacy actions...

Sharing experiences and building capacities between organizations of different types and levels of action, facing similar challenges, will help accelerate local agro-ecological transitions.

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