

***"Agroecological & Regenerative farming projects  
and best practices in Greece"***

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**EURACADEMY ASSOCIATION'S 20TH SUMMER ACADEMY**

***"CHANGING FARMING PRACTICES TO ADDRESS THE CLIMATE CRISIS"***





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Co-founder & Head of Open Farm

Regenerative & Organic Farming Consultant

Accredited Trainer

Member of Agroecology Greece



# Regenerative agriculture !?

... *Beyond Organic ?*

... *Agroecology without politics?*

... *IFOAM – Organic 3.0.*

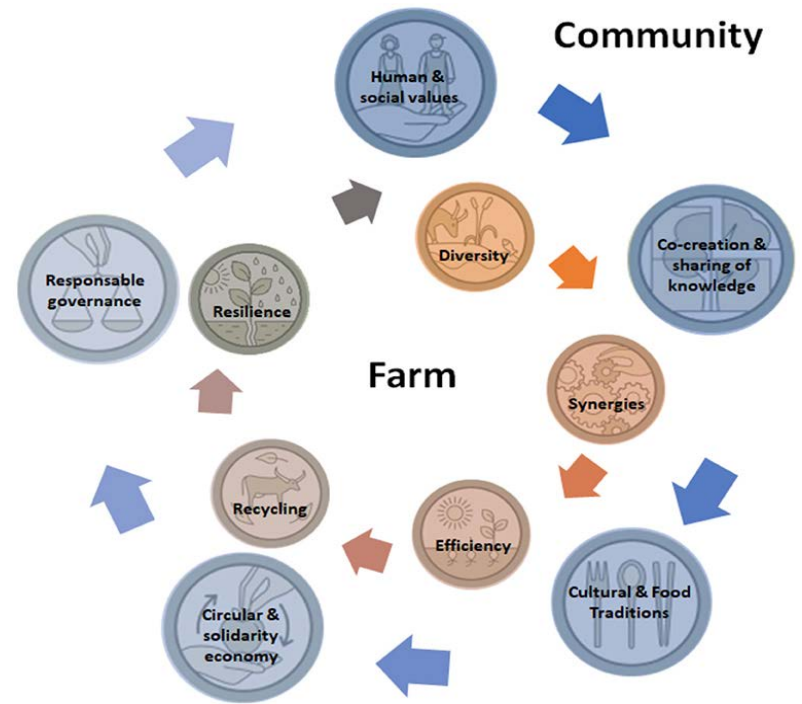


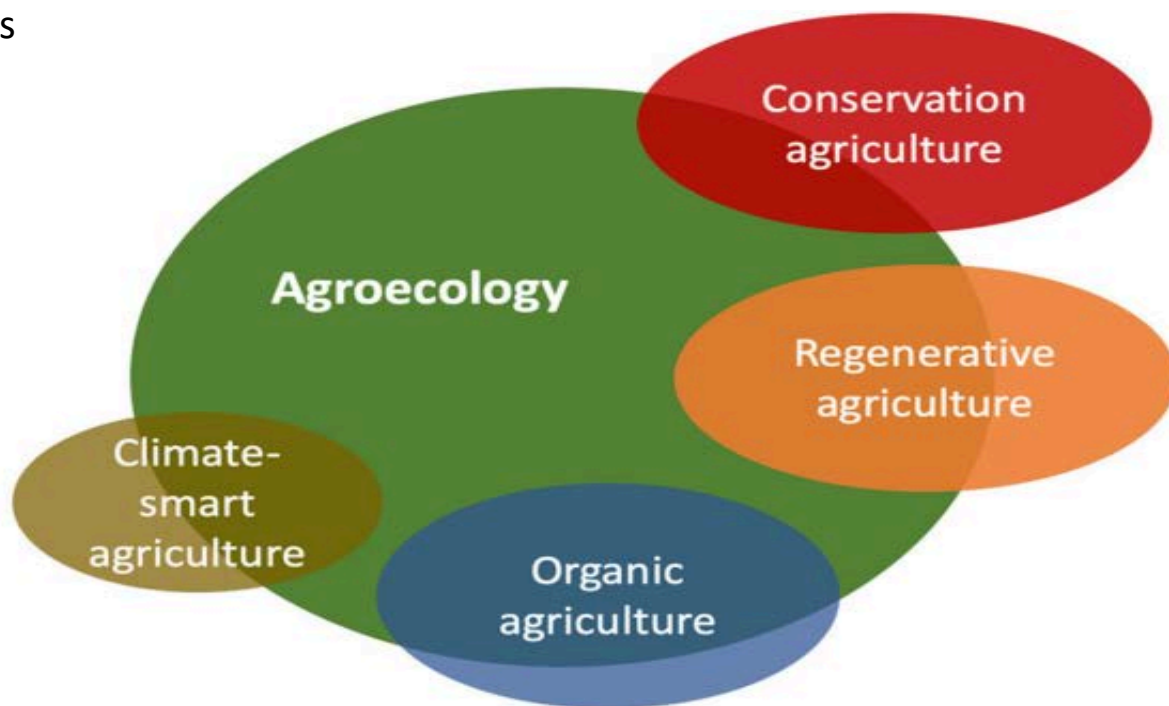
FIGURE 1 | Widespread Conversion Development Towards True Sustainability Inclusiveness



**Agroecology** is considered jointly as a **science, a practice and a social movement** .

It encompasses the whole food system from the soil to the organization of human societies.

It is value-laden and based on core principles.



**FIGURE 5**

The relation between agroecology (science, practice and movement) and other approaches to sustainable agriculture, depicting their degree of overlap as intersecting sets. As a scientific discipline, agroecology provides the ecological knowledge that underpins sustainable practices under the other approaches.

# PRINCIPLES OF AGROECOLOGY

INCREMENTAL TRANSFORMATIONAL

- LEVEL 5**  
Build a new global food system based on participation, localness, fairness and justice
- LEVEL 4**  
Reconnect consumers and producers through the development of alternative food networks
- LEVEL 3**  
Redesign agroecosystems
- LEVEL 2**  
Substitute conventional inputs and practices with agroecological alternatives
- LEVEL 1**  
Increase efficiency of input use and reduce use of costly, scarce or environmentally damaging inputs

FOOD SYSTEM AGROECOSYSTEM



ILLUSTRATIONS: DOROTTY POOR

**Regenerative Agriculture is not a fixed model but rather a principle for how to farm.**

The six core principles to regenerative agriculture are:

- Context
- Minimise Soil Disturbance
- Diversity
- Protect Soil Surface
- Maintain Living Roots
- Livestock Integration

## 6 Core Principles of **REGENERATIVE AGRICULTURE**



# Regenerative Agriculture – Corporate approaches

## Regenerative Certification



FOUNDERS

These organizations established the Regenerative Organic Alliance and Regenerative Organic Certified®



## Regenerative Market

REGENERATIVE AGRICULTURE AND FOOD SYSTEMS SUMMIT 2023



2023 PARTNERS

Platinum Partners



Gold Partners



Big food industries/ companies whose products are directly linked to agricultural production have **made a priority to reduce carbon emissions in their production chain** and have created a general ecological trend in the market and among consumers, aiming for a more responsible consumption of products.



# Regenerative Agriculture – Movement's approach



# CSA

COMMUNITY SUPPORTED AGRICULTURE





***"Agroecological & Regenerative farming projects  
and best practices in Greece"***





## The chilli factor organic farm

Neoi Epivates, Thessaloniki  
2,5 Ha, Organic Vegetable Farm

Organic Farm, Microgreens, Edible Flowers, Vegetables,  
Chillies, Chutneys & Sauces



## The chilli factor organic farm



... polyculture , companion planting,  
rotations, mulching, green manure  
...not use of big/ heavy agricultural  
machinery, Minimum tillage!  
...working with hands, taking care of the  
unique precious soil.  
..recycling, composting

... self-distribution of the products  
(farmer markets, farm to chef, U pick on  
farm)



## ECOGAIA FARM

NATASA ANTARI & ALEXANDROS KARATZAS

Trikala, Greece

Land size: 3,5 ha

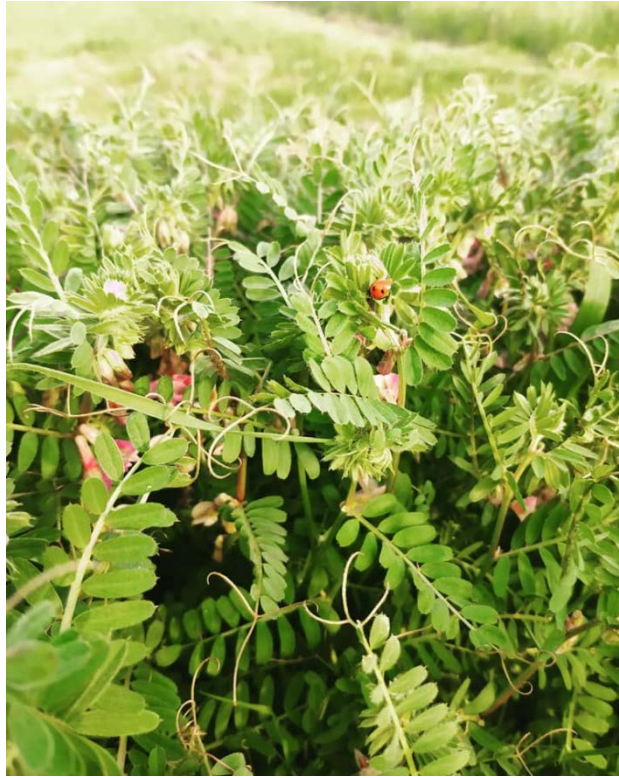
Agroecological approach

Low tillage management, Soil cover, Compost,  
Companion planting, Green Manure, Rotation,  
Supporting plants, food forest , agroforestry

self-distribution of the products

CSA – Farmers Markets – Farm to Door (basket)





## Agroforestry

### grain and legume in rotation

The grain and legumes production is converted into an alley cropping system, meaning that tree lines consisting of timber, fruit trees or support species added into the fields as to increase overall production and ecological impact.

Wind breaks and hedgerows will be planted to protect from wind stress.

The added biodiversity will support the system overall through attracting beneficial insects and other animals

tree lines will be interplanted with supportive species in this

plot :

For crop: Pecan- Walnut- Mulberries – Plum- Grapes-  
Hazelnut

For Timber: Pawlonia- Black Maple

For organic matter production:

Mulberry- Albizia Julibrissim- Black Maple- Catalpa-  
Eleagnus



## ECOGAIA FARM



**market garden plot** → inspired by syntropic farming.  
Agroforestry systems - Plants supporting each other  
having in mind the development of them over time  
and their interaction with the market garden.  
Low tillage management, Soil cover, Compost,  
Companion planting, Rotation



## Sheila Damos - The Southern Lights



Co-founder and Director of  
The Southern Lights non-  
profit organisation and  
Regenerative Farming  
Greece initiative

Sparta/ Skala Greece

The Farm

Skala, Lakonia, Greece

2,5 Ha

Olives and Citrus fruit cultivation  
(organic since 1985)

Organic Olives & Olive Oil (Silver Leaf)



Low tillage management, Food forest , Soil cover, Compost,  
Companion planting, Green Manure, Rotation, Supporting plants,  
permaculture design, Water natural tanks

### THE SOUTHERN LIGHTS

is a non-profit organization based in the South of Peloponnese in Greece in a beautiful agroforestry farm.

Its mission is to spread knowledge, techniques and the mindset for regenerative practices in all domains of human activity.

Through workshops, networking and building active and alive examples of regenerative practices in close collaboration with other organizations, public entities and ecological enterprises.



The farm is in constant evolution. 30 years ago, Stavros Darnos converted this farm to organic farming methods, being one of the first in Greece to do so.

With a focus on olive trees and citrus trees, throughout the whole farm several other fruit trees were planted. Each season many wild growing edible leafy greens contribute to our own food autonomy.



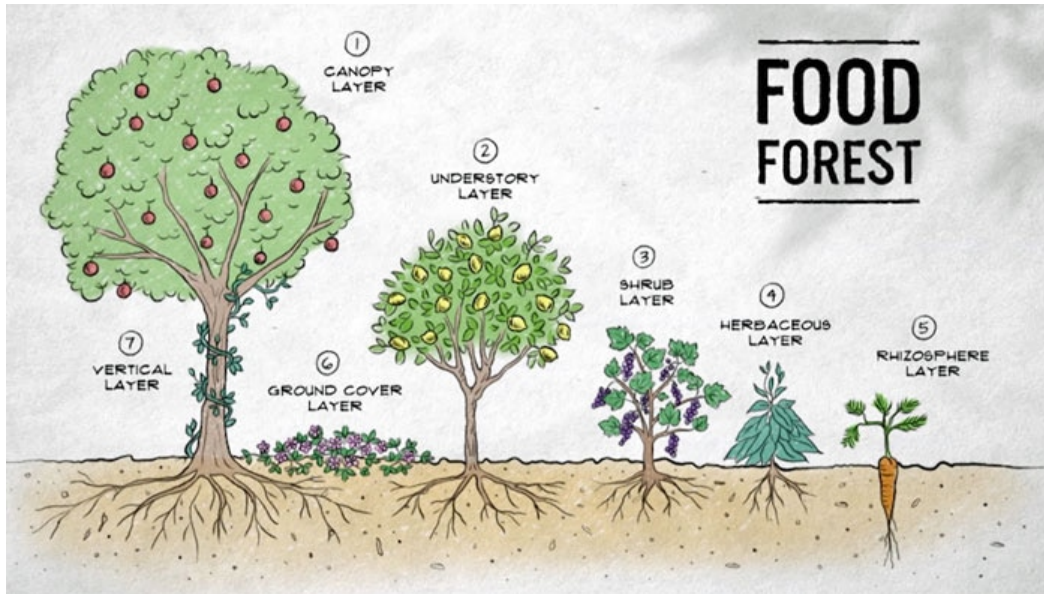


## Sheila Damos - The Southern Lights

The practice of shredding the prunings of the trees and leaving them on the soil has been constantly increasing the organic matter, leading to a rich and fertile soil 30 years later. food forest among the citrus and olive trees, experimenting with a high diversity of plants ranging even to subtropical species



## food forest

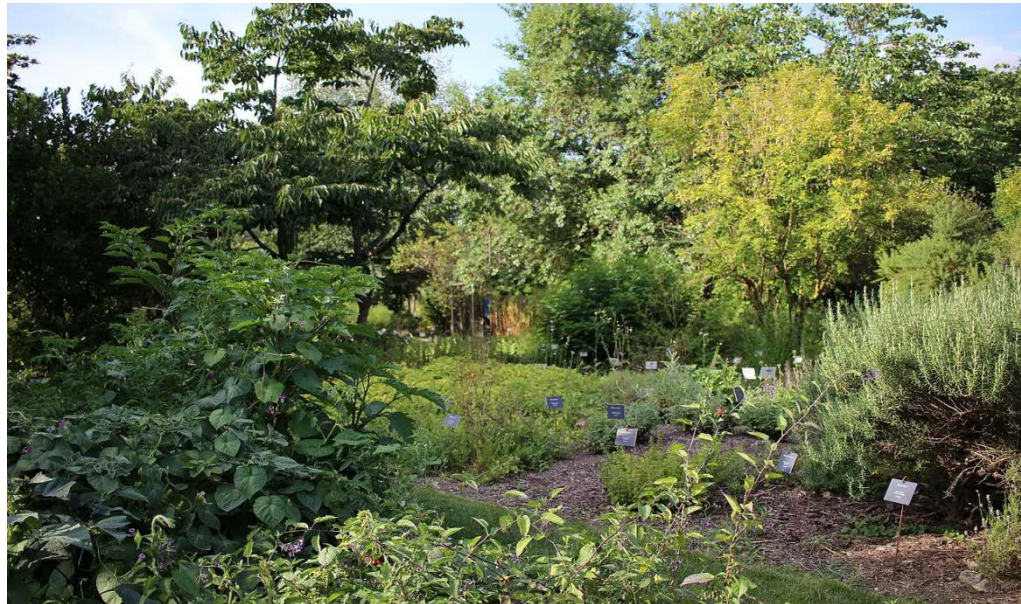


A food forest, also called a forest garden, is a diverse planting of edible plants that attempts to mimic the ecosystems and patterns found in nature.

Food forests are three dimensional designs, with life extending in all directions – up, down, and out.

Generally, we recognize **seven layers of a forest garden** – the overstory, the understory, the shrub layer, the herbaceous layer, the root layer, the ground cover layer, and the vine layer.

Some also like to recognize the mycelial layer, layer eight (mushrooms). Using these layers, we can fit more plants in an area without causing failure due to competition.





**REGENERATIVE  
FARMING  
GREECE**

Growing food while regenerating soil and biodiversity

EMPOWER FARMERS ALL OVER GREECE AND BEYOND TO CONVERT  
THEIR FARMING OPERATIONS TO REGENERATIVE ONES



The aim of this program is to enable and support the transition of farming in Greece into a regenerative one, by sharing the knowledge about agroforestry, its possibilities for restoring soil, plant and animal health, thus regenerating our ecosystems and building resilience facing climate change.

Regenerative pilot farms represent some of the most prevailing agricultural contexts of Greece. Through with real examples other farmers can experience what a regenerative farm looks in practice, while we gain precious insights into country and context specific challenges and opportunities.



### POMEGRANATES

SPARTA



### OLIVES

GYTHIO



### OLIVES WITH GRAZING ANIMALS

SKALA



### GRAPES

LOUTRAKI



### MARKET GARDEN

LARISSA



### GRAINS AND LEGUMES

TRIKALA





Nessonas, Larissa, Greece

Land size: 1,6 ha

Products: Vegetable baskets, Cosmetics, jams

Market: Locals, expanding community in Greece

Low tillage management, Soil cover, Compost, Companion planting, Green Manure, Rotation, Supporting plants, permaculture design, Swales, food forest , agroforestry

COB.GR

The organization is working since 20 years on natural building techniques with many experimental buildings and DIY applications on site which attract a broad audience.





The almond orchard has been diversified and transformed into a successional agroforestry operation including market gardens, fruit trees and bushes, grazing poultry, as well as support species.

The agroforestry products are commercialized primarily in the local area.

One of the main focus is to increase soil organic matter as to reduce water needs.

... by using compost tea, effective micro-organisms, and other amendments as to boost soils fertility.



## Eumelia Organic Agrotourism Farm



A unique regenerative agritourism & ecotourism farm stay accommodation

### Regenerative & Organic

- Organic, Regenerative Biodynamic and Permaculture farming practices
- Composting weeds, dry plants, prunings and leafs from the garden and farm. As well as vegetable leftovers from the kitchen in order to create new soil for our vegetable gardens
- All the food provided in our BioCafe and Restaurant is organically grown at the farm, or certified organic from other producers



## Eumelia Organic Agrotourism Farm



Wine & organic olive oil producers.  
Guests participate in olive picking, grape harvest & other agricultural activities.





Yiannis Zannias, Farmer



## Agricultural Cooperative of Orchomenos (asoo.gr)



At the level of cooperatives with large areas of crops, we find the example of the Agricultural Cooperative of Orchomenos (asoo.gr) and the Agricultural Cooperative of Enipeas in Mikro Evdrio of Farsala (enipeasagro.gr), which started in the Fall of 2021.



The two Cooperatives under the same program, apply regenerative agriculture practices to the cultivation of cotton, a crop which in its conventional form uses significant amounts of chemical fertilizers as well as preparations to deal with weeds and insects in the field.

In regenerative cotton farming, certain core principles and practices stand out, such as **using cover crops to build soil health, rotating crops to reduce pest pressure, and using compost and other natural inputs to improve soil fertility.**

Regenerative cotton farmers also often use **agroforestry**, which involves planting trees in and around crops to provide shade, promote biodiversity, and make the soil even better.



- Regenerative cotton is a type of cotton grown using principles and practices of regenerative agriculture, which aims to improve soil health, increase biodiversity, and create a closed-loop system.
- The benefits of regenerative cotton include improved soil health, increased water retention, reduced dependence on synthetic chemicals/pesticides as well as promoting biodiversity.
- Regenerative cotton farming has environmental (reduced soil degradation), economic (reduce reliance on external inputs) and social benefits for local communities by creating jobs & reducing poverty.
- Its use is becoming increasingly popular among farmers & textile producers due to the increasing demand from consumers for sustainable products; this trend is expected to continue in the future.

A photograph of a cotton field with rows of white cotton bolls ready for harvest. The background shows a line of trees under a clear sky.

**REGENERATIVE  
FASHION TO HELP  
THE PLANET**

Already in the first year of application and from the moment regenerative practices are started in the field, the samples that the farmers get about the condition of the soil are encouraging. According to the advice of expert scientists and agronomists closely monitoring the program, reduced fertilization is already planned for this year's crop (less expenditure on supplies), as the soil has, to some extent, filled its carbon stores, as well as recovered part of its organic substance.



Nitrogen bound to the roots of the plant, ready for incorporation and absorption by the new crop in all stages.

The roots of the soil cover plants have reached more than 70 cm in depth and have prepared the soil for the main crop.

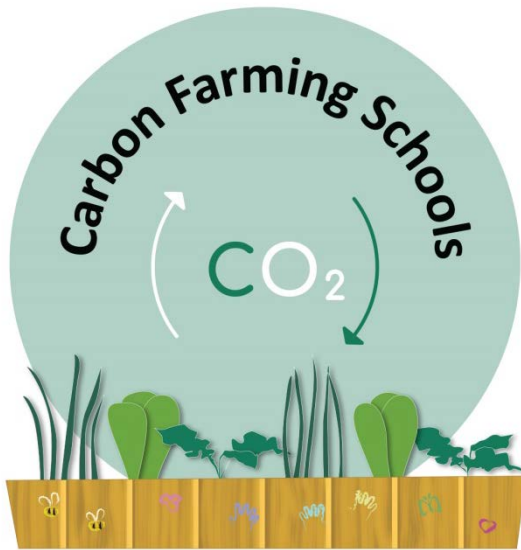




Urban Agroecology  
School Farming







**Carbon farming schools:**  
Students learned about sustainable agriculture with the support of DEI.

σχεδιασμός, υλοποίηση:



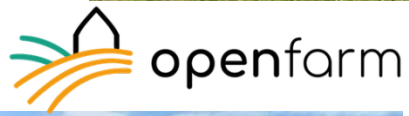
με την υποστήριξη της ΔΕΗ Α.Ε.



Public  
Power  
Corporation











# Best Case Scenario

## The fundamental principles that guide our activity

- ✓ Act as a social enterprise, seeking to improve the community in which we live above all else.
- ✓ Valuing and dignifying the people who collaborate with us.
- ✓ Promote stable employment of local residents.
- ✓ Treat profit as a condition and not as a goal to be maximized.
- ✓ Build living, healthy soil through the use of practices such as annual crop rotation, the use of compost, cover crops, green manuring and minimal tillage.
- ✓ Practice Organic Agriculture certified according to European standards (Reg. (CE) 834.2007).
- ✓ For the sake of the health of soils, people and ecosystems, reject the use of chemically synthesized pesticides such as pesticides, herbicides, fungicides and fertilizers.
- ✓ Reject the use of genetically modified organisms GMO's, synthetic resources, toxic and radiation, in all stages of production and post-harvest operations.
- ✓ Manage the animals and all living beings on the estate, from the perspective of ecosystem elements, respecting their characteristics and functions.
- ✓ Feed ruminants (cows, sheep, goats, horses and donkeys) exclusively with natural fibers, such as natural grass, germinated seeds, hay and straw.
- ✓ Feed omnivores (pigs) and granivores (turkeys, chickens, chickens and geese) with adequate diets, essentially through cereals, natural pasture, germinated products, fruits, and vegetables.
- ✓ Do not use foods with GMO's, antibiotics, ivermectin or synthesized hormones, as well as all prohibited substances.
- ✓ Conserve and enhance natural resources, such as biodiversity, climate and atmosphere, reducing erosion and pollution of air, soil and water, through the application of correct techniques.
- ✓ Breed and preserve indigenous national breeds and use local seeds and plant varieties whenever possible.
- ✓ Maximize the nutritional value of food by harvesting and slaughtering at the most appropriate times.
- ✓ Practice the minimum processing of food, sufficient to preserve its nutritional value as much as possible. Do not use radiation, ultra-pasteurization, excessive heating, synthetic additives or GMO derivatives.
- ✓ Include all ingredients on the product label.
- ✓ Manage and use water responsibly.
- ✓ Minimize the ecological impact of the estate, using as much renewable energy as possible.
- ✓ Promote and manage spaces that allow the existence of wildlife in at least ten percent of the estate.
- ✓ Reduce the number of kilometers driven by selling more locally.
- ✓ Ensuring the hygiene and food safety of the food produced.
- ✓ Ensuring job security.
- ✓ Help to promote the rural world.
- ✓ Develop and share knowledge in all areas.
- ✓ Act ethically in the marketplace.
- ✓ Do not practice commercial speculation.
- ✓ Determining the value of products through the cost of obtaining them.
- ✓ Promote and cooperate with scientific research.

## Agricultural Society of Freixo do Meio



*Agroforestry – Food Forests*

*Regenerative Agriculture*

*Permaculture*

*Community Supported Agriculture*

*Portugal*

*600 He*



“Our project implements in the Agroforestry model the visions of Agroecology, Permaculture and Food Sovereignty as a way of approaching the present and building the future.

**A path focused on preserving ecosystems and sustainable food production** , without using processes and concepts alien to the natural system”.

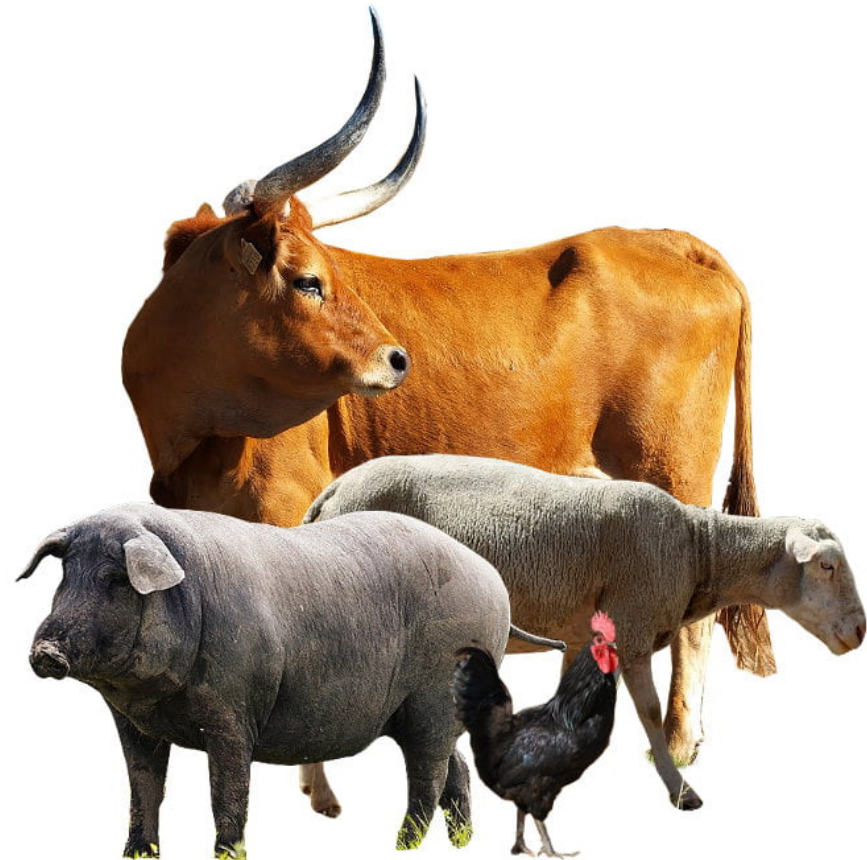
## Montado Agroforestry

The two main families of foods that we obtain from the Montado Agroforestry are **acorn foods** and the **meat of various domestic animals** . However, foods such as honey, mushrooms, wild plants and game meat have been gaining expression due to demand.





The domestic animals with whom we cooperate in the Montado do Freixo do Meio are essential elements, not only in guaranteeing the functioning of the natural system, but also in its regeneration. The practice of holistic management seeks to restore pastures and regenerate soils, making the land productive again.







## Dynamic Succession Agroforestry



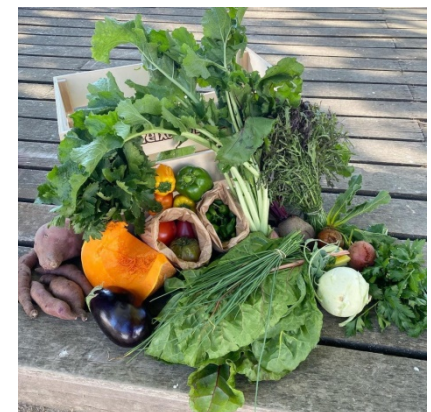






Bio-intensive horticulture

This is an organic method based on small plots organized and planned according to both ecological and logistical requirements.





Thank You !