THE PRINCIPLES OF MULTIFUNCTIONAL AGRICULTURE AND EAL

An agricultural landscape - an opportunity for diversification of farming activities
THE PRINCIPLES OF MULTIFUNCTIONAL AGRICULTURE AND EAL

Description of the module

Overview: This module explains how a knowledge on landscape values of European agricultural landscapes (EALs) might open new horizons for the establishment of a farm performing different non-agricultural activities thus, realizing multifunctional agriculture. Awareness of the landscape quality by farmers and stakeholders aims to tackle challenges of the European Landscape Convention (CoE, 2000).

• Learning objectives

  Knowledge
  ✓ Understanding typology of EALs and attributes making EALs multifunctional.
  ✓ Know-how to apply multifunctional activities within different EALs.

  Skills
  ✓ Recognizing a landscape type – EAL and values of different EALs and their landscape character.
  ✓ Practising multifunctional farming in coincidence with characteristics of a particular EAL.
  ✓ Providing adequate maintenance to EALs, preserving EALs values and improving their quality.

  Attitudes
  ✓ The awareness to improve EALs quality and maintenance in a sustainable way regarding traditional land uses based on deep ancestral knowledge of the environment preserving the landscape character.

The training module is linked with Summary report – Case studies – E-atlas.
Index

• International context of EALs presented in case studies
• EALs presented in case studies
• National context of EALs presented in case studies
• Advanced multifunctional entrepreneurship based on EALs values
• Attractive landscape as a result of multifunctional and sustainable farming and as an asset for the further entrepreneurship development
• Maintenance and preservation of EALs values
• Sharing and distribution knowledge on EALs values
International context of EALs presented in case studies

Why a farmer needs knowledge on different EALs?

Expected knowledge

- Finding inspirative ideas in case studies across Europe within the same EAL.
- Know the landscape potential for the establishment of particular non-agricultural activities on farms.
- Dealing with natural conditions and constraints using traditional agricultural techniques making the landscape more fertile and agriculture sustainable as well as maintaining cultural and historical heritage.

Targeted improvement of the landscape quality

- International context allows international knowledge exchange.
- Advanced multifunctional entrepreneurship.
- Sustainable agricultural systems based on inherited knowledge transformation to modern agricultural systems.

EALs of higher quality mediate more opportunities for business expansion and diversification of entrepreneurship in the countryside.
THE PRINCIPLES OF MULTIFUNCTIONAL AGRICULTURE AND EAL

International context of EALs presented in case studies

Why a farmer needs knowledge on different EALs?

Understanding of EAL attributes

Typical features = similarity
A farm takes care about typical attributes of the EAL and this similarity allows comparison of multifunctional activities with other farms in the same EAL across Europe.

Example of EAL: Pasture
Less fertile land not suitable for crops cultivations or haymaking
Grazing grasslands by cattle
Horse breeding
Challets

Distinctive features = differences
They rise from specific farming activities related to natural, cultural and historical heritage and/or landscape identity making the EAL valuable at regional, national or international level.

A farm performs multifunctional activities comparable at international level within the same EAL

A farm is a unique entity making individual multifunctional activities which can be interesting for other farms.

Transhumance pastoral systems in mountains
Extensively grazed NATURA 2000 habitats and other protected sites
Grazing grasslands on alluvial flats with waterlogged soils
Grazing orchards
THE PRINCIPLES OF MULTIFUNCTIONAL AGRICULTURE AND EAL

EALs presented in case studies

**Dehesa**

*Mª Jesús Gualda (ES)*

**Delta landscapes**

*Jesús Villena (ES)*

**Heathland and huertas**

*Francisca Ruiz Requena (ES)*

**Highlands**

*Emiliano Brandimarte Az. Agr. (Sibillini Ranch) (IT)*

Go to E-Atlas to read the EALs definitions! Check detailed characteristics of EAL in case studies!
EALs presented in case studies

Graditz Stud Farm (DE)

Bio-Saalberghof Berghaus (DE)

Farmland

Haetteli farm (DE)

VčelíkRaj (SK)

Farma pod Melichovou skalou (SK)

Farma Etelka (SK)

Inmaculada Jiménez - a beekeeper (ES)

Go to E-Atlas to read the EALs definitions! Check detailed characteristics of EAL in case studies!
The principles of multifunctional agriculture and EAL

EALs presented in case studies

Meadow
Maridiana (IT)

Open fields

Semi-bocage
Farm of Joseph Lehmenkühler (DE)

Farmland of Joseph Lehmenkühler (DE)
Farma AFRA Odorica (SK)
Aboca (IT)

Go to E-Atlas to read the EALs definitions! Check detailed characteristics of EAL in case studies!
THE PRINCIPLES OF MULTIFUNCTIONAL AGRICULTURE AND EAL

EALs presented in case studies

Orchards

Haetteli Farm (DE)

Esteban Moya (ES)

Jesús Villena (ES)

Eredi Gradassi Andrea s.s. (IT)

Bodegas Nestares Rincón (ES)

Esteban Moya (ES)

Go to E-Atlas to read the EALs definitions! Check detailed characteristics of EAL in case studies!
EALs presented in case studies

BioLiebert - organic farm of the Liebert family (DE)
Marekov Dvor (SK)

Maridiana (IT)
Šenk Farm (SI)
Gregor Gomol (SI)

Go to E-Atlas to read the EALs definitions! Check detailed characteristics of EAL in case studies!
EALs presented in case studies

Torre Colombaia (IT)  
Vrhovc Farm (SI)

Crone Farm (DE)  
Marijan Bavcon (SI)

Go to E-Atlas to read the EALs definitions!  
Check detailed characteristics of EAL in case studies!
EALs presented in case studies

Terraced landscapes

Esteban Moya (ES)

Eredi Gradassi Andrea s.s. (IT)

Farma AFRA Odorica (SK)

Go to E-Atlas to read the EALs definitions! Check detailed characteristics of EAL in case studies!
EALs presented in case studies

**Vineyards**

*Bodegas Nestares Rincón (ES)*

*Srečko Trbižan (SI)*

**Wooded grasslands**

*Caprinatura SL (ES)*

*Torre Colombaia (IT)*

Go to E-Atlas to read the EALs definitions! Check detailed characteristics of EAL in case studies!
The database of EAL's that was developed by the EUCALAND (Pungetti & Kruse, eds., 2010; Kruse et al., 2011) was consolidated with national types of agricultural landscapes.

National context of EALs presented in case studies

**From European to local landscapes**

- geographic identification is important
- 5 basic landscape types in Europe
- Corine Land Cover Map 2006 - 44 land cover types in Europe
- EUCALAND glossary - 44 typov European types of agricultural landscapes

- integrated into national typologies

- Read more about types of cultural landscapes in the Summary Report, p. 39-43!
National context of EALs presented in case studies

European and national landscape classifications are visualized in interactive pdfs developed particularly for each case study demonstrating a large variety of EALs and distinctive features of their landscape character.

Learn more how to use interactive pdfs in E-Atlas!
National context of EALs presented in case studies

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Slovenia

Learn more how to use interactive pdfs in E-Atlas!
**THE PRINCIPLES OF MULTIFUNCTIONAL AGRICULTURE AND EAL**

**Advanced multifunctional entrepreneurship based on EALs values**

*Why a farmer shall recognize natural, cultural and historical characteristics of EALs?*

- **Natural environment**
  - Basic constraints and advantages

- **Historical land uses and cultural traditions**
  - Traditionality and landscape identity

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**Knowledge system on landscape inherited from generations of ancestors is very important for the current management.**

*Historical landscape was multifunctional and farming methods were usually nature friendly and sustainable.*

**Example of EAL: Terraced landscape**

- Soil loose and erosion prevention
- Increasing insulations for cultivated plants

- Stone terraces built with different techniques
- Seasonal dwellings on terraces

*You can read more about very interesting historical genesis of EALs in the Summary Report p. 8-10!*
Advanced multifunctional entrepreneurship based on EALs values

A framework of interfaces between a farm and a landscape.

- Multifunctionality implies the diversification of sources of farm income, allowing farmers to reduce the business risk relying on alternative sources of revenue.
- Multifunctionality is directly related both to the sustainability of farms and to the production of services for society - ecosystem services.

You can read more about interactions of farms and their environment in the Summary Report, p. 21-22, 28!
Advanced multifunctional entrepreneurship based on EALs values

- Agritourism
- Social services provided by the farm
- Rehabilitation and care for persons with disabilities
- Social agriculture
- Agri-kindergartens and day-care services for the elderly

Sustainable landscape management makes a high quality attractive landscape.

- Processing and direct sale of agricultural products
- Services for guests and products customers provided directly at the farm

Education, training and job placement

- Quality labels
- Guides, festivals, tastings
- Local / regional products supporting local economy
- Product transformation on behalf of a third party
- Boxing schemes
- Farmers’ markets
- Purchasing groups
- Community Supported Agriculture (CSA) or solidarity economy

Find more information about challenges of multifunctional agriculture in the Summary Report, p. 24-27!
**The Principles of Multifunctional Agriculture and EAL**

Attractive landscape as a result of multifunctional and sustainable farming and as an asset for the further entrepreneurship development

**Priorities of values maintenance in different EALs**

<table>
<thead>
<tr>
<th>Preservation of natural heritage and biodiversity</th>
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<tr>
<td>Traditional extensive pastures</td>
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<td>Challets and haymaking structures</td>
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<tr>
<td>Highlands</td>
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<tr>
<td>Mountain landscapes</td>
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<td>Meadows</td>
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<td>Pasture</td>
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<td>Heathland</td>
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<td>Wooded grasslands</td>
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<table>
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<tr>
<th>Landscape diversity</th>
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<tr>
<td>Historical vegetation forms</td>
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<td>Historical irrigation systems</td>
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<td>Folk architecture</td>
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<td>Rural landscapes</td>
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<tr>
<td>Farmland</td>
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<td>Semi-bocage</td>
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<td>Huertas</td>
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<td>Terraced landscapes</td>
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<td>Delta landscapes</td>
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<td>Open fields</td>
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<td>Orchards</td>
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<td>Vineyards</td>
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Preserved rural landscapes help maintain the quality of life for rural residents by providing viable communities and economies and the positive values associated such landscapes (Agnoletti, 2014). The landscape's image or identical landscape features are used as trademarks of products originating in a certain territory for product marketing strategies. A regional trademark strategy related with local products can be applied in daily food marketing in shops, during festivals, or used for the regional promotion in tourism activities (Summary Report, p. 54).

*Find more information about challenges of multifunctional agriculture in the Summary Report, p. 24-27!*
The Principles of Multifunctional Agriculture and EAL

Maintenance and preservation of EALs values

Which attributes of EALs shall be preserved?

- nice and attractive
- Original tasty
- relaxing
- inspirative

What can a farm do?

- Maintain traditional land uses.
- Preserve natural, cultural and historical heritage and the landscape character.
- Organic farming.
- Cultivating local / regional plants and breeding animals (genopool heritage preservation).
- Extensive, soft tourism activities and family friendly programs on the farm for visitors.
- The implementaiton of knowledge about farm eco-functions and traditions into eco-museum conceptions.
- The implementaiton of high-tech and eco-friendly agri-technologies into modern landscape design conceptions.

Find more information about challenges of multifunctional agriculture in the Sumary Report, p. 52-54!
A key task is setting up a farm as a hotspot of business and touristic infrastructure in the countryside.

- Natural heritage preservation requires extensive and eco-friendly agricultural activities (organic farming, apiculture etc.).
- Traditional extensive pastoral systems are maintained by continuous non-intensive grazing of ecologically vulnerable grasslands by different kinds of animals, removing shrubs and successive woody plants.
- Biodiversity and landscape diversity: a farm provides daily maintenance on land cover. For instance, for meadows it is expected two or four times yearly a grass cutting and haymaking.
- Genopool heritage and diversity of cultivated plants is performed by a farm preferring biological prevention against pests and diseases and producing local eco-products.
- Historical elements of vegetation require maintaining their primary form and functions by removing successive plants or planting/cultivating new ones.
- Historical irrigation structures require active usage, cooperation of landowners in preserving their continuity among land parcels, grass cutting, removing woody plants and reconstruction of channels.
- Historical artificial terraces on slopes require removing successive woody plants and reconstruction.
- Traditional challets, haymaking structures and folk architecture require active usage and reconstruction regarding their cultural and historical features and in some cases also adoption to a new function.

Find links among different EALs and variety of business models in case studies!
Sharing and distribution knowledge on EALs values

Customers, visitors and their activities

- Attractive visual landscape
- Protected natural habitats
- Preserved biodiversity

- Healthy food, original products of high quality
- Support of the local economy (employment)

- Clean environment
- Calm atmosphere in family and small farms

Designing EALs like:
- Eco-museums with natural sites and traditional land-uses;
- Modern landscapes with innovative eco-technologies

How a farm can share knowledge?

A virtual guide as a mobile application linked with web hiking/touristic portals sharing hiking routes across the countryside and farms and related touristic services.

E-commerce combined with tastings or small festivals on the farm.

Seminars, workshops for target social groups.

Workshops, seminars, courses, online courses combined with work stages on the farms or Woofing programs.

Find links among different EALs and variety of business models in case studies!
References/Links


The current state of the health of the agricultural landscape does not meet the criteria for optimal and ecological land use in many EU regions. This statement especially applies for traditionally farmed landscapes where the main problem is land abandonment. Waiting for the decisions brought about by legislation brings the irreplaceable loss of landscape values, and as a consequence, disturbances in ecological relations and eventually economic losses.

Therefore, the training module explains successful realizations of multifunctional agriculture on farms and brings inspirational ideas for other farms in similar landscape types from different European countries. It provides knowledge how farmers could be more independent from unpredictable natural conditions (disasters) and economic obstacles (for instance products trading that is influenced by global prices) as well as it brings ideas how a multifunctional farming can lead to win-win situations presented in case studies. Well-educated farmers are able to identify financial potential of EAL and to implement this knowledge into their successful business plans.

Landscape is being shaped by types of behaviour intimately connected with the culture of images. Landscapes are sculpted by habits, and never before have these been so strongly influenced by appearances.

Prof. Arch. Juan Manuel Palerm Salazar
Universidad de Las Palmas, Gran Canaria, Spain
Essey „On Silence in the Landscape“