Socio productive landscape in Europe: tools and approaches for their conservation and valorization

Prof. Mauro Agnoletti
Faculty of Agriculture - University of Florence - Italy
www.landscape.unifi.it
The European Landscape as a cultural product

- natural features:
  - geophysical formations
  - climate
  - abiotic resources (soil, water, ...)
  - biotic resources (fauna, flora)

- cultural features:
  - information
  - technology
  - policy
  - planning
  - cultural background

Data source: European Commission (1999)
- agricultural landscapes: including 44% agricultural land and 33% wooded land
- other areas: urban and industrial area, roads, railways, wasteland, etc.
- natural landscapes: own assessment
Reduction of farmed land and increase of forests

EU landscape dynamics
From farming to abandonment: “nature” is back
+ 75,000/year in Italy 1920-2005
-88% of landslides on Abandoned terraces
Industrialization and Technological development of agriculture
Industrialization and Technological development of agriculture
Czech Republic

Novodvorsko and Žehušicko 1950-2002

Šantrůčková and Weber 2014
Industrialization and Technological development of agriculture

Sentmenat

In 1950-56

In 2003

Catalonia - Spain

Garrabou and Tello 2005
Effects of EU policy on landscape

1954

Fine grained

Coarse grained

2002

LEGENDA
- bosco
- pascolo
- roccioso
- seminativo
- urbano
Industrialization / monitoring

1977

Castello d’Albola, Podere Marangole (Chianti Siena)

2007
Industrialization: forestry

Land cover in Lierneux (Belgian Ardennes): 1775-2000

1775

1868

1923

1953

2000

Legend:
- bogs
- coniferous
- deciduous
- deciduous-coniferous
- grassland-cropland
- heath
- orchards
- water
- wet meadows

2 0 2 4

Kilometers
URBANIZATION ITALY 1996-2006: + 8,000 /ha

Urban sprawl in Lombardia

1955

2007
urbanization 93% around big cities

Firenze 1954 – 2003: + 50% but same population
“Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”
ELC (Council of Europe)

- Landscape policy
- Landscape quality objectives
- Landscape protection
- Landscape management
- Landscape planning

38 countries have ratified but not Germany

Meetings between EU-ELC for incorporation in CAP
1960: production

1992: environment (set aside)

2014: landscape?

Italy: 30% of Agriculture GDP
- **Axis I**
Improving competitiveness of the agriculture and the forestry sector

“Landscapes as an “added value” for the rural territory”

- **Axis II**
Improving the environment and the countryside

“Enhance biodiversity due to human action considering the characters of local landscapes”

- **Axis III**
Quality of life in rural areas and diversification of the rural economy

A high quality landscape for a high quality of life in rural areas. The “cultural identity” of places against globalization
Tourism and agriculture

Agritourism in Tuscany 2003-2011: + 55.7%

Economic role of tourism in the Italian rural economy (PSN 2007-13)
Landscape actions in the Italian RDP 2007-13

- Isole
- Nord Italia
- Sud Italia
- Centro Italia

- misure potenzialmente negative
- misure potenzialmente positive
National Catalogue of Historical Landscape:
- 14 Universities
- 80 researchers
- 10 Scientific coordinators

126 areas selected

Av. Extension of each area: 500-2000 ha

Selection criteria:
- Significance
- Integrity
- Vulnerability
All areas mapped: 500 m2

Terraced olive orchards – Vallecorsa

<table>
<thead>
<tr>
<th>Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total surface area (ha)</td>
<td>1314.16</td>
</tr>
<tr>
<td>Number of land uses</td>
<td>25</td>
</tr>
<tr>
<td>Number of patches</td>
<td>1161</td>
</tr>
<tr>
<td>Average Surface Area of patches (ha)</td>
<td>1.13</td>
</tr>
<tr>
<td>Average Surface Area of arable land patches (ha)</td>
<td>1.14</td>
</tr>
<tr>
<td>Hill’s Diversity Number</td>
<td>8.98</td>
</tr>
<tr>
<td>Edge Density (m/ha)</td>
<td>1012</td>
</tr>
<tr>
<td>Landscape Integrity Class (I-VI)</td>
<td>IV</td>
</tr>
</tbody>
</table>
Abandon in protected areas
(Ministry of Environment)

- Abandon outside protected areas
- Abandon in protected areas
- Forestation outside protected areas
- Forestation inside protected areas

Percentage

1900

2004
Abandon in areas of landscape restriction
(Ministry of Culture)

Abandonment in areas with no landscape restriction
19%

Abandonment in areas with landscape restriction
81%
The National Observatory for Rural Landscape

a. Development of planning and management strategies
b. Definition of landscapes types
c. National register of historical rural landscapes
d. Landscape monitoring
e. Definition of landscape quality objectives
f. Development of international collaborations
g. Landscape prize
h. Landscape certification
- Protection of biodiversity and the state of EU landscape
- Diversification of crops (more diversity at landscape scale)
- Ecological Focus Areas (Landscape elements such as terrace, buffer, strips, afforested areas etc.)
- Restoration of landscape and cultural and natural heritage
Nature 2000: the identification of “natural habitats” in a cultural landscape

15-18% of the EU territory
Ministerial Conference on the Protection of Forest in Europe (Forest Europe)

*Three Pillars of SFM*
- Ecological value
- Economic value
- Social and Cultural Value

Cultural value never implemented!
Difficulties in recognizing the cultural nature of forests
density, structure, species composition, all affected by man since 15th century
UNESCO
WHC 1972

Cultural Landscapes 1992

Some cultural landscapes can also be mixed sites. They are identified as cultural landscapes under the cultural criteria, but their natural values are also sufficient to meet one of the natural criteria.

Cultural landscapes are inscribed under the cultural criteria, representing the combined works of nature and man.
UNESCO WHL
cultural landscapes:

A – Landscape created by the man (parks and gardens)

B – Organically evolved landscapes
   1 – relict or fossil landscapes

   2 – continuing landscapes
   (they retain an active social role in society closely associated with traditional way of life in which evolutionary process is still in progress. It exhibits significant material evidence of its evolution over time).

c – Associative cultural landscapes
   (religious, artistic or cultural association of the natural elements)
Criteria and requirements:

- Statement of outstanding and universal value (unique cultural traditions, land use, natural habitats)

- Authenticity

- Integrity
Considering 45 cultural landscapes inscribed in the WHL, 42 clearly rural landscapes but rural landscapes are not mentioned as a category.

- Dossier vary from 6 to 800 pages...
- Only 12 dossier put rural landscapes really into evidence
- Features of crops and landscape mosaics often not properly assessed
- Biodiversity mostly refers to natural habitat and species
- Integrity lack of effective assessment and indicators
- Rural communities not central

- Evaluation made by ICOMOS
A new tool for Europe?

DEFINITION

“Remarkable Land Use Systems and landscapes which are rich in biological diversity evolving from the co-adaptation of a rural community with its environment and its needs and aspirations for sustainable development”.
**Financial Capital:**
- money, savings

**Natural Capital:**
- nature’s goods and services
  - waste assimilation, pollination, storm protection, water supply, wildlife

**Social Capital:**
- cohesiveness of people and societies - trust, reciprocity, rules and norms, networks and institutions

**Physical Capital:**
- Infrastructure, roads, markets

**Human Capital:**
- the status of individuals - health, skills, knowledge

**Financial Capital:**
- money, savings
GIAHS CRITERIA

- Local food and livelihood security
- Biodiversity and genetic resources
- Indigenous and Local knowledge of individuals and community
- Cultural Diversity of Agri-“Culture” including product and service diversity
- Landscape diversity and aesthetic values
Good things
- Farmer communities at the center
- Rural practices and rural development are fundamental
- Focus clearly on rural landscapes
- Opportunity to promote sustainable agriculture

Problems:
- Nomination dossier made according to different styles (7-50pag)
- Nomination procedure need revision (steering c / scientific c)
- Structure and features of crops not assessed
- Landscape not properly assessed
- Biodiversity made according to natural habitat
The need for a new paradigm
Recognizing further the importance of the links between cultural and biological diversity, and in this context noting the concept of Biocultural Diversity and the relevance of cultural services provided by ecosystems.

The current state of biological and cultural diversity in Europe results from the combination of historical and on-going environmental and land use processes and cultural heritage;
As it assimilates economic, social, cultural and environmental processes in time and space, the European landscape is predominantly a biocultural multifunctional landscape. As such, it provides a crucial and effective space for integration of biological and cultural diversity for human wellbeing, including in the context of rural territories;
The landscape as the result of the interrelationships among systems in space and time.

Landscape as the future approach to sustainable development? (COP 12 – Korea)
CONCLUSIONS

- Rural landscapes are not yet fully recognized and managed according to their cultural nature

- Most of their assessment still based on tools developed for nature conservation

- International programmes and policies rarely recognizes their importance as added value for the economic development of the rural territory

- Tourism can play an important role but the quality of food strictly associated to landscape seems a better option