

Decalogue:

**Strategic elements to promote policies that favour agroecological transition
in the face of climate change in the Alt Penedès region**



The main objective of this Decalogue, developed by and for the territory, is to make a diagnosis of the challenges and opportunities for promoting the agroecological transition in the Alt Penedès.

The industrial agri-food system is one of the main causes of environmental degradation and social inequality, which has negative effects on society in general and, particularly, on farmers. The impacts of climate change, loss of biodiversity, land use change, depletion of water resources, pollution of terrestrial and aquatic ecosystems, as well as corporate concentration and food insecurity are just some of the socio-ecological repercussions that question the sustainability of the current agri-food system.

Due to climate change, pressures on Mediterranean farming systems and on the peasantry itself, are accelerating because of the growing invasion of pests and diseases, reduced water availability and increasingly unpredictable farm incomes. Moreover, on the socio-economic side, integration into global agri-food chains has jeopardised the economic viability of smaller farms, aggravating the lack of generational renewal.

Today it is crucial to explore agroecological transition pathways from farms to territories such as the Alt Penedès. The FAO and the European Union propose five levels of transition of the agro-food system, which describe gradual steps from greater efficiency in industrial farms (level 1), substitution by alternative agricultural practices (level 2), functional remodelling of the entire agroecosystem (level 3), change in the relationships between producers and consumers (level 4) and transformation of the entire agro-food system through participatory governance of the territory and its resources (level 5).

The MA4SURE project assesses the different levels of the agroecological transition, from the farm to the landscape, to understand the key challenges and identify viable solutions towards a transition to agroecology in the Mediterranean. In the Alt Penedès, viticulture has become the predominant crop over the last century and today occupies around 80% of the agricultural area. Partly due to the rise of the large cava companies in the region, the old agricultural mosaic of vineyards together with other Mediterranean crops (e.g., wheat, olives, orchards, fruit trees) has been gradually replaced by monocultures of vines as a way of ensuring the productive demands of these companies.



This process has led to several socio-ecological problems, in particular loss of soil fertility and soil erosion, as well as socio-economic pressure on farmers due to low prices for agricultural products. A major challenge is therefore to develop solutions to improve the socio-ecological resilience and adaptive capacity of agri-food systems to climate change.

In the long term, the aim is to move from monocultures to more diverse and integrated systems, thus ensuring the environmental sustainability and socio-economic viability of agricultural activities in the Alt Penedès.

To advance in the agroecological transition of the Alt Penedès, an initial diagnosis has been made of the challenges and opportunities involved in moving towards a more sustainable and resilient agri-food system than the current one. This diagnosis, agreed by the various territorial actors who have participated in the preparation of this document, is the result of a workshop that took place in Sant Sadurní d'Anoia on 17 November 2022, and is presented below in the form of a decalogue:

1) Towards a systemic understanding of agroecology

Promoting farming practices that have long-term positive effects on the functioning of agroecosystems, on the one hand, and ensuring food production and supply in line with a balanced diet and with an equitable distribution of value among all actors in the agro-food chain, on the other hand, are identified as crucial and complementary approaches towards the agro-ecological transition.

2) Promoting agroecological practices

Further promotion of agroecology in the viticulture sector requires a clear political will, and corresponding technical support, for winegrowers to apply good agroecological practices, especially to improve soil quality, such as: organic fertilisers, diversification of production, limiting or eliminating external inputs, applying alternative pest management methods, and developing integrated agroforestry and livestock management.



3) Ensuring the economic viability of agriculture

To ensure the economic sustainability of agroecological farms, instead of providing subsidies, policy makers should advocate for regulations that: pay for the ecosystem services provided by good agroecological practices; make those whose practices have a negative ecological impact on the environment, climate, and soils pay; ensure the economic viability of farming by advocating for strict enforcement and revision of existing laws to ensure fair prices by promoting distribution channels for local products; and streamline administrative procedures.

4) Planning and managing the landscape as a system

In the face of the physical fragmentation of agricultural systems caused by the occupation of land through infrastructure, technical services, or urban growth regardless of the ecological and productive functionality of the landscape, a systemic planning of the territory is needed. This includes re-establishing the connection between agricultural and urban spaces and balancing the different demands on land use, such as the conservation of ecological processes and biodiversity, food self-sufficiency, urbanisation, and infrastructure. The aim is to restore more diverse, integrated, and complex landscapes, capable of accommodating greater biodiversity, while allowing for more sustainable and resilient economic activity in the face of climate change.

5) Commitment to solidarity-based socio-economic innovation

We must promote socio-economic innovations, financed with public support funds, that increase cooperation and solidarity between farmers and other actors in the agri-food system, such as plant protection associations or local seed banks, and in particular, help young farmers to continue in agriculture and reorient their businesses, for example: creating public agricultural composting facilities for shredding pruning and other wastes at district level, installing communal cellar nurseries so that the peasantry can make their own wine and generate added value to their production, or through sharing or renting machinery at communal level to reduce the economic burden on young farmers. In this context, it would be especially useful to promote the figure of the mentor.



6) Promoting agroecological education

A fundamental aspect of the agroecological transition is the education and training of farmers and technical staff in the application of agroecological practices and business models. Agroecology therefore needs to be a central component of curricula at all levels, from school gardens and school canteens to agricultural vocational training and university, to equip future peasants with the technical and practical knowledge necessary to actively participate in this transition. This includes the transmission of traditional knowledge and practices (e.g., in viticulture, the practice of grafting or companion planting and knowledge of drought-adapted vine varieties). In addition, there is a need for publicly funded training opportunities for existing farmers to support them in the transition to agroecology.

7) Raising public awareness

An essential aspect for the agroecological transition is that society values agroecological food. This requires raising public awareness of the links between agroecological food production, health, ecosystem health, and climate change mitigation and adaptation. More and better awareness-raising campaigns are needed to transmit knowledge about production practices and cycles, and on how seasonal and proximity products help to reduce the gap between the urban and rural world by reconnecting farmers, communities, and neighbours with the territory, and strengthening values such as the relationship between quality of life and sustainable management of landscapes through the agri-food system.

8) Promoting extensive livestock and pastoralism

It is important to consider extensive livestock farming and pastoralism as key elements of agroecology, as they provide important ecosystem services, especially those that contribute to preventing forest fires, closing nutrient cycles, and improving soil quality, and restoring mosaic landscapes with more differentiated habitats that favour biodiversity. Therefore, administrations need to hire local/community pastoralists and livestock keepers, simplify bureaucratic procedures, and guarantee the seasonal droving of livestock, as there are hardly any safe and protected transhumance routes left.



9) Promote integrated forest management

An administrative legal framework for integrated forest management is critical for wildfire prevention, biodiversity conservation, and as a potential economic source for farmers. Therefore, the creation of a law is needed to mobilise economic resources and technical expertise for integrated forest management that supports agroforestry and extensive livestock farming oriented towards the creation of an agroforestry landscape mosaic.

10) Achieving sustainable management of the water cycle

Agroecological transition, especially soil management and diversification of production, depends on access to water and its availability. Water is a limiting factor for agriculture in this territory, and this problem is expected to worsen under climate change. It is therefore essential to be aware of the importance of integrated and sustainable management of the water cycle and to work towards a territorial consensus on water use and aquifer management.

Territorial actors that have participated in the elaboration of the Decalogue.

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