REFRAMING THE
FUTURE OF THE
EUROPEAN
LANDSCAPE

Policy Visions and
Research Support

Blueprint for
EUROSCEAPE 2020
Blueprint for EUROSCAPE 2020

REFRAMING THE FUTURE OF THE EUROPEAN LANDSCAPE
- Policy Visions and Research Support -

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## Contents

1. **LANDSCAPES: WHERE EU TERRITORIAL POLICIES MEET**

2. **CHALLENGES IN EUROPEAN RURAL DEVELOPMENT**
   - 2.1 LANDSCAPE: THE HUMAN DIMENSION
   - 2.2 THE END-EFFECT OF SO MANY POLICIES: LANDSCAPE CHANGE
   - 2.3 PLANNING SUSTAINABLE REGIONS

3. **THREE CRUCIAL PRINCIPLES: ASSESSMENT, GOVERNANCE AND SPATIAL VISION**
   - 3.1 LANDSCAPE CHARACTER ASSESSMENT
   - 3.2 NEW FORMS OF GOVERNANCE AT THE LANDSCAPE LEVEL
   - 3.3 SPATIAL VISION: POLYCENTRIC REGIONS, VITAL BRIDGES AND RURAL RETREAT

4. **TOWARDS EUROSCAPE2020: RECOMMENDATIONS**
   - 4.1 GETTING STARTED
   - 4.2 LANDSCAPE AGENDA FOR EUROSCAPE2020

References
• An emerging policy domain
Since the launch of the European Landscape Convention\(^1\) in 2000 was backed by a successful ratification process, the awareness and political willingness of European countries to develop national strategies and plans in support of landscapes has clearly increased. National agencies such as Natural England, Federal Agency of Nature Conservation in Germany, the Belgium Research Institute for Nature and Forest, Cemagref in France and many others are currently in the process of reviewing their national landscape policies. In most cases, efforts are being directed towards the strengthening of existing legal instruments, integrating landscape objectives into other sectors and increasing the overall awareness among decision makers and stakeholders. In doing so, national agencies encounter a striking congruence between the need to sustain their characteristic landscapes and the European Union’s shift towards the second pillar of the Common Agricultural Policy rural development.

• Rural development, a crucial asset
With over 60% of the population in the 27 Member States of the European Union (EU) living in rural areas, which comprise 90% of the territory, rural development has evolved to one of the most vitally important policy areas. Spatial policy instruments such as Natura 2000, the Water Framework Directive, or the plans of the Trans-European Transport Network have
already been established to set a direction towards sustainable environmental management. The European Commission, supported by the European Environment Agency and by ESPON, has established comprehensive indicator frameworks (e.g. IRENA\textsuperscript{2}), is developing policy-oriented sustainability impact assessment tools (e.g. SENSOR\textsuperscript{3}) and is in the process of strengthening its reporting mechanisms to monitor and guide policy implementation.

- **Ambitions and reality**

However, it is already clear that European landscapes will not be able to support the EU’s ambitious Biodiversity Targets 2010, will face a further divide between economically prosperous and under-privileged regions, and
will be exposed to unprecedented land use changes driven by the global market economy – see the recent debate on bio-energy crops and the world-wide shortage of agricultural products. The EU’s spatial policies lack region-specific feed-back mechanisms addressing the large variety of rural and urban structures, expressed in the socio-economic and demographic profile as well as in landscape character. This in return, will require new forms of governance, namely more transparent and integrated decision pathways that link local, regional, national and European institution, new forms of inter-agency communications in the form of spatial and contextual reference systems (e.g. regional typologies) and new methods for participatory processes that involve stakeholders and citizens alike at different levels. In essence, the EU’s ambitious territorial policies are likely to conflict with its social cohesion, regional identity and quality of life targets if not rooted in effective regionalised bottom-up procedures.
Aim: A new approach in policy implementation

This Blueprint for EUROSCAPE 2020 proposes to undertake a radically new strategic operational approach for the European Union when defining targets for its territorial policies. The key principles are:

(1) to establish a policy monitoring for rural development on the basis of a landscape functions;
(2) introduce new spatial planning instruments to support Polycentric Regions and Vital Bridges; and
(3) develop new forms of governance involving local and regional authorities, people and decision-makers.

Before describing these, the main challenges in rural development are identified, based on an analysis of landscape changes in the past 50 years, and a prospective analysis of trends in land use change into the future.
2.1 Landscape: the human dimension

- Drivers for the quality of life

Recent scientific literature on sustainability impact assessment\(^3\) suggests that the adequacy and scope of rural development measures are assessed on the basis of the multiple landscape functions associated with certain landscape types. Several EU projects\(^4\) have proposed to develop the landscape function approach based on the framework of ecosystem goods and services as addressed in the Millennium Assessment\(^5\). The underlying assumption is that both policy and economy affect the social/cultural and the natural/cultivated capital of a society (Figure 1) and so have decisive impacts on people’s well being. Conceptually, landscapes provide transmission functions between the mechanics of land-use management and change on the one hand, and basic goods and services offered by ecosystem on the other hand.

- The weak position of ecosystem services in cultural landscapes

Classical ecological theory considers ecosystem goods and services as direct drivers of human well being. In Europe – where cultivated systems dominate and where landscapes are being managed according to traditions and demands put forward by recreation and tourism, such a view does not only come across as a natural science interpretation, but also seems at odds with both policy and basic economic
Figure 1. The conceptual framework of landscape functions. The sustainability triangle (brown) is used to conceptually locate the approach. Policy and economic/technological capital is driving both the social/cultural and natural/cultivated capital. Landscape functions act as link between the goods and services and the social and cultural capital, driving the quality of life.
theory\textsuperscript{7}. Over the centuries, European landscapes have been gradually but nevertheless radically transformed from natural systems to cultural essentially artificially maintained environments. Since only relatively small relics of the original natural ecosystem components remain – in often remote locations and/or dependent on massive human interventions in terms of management and protection measures – the net economic value of this fragmented natural capital is probably rather limited\textsuperscript{7}. Key ecosystem goods and services affecting the quality of life are certainly regulating functions affecting climate, flooding or water purification and retention. On the other hand, when addressing production functions such as agriculture and forestry or biodiversity values such as rare species, a spatially complex and wide network of landscape functions related to perception, identity and recreation remains unaddressed. This means that there is an over-emphasis of ecological and economic goods and services on the expense of the human dimension of the landscape.

- **Transmission functions bridging the gap**

In order to strengthen the social-cultural components that are less driven by environmental factors but rather by human interaction and perception, it is proposed to consider landscape functions transmitting between “ecosystem goods and services” and “quality of life”. The reasons for this proposition are twofold. First
landscape is a holistic expression of the physical, biological and human properties of a given parcel of land and acts at a higher spatial aggregation level than simple land-use or land cover. Second, “single land use can involve numerous functions”\(^8\). Different land uses can result in different functions, but not all functions can be expressed as land uses. Agriculturally used land has, for example, economic, aesthetic and recreational functions, but only one land use, namely, agriculture.

Furthermore, the ecosystem dimension of these services are strongly – almost entirely – demand-driven: without human resource needs and aesthetic preferences, such goods and services would not exist\(^9\). The introduction of landscape functions will not only fill a major gap in current land use policy design and implementation, it will also strengthen the participatory and integrative dimension at the regional level.

**Landscape functions at regional level**

The recent reforms of the Common Agricultural Policy are a first expression of this situation: because there are periodic fluctuations in the needs for agricultural products (goods) and an increasing demand for agricultural services (quality of life), the European Commission is shifting its financial support away from production towards rural development. The recreational and aesthetic functions of agricultural landscapes are very much related to the results...
of certain – often traditional – forms of land use management, policies, patterns and structures. These result from historic developments and enhance the perception of an identified landscape character. But such factors derive from outside the pure natural science context and are difficult to match with classical ecosystem theory\textsuperscript{10}. It hence does not come as a surprise that state-of-the-art valuation methods are – in the majority – focusing on identifying issues such as ‘readiness to pay’ and related preference systems. In most cases, it is difficult to establish clearly defined linkages between such preferences and ecosystem goods and services. A much more transparent and direct way of measurement would be the identification of landscape functions with respect to preferences at the regional level.

2.2 The end-effect of so many policies: landscape change

- Land abandonment, a temporary feature?

Given the influence of global market fluctuations on all economic sectors, land use change is already a defining feature of the European landscape. Periods with land abandonment in the past are e.g. those affected by the McSharry regulations, characterised by the abandonment of marginal lands in mountain areas, and the abandonment of non-economic lands in some of the new Member States. Such periods alternate with periods of increasing land pressure, in the past especially in the larger conurbations, but also in areas with formerly completely
unproductive soils. Recently the increasing attention to biomass-fuel crops is leading to considerably differing points of view in the debate about the value of the rural area for cropping. Also, the revision of the Common Agricultural Policy will have large consequences for land use and landscape.

• EU enlargement challenging sustainable landscapes

The accession of the southern countries to the EU in the 80s (Greece in 1981, Spain and Portugal in 1986) more than doubled the size of the population working in agriculture and increased the number of agricultural enterprises in Europe by more than two-thirds. “Thus enlargement must inevitably reduce both the Community’s average holding size and, by implication, the average level of farm incomes – a retrograde shift vis-à-vis the objectives of the CAP”. This had substantial consequences e.g. for the montados in Portugal (first case below). Such processes will be evident in the recently accessed countries as well, e.g. in the currently small scale pattern of agricultural land use in Poland (second case below). In the upper Po valley in Italy (third case below) consolidation of landscape development might be expected, but also here large dynamics remain present.
The Montado case

Intensification and extensification of the traditional system in the last decades has led to degradation of the montado, the Portuguese traditional mixed farming system of scattered (often cork) oak trees and grazing meadows. With the opening of international markets and the fall in crop prices, market-oriented cultivation of cereals on the infertile montado soils has progressively declined. This led to extensification of land-use, and in some areas even to abandonment. Moreover, the system of extensive Iberian pig-raising under the trees disappeared in the sixties, mainly due to the spread of African swine fever. Other production strategies followed, based on alternative livestock, intensification of cultivation in the most fertile soils, increased cork production and abandonment of agriculture in many areas, resulting in a degradation of the traditional system and in the distortion of the human-maintained equilibrium that has preserved not only economic and biological productivity, but also the stability of unique cultural landscapes.

Land use changes characteristic of extensification are: fewer cultivated fields, more shrub patches, larger areas of natural pastures, and also abandonment of some patches, followed by the development of stratified bush communities. The result is a new landscape mosaic, more heterogeneous than the landscape created under the regular management of the montado. If crop cultivation is the main objective of intensification (this is normally the case on the best soils), the tree density is often reduced, and the cultivation depends on mechanisation and deep ploughing. The choice of the crop
Figure 2. Land use change scenario focusing on land abandonment (purple) and intensification (red) in the context of current tourist activities (brown for inland camping, turquoise for coastal recreation) and proximity to protected areas for Portugal and Spain.\(^5\)
is often determined by CAP subsidies, more than by the management strategies for the montado system — which in this case no longer works as a system. Even if these types of change in the traditional land use systems are not part of the strategy politically defined for Alentejo, in the last decade such change has been favoured by the CAP.

In the long term the montado system will disappear, since only one component is promoted, whereas the others are only preserved as relicts of the traditional land use. Figure 2 illustrates the expected dimension of land abandonment for 2030. Intensification is not a generalised trend, it occurs in limited areas — but where it occurs it may be considered as a true threat to the montado. Even if there is no accurate monitoring of changes for the whole region, this seems to be the dominant trend. It is not resulting in abandonment everywhere; it may lead to a new equilibrium and eventually to an even more heterogeneous landscape pattern. The maintenance of these extensive systems is partially supported by current CAP measures applied in Portugal.
Poland is among the largest agrarian economies of Central and Eastern Europe. Its agricultural land resources of 15.9 million hectares account for 60% of the country’s total land area and the number of people engaged in agricultural activities is nearly 17% of the economically active population. Polish rural landscapes have thus far remained relatively unaffected in terms of biodiversity and cultural heritage. Therefore the significance of rural landscapes of the country is recognised at the highest policy level in the European Union.

In view of the expected economic development within the European Union the large diversity of Polish landscapes is, however, subject to future change. Environmentally valuable agricultural landscapes recognised as high nature value farmlands in Poland comprise about 10.6% of utilised agricultural area, representing almost one fourth of the area of semi-natural grasslands in Central and Eastern Europe. In this respect the role of support measures for less intensive farming methods to help in maintaining biodiversity should be enhanced.

Implementation of the CAP will cause certain adjustments in rural development strategy and agricultural management practices, which will affect rural landscapes substantially. The declining role of agriculture will be accompanied by on-farm diversification. A decrease in numbers of smaller farms using traditional methods can be expected. Instead, the number of more commercially viable farms will grow, which means an increased inten-
sity of use of most productive landscapes, while the less economically viable become marginalised. Considerable enlargement of individual farm ownerships can be predicted, as the average farm size at present accounts only 6 ha against e.g. 43 ha in Germany\textsuperscript{17}.

Figure 3. Expected changes of the share of agricultural production at overall GDP in the context of current tourist activities (light green for coastal recreation) and proximity to protected areas for Poland\textsuperscript{15}. 


The upper Po plain (Regione Piemonte) in Italy is one of the economic drivers of Italy’s society. Besides traditional industrial activities like textile and automobiles, modern industries of IT, aerospace and food products dominate. Land use is characterised by extensive high input farming, especially rice and cereals, but also exquisite wines are grown in Piemonte. Spatial planning principles, however, are very difficult to implement due to the scattered nature of the rural and urban settlements in the plains and the difficulties in preventing construction of large stores along the main roads. Also the availability of water for the rice paddies is becoming problematic in recent years, so that conversion of wet rice into dry rice is currently being considered widely.
The expected changes in land use (see Figure 4) have significant consequences for landscape character. The regional spatial planning philosophy is based on due consideration of landscape values, especially in areas of outstanding beauty, but also the areas of mainly residential and agricultural function are taken into consideration. The Biella Project (an initiative of the Province and the town of Biella, supported by the Regione Piemonte, implementing the European Landscape Convention) provides an example of this. An example of new alliances forged for the sake of landscape conservation and sustainable rural development is the cooperation between farmers and the administration of a Regional Park along the Po river, rehabilitating land use in the marginal areas in the hills, and promoting tourist functions on farms.
**Figure 4. Land use change scenario focusing on land abandonment (purple) and intensification (red) in the context of current tourist activities (brown for inland camping, turquoise for coastal recreation) and proximity to protected areas in northern Italy.**

Legend

**Urban Tourism**
- World City
- Global cultural metropole
- European cultural attraction
- Other international attraction
- Tourist attraction
  - World Heritage Cultural object

**Number of hotelbeds in urban areas (only in NUTS regions)**
- < 10,000
- 10,000 - 50,000
- > 50,000

**Countryside Tourism**
- NumCampBeds
  - 5,000 - 10,000
  - > 10,000

**Coastal tourist concentration**
- Coastal landscape unit
- Coastal landscape unit with high tourist concentration

**Areas of outstanding beauty**
- WDPA protected areas
- Protected areas with no tourist data or low tourist presence

**Everyday Landscapes**
- Urban area
- Peri-Urban Recreational areas

**Landuse change 2000 - 2030**
- Trend expectation: more extensive
- Stable
- Trend expectation: more intensive

**Areas of Detioration**
- Tourist in percentage of the total peak season population

**Continuity**
- Corine Land Cover change between 1990 and 2000 < 0.5%

**Potential**
- Distance to lakes, coasts, mountains and forests
  - major road
  - Ferry
Figure 5. Changes in semi-natural land per Harm region as a consequence of the continental market scenario. Left: 2007, centre: 2030, right: difference between them.
Source: EURURALIS²³.
2.3 Planning sustainable regions

Recent projections\textsuperscript{24} show a trend towards the richer European regions getting richer and the poorer regions falling ever further behind. Overexploitation of the landscape in the economic zones, and underexploitation and land abandonment are the unsustainable but logical consequences of this rather autonomous development. Under a continental market scenario (EURURALIS\textsuperscript{23}), within the axis of economic development (London – Frankfurt – Milano), the expansion of semi-natural lands will decrease only slightly or even increase, whereas in the periphery the decrease in semi-natural lands is almost catastrophic, mainly due to increase of agricultural land use intensity (Iberian peninsula, Denmark, Lithuania, Greece and as an exception also Paris: Figure 5). These processes are associated with a loss of landscape character and identity in those places where no special protection status applies. Europe as a whole is thus getting poorer in landscape values.
THREE CRUCIAL PRINCIPLES:

• ASSESSMENT,

• GOVERNANCE AND

• SPATIAL VISION

Landscape scientific research, which is mainly expanding from pure landscape ecological perspectives towards broader socio-cultural domains, has stressed the interdependencies that exist between landscape character and the socio-economic context when assessing sustainability, sensitivity and multi-functionality of the landscape. EU research projects such as SENSOR and FARO on sustainability impact assessment and land use scenarios have demonstrated the use of the European landscape typology LANMAP for the development of a spatial regional reference for policy evaluation. A spatial reference framework that is accepted by both the European Union and the Member States must be considered as an important prerequisite for a transparent implementation of rural development policies at the regional level.
3.1 Landscape Character Assessment

• Sharing a passion for landscape

The example of England shows that the ambitions of a governmental agency in the field of landscape character assessment – in this case the former Countryside Commission – can have a tremendous impact on the national status and perception of landscape. It must be assumed that several aspects have contributed to this development, one of which is certainly the existence of a cultural affinity towards the topic of landscape, a ‘passion for landscape’. This passion has probably been shared between larger parts of the population and the agencies involved. However, it is also clear that this impact has ‘been staged’ by the political forces, e.g. by launching the ‘landscape character area map’ as one of the key national references for regional identity in the countryside. Another likely element of the success-formula was the early and broad participation of many different stakeholders when establishing each landscape character area unit, and it is significant that a technological approach did not play a dominant role!
• About 6% (56) ofJCAs were stable or showed changes that were consistent with either maintaining or strengthening their character.
• In about 64% (100) they were diverging, in the sense that they showed marked patterns of change that were transforming or eroding the elements that made them distinctive.

Figure 6. The first CQC assessment, covering the period 1990-1998. 
• Monitoring landscape change is possible

In England, the aim was to develop a national framework of geographical areas that described what the landscape was, how it had evolved and how to use this knowledge better to guide and inform its protection, conservation, enhancement and restoration. Landscape Character Assessment in fact also allowed the monitoring of landscape change through the Countryside Quality Counting method (Figure 6).

Landscape Character Assessment techniques as developed in England and Scotland have become a point of reference for recent European approaches, manifested in the development of a European Landscape Typology LANMAP and a review of classifications. European programmes such as Corine land cover, the agri-environmental indicator programme IRENA (EEA), the area sampling process LUCAS (Eurostat), and the European Landscape Mapping initiative LANMAP must be considered as the cornerstones for the systematic development of a landscape monitoring and reporting programme.

3.2 New forms of governance at the landscape level

• Linkage between governance and nature

It is interesting that from the viewpoint of the social sciences, the landscape concept is being
interpreted as follows: “as a link between governance processes in multi-level-politics and natural-spatial conditions is precisely its hybrid character, that is, that societal and “natural” factors are intrinsically linked to one another”\(^3\). The identification of a ‘linkage’ between governance and nature echoes in an intriguing way the earlier acknowledged role of landscape functions between land use and ecosystem goods and services. Both conceptual placements of landscapes evoke associations with the chemo-physical sciences, namely attributes such as catalyst, converter or transmitter.

In many countries, nature conservation and landscape protection instruments are addressed in one and the same legal framework. Because of their complementary character and the traditionally common roots of both concepts such a dual approach is not surprising. Interestingly, spatial and regional planning is frequently very closely associated with landscape planning\(^2\). Figure 7 serves as a reference for placing new forms of governance into the existing framework of policy implementation.

**Landscape governance, a new concept**

Although top-down regulations and policy structures tend to be inherently conservative and to counteract creative participation from the bottom-up\(^3\), landscape governance should be able to compensate for this inherent problem in modern landscape management. According to Görg\(^1\), landscape governance as a component of environmental governance...
stakeholders and decision-makers involved in EU policy implementation. In the case of the “Cross Compliance” scheme as part of the CAP reform, the introduction of the Single Payment Scheme (single farm payment for EU farmers, independent from production, with the option of limited coupled elements) in 2005, payments to farmers are linked to the respect of environmental, food safety, animal and plant health and animal welfare standards, as well as the requirement to keep all farmland in good agricultural and environmental condition. In the current situation farmers follow European-wide generic requirements, rather than context-specific, stakeholder determined solutions.

should follow these principles:

- **Social shaping of landscapes must be the starting point for analysis;**
- **The plurality of landscape-comprehensions and interests related to a landscape in context should be recognised;**
- **The aesthetic dimension is not itself a normative starting point for landscape governance;**
- **Cultural dimensions must be supported by the insights of natural-science.**

**Single payment as a chance**

Landscape governance can be seen as a way of offering a pragmatic up- and downscaling mechanism based on the view of a variety of stakeholders and decision-makers involved in EU policy implementation. In the case of the “Cross Compliance” scheme as part of the CAP reform, the introduction of the Single Payment Scheme (single farm payment for EU farmers, independent from production, with the option of limited coupled elements) in 2005, payments to farmers are linked to the respect of environmental, food safety, animal and plant health and animal welfare standards, as well as the requirement to keep all farmland in good agricultural and environmental condition. In the current situation farmers follow European-wide generic requirements, rather than context-specific, stakeholder determined solutions.
Figure 7. Context of landscape governance between sectoral policies, multi-sectoral instruments and methods. 

- Sectoral Policies
- Multi-sectoral Instruments
  - Nature Conversation
  - Landscape Protection
- Methods
  - Inventory & Monitoring
  - Landscape Character Assessment
  - Landscape Evaluation
  - Protection Compensation Design

Spatial & Regional Planning

- Biodiversity & Landscape
- Agriculture
- Energy
- Water
• **Establishing landscape development plans**

According to a recent evaluation, a general conclusion can be reached that these obligations are mostly appropriate and likely to contribute to the intended effects (assuming farmers comply with them). Some Member States have made particular effort to design and target obligations to achieve real environmental benefit. However, in other cases, some obligations are considered to be so general that they are unlikely to achieve any real benefit. A landscape governance type of approach could require the establishment of landscape development plans in which landscape functions and the respective indicators for monitoring policy implementation constitute a first step for making farmers of such a region eligible for farm payments. Member States and regional authorities would need to ensure that such landscape development plans are based on landscape character assessments and are available in digital, georeferenced formats for European-wide integration. If national or regional authorities are not able or willing to provide such services in support of their farmers, land owners can also apply for interim payments provided they commission private landscape planners to produce the required plans on behalf of the municipalities or regions. The specifications put forward in such landscape developments plans would replace the generic requirements followed thus far (Figure 7).
3.3 Spatial vision: polycentric regions, vital bridges and rural retreat

• Polycentric regions as anchor points

A continuous and increasingly dynamic change in time and over space calls for strong anchor points of more stable land use\(^5\). It will certainly be a challenge for land use and landscape management to define which places have such a strong and unique character that they deserve to be managed as polycentric regions\(^6\). This may be from the point of view of the visually attractive and ecologically resilient landscape as much as from the point of view of intrinsic values like historical meanings of a particular landscape (e.g. battlefields, landscapes with a particular reclamation history, etc.). Though the debate and research on multi-functional land use must be welcomed as a great contribution in response to the largely undervalued aspects of the land such as habitat, cultural amenity and information functions, the focus on land use only is lacking a spatially coherent vision and regional focus. The concept of European Polycentric Regions is an answer to that as a meta-scale regional planning instrument for integrating multi-functional land use into a spatial framework based on landscape functions. Polycentric Regions can be characterised by:

• designation of region-specific resilience centres that provide essential compensation and buffer functions for adjacent high agglomeration and that can support structurally weak zones;
• spatial distribution of landscape services that reflects the bio-physical structure as well as socio-economic necessities at various levels of
scale from the local to the supranational with special emphasis on trans-boundary situations;

- governance structures that build upon bottom-up civil society initiatives within a generally accepted framework of European policies, stimulated by incentives from public administration;
- awareness of the importance of linking regional identity with global sustainable development objectives, implying careful reference to landscape impacts in all relevant policy sectors.

The envisioned system of Polycentric Regions – essentially a spatial concentration of vital landscape services at the regional level – will have to be embedded into a network of European Vital Bridges providing easy access, sustainable forms of resource management and environmental risk management programmes.

**Safeguarding Vital Bridges**

The degree of connectivity between regions depends on the scale of required support services (international, national, regional and local) taking into account a wide range of parameters. E.g. centres of high manure and urban organic waste production will need to be linked to alternative energy production plants; recreational areas need to accommodate for expected growth trends in urban areas; key biodiversity centres need to be supported by corridors for current and future migration needs. A European Green Structure in support of the Natura 2000 network, linking habitats across national borders and large distances has become a Eu-
European strategic consideration. River networks can be considered as key bio-physical structures, among other things with reference to flood risk. Trend reports have prompted European countries to re-consider the role of spatial planning in the light of risk management. Identifying landscape services that can provide buffer and compensation against life threatening risks must be considered as a primary step of Euroscape 2020.

Vital bridges imply landscape concepts and design solutions linking polycentric regions with each other where appropriate, providing natural and cultural corridors, closing the gap between the rural and urban and offering spatial solutions for risk management.
• Providing the Rural Retreat

Currently, nature conservation areas, national parks and landscape protection areas serve as the stepping zones of biodiversity and recreation. However, many of the already fragmented sites are becoming pressurised by expanding urban development, tourist exploitation and penetrating infrastructural networks.

The consequences are increasing noise levels, barrier effects, visual disturbance, fragmentation, as well as loss of function and identity in the peripheral zones of the designated areas. Areas with weak protection status or without any are prone to piecemeal land use changes. Even larger zones that serve as national icons
Figure 9. The Green Heart in the Netherlands – a long-term spatial planning asset as an example for classical rural retreat. 

Legend

Urban Tourism

% World City
% Global cultural metropole
% European cultural attraction
▲ Other international attraction
# Tourist attraction
## World Heritage Cultural object

Number of hotelbeds in urban areas

- < 10 000
- 10 000 - 50 000
- > 50 000

Countryside Tourism

NumCampBeds

- 5 000 - 10 000
- > 10 000

Tourism Function Index (area) > 300

Coastal tourist concentration

- Coastal landscape unit
- Coastal landscape unit with high tourist concentration

Areas of outstanding beauty

- WDPA protected areas
- protected areas with no tourist data or low tourist presence

Everyday Landscapes

- Urban area
- Peri-Urban Recreational areas
- major road
- Ferry
for the ‘rural retreat’ such as the ‘Green Heart of Holland’ (see Figure 9) are exposed to these trends and the protection status is slowly being removed to give way to immediate community interests.

Especially adjacent to Europe’s agglomeration areas, such zones for ‘rural retreat’ become increasingly important for providing essential landscape services such as habitat, day-trip recreation, drinking water recharge, cultural identity and simply open space. Whether the Copenhagen ‘Green Fingers’, the green belts of larger European metropolitan areas or the recreational areas close by urban agglomeration zones, the role of ‘rural retreats’ is essential for human health and quality of life, and for biodiversity.

The maintenance and (re-)development of such zones must be considered as a major asset in many European regions. Quite naturally, there should be a spatial integration/overlap of ‘rural retreat’ zones with the realm of ‘vital bridges’ addressed in the first concept. In regions where this is not the case, remaining open space zones with yet under-developed landscape services will require new spatial policies and management plans.

Rural retreats would need to be stable but polycentric landscape anchor places with extensive recreational, cultural and biodiversity services as buffers against agricultural intensification and urban expansion.
Energising Remote Regions

Rural development is an increasingly important policy area. Farming and forestry remain crucial for land use and the management of natural resources in the EU’s rural areas, and as a platform for economic diversification in rural communities. The strengthening of EU rural development policy has, therefore, become an overall EU priority.

The EU Rural Development Strategy 2007-2013 provides a key reference for EUROSCAPE 2020, especially the requirement to identify the areas where the use of EU support for rural development creates the most value added at EU level. In remote European regions regional identity and economic viability might be introduced or revitalised through innovative land use based production systems. For instance, special initiatives for regenerating the socio-economic perspectives of these areas require a third set of strategic policy plans. In remote European regions thus regional identity and economic viability should be introduced or re-vitalised through innovative land use based production systems.

Current trends show that the proportion of peripheral areas is increasing. According to ESPON scenarios (Figure 10), these trends will continue, raising the question how ‘quality of life’ objectives can be met in the future for both local population and tourists.37
Figure 10. Integrated spatial scenarios on European economic core regions. The two scenarios are developed under two different policy assumptions: a cohesion approach (left) resulting in a wider coverage, and a competition-oriented approach (right).
4.1 Getting started

Until today, most of the manifold impacts of European policies on the ‘everyday’ landscape as addressed in the European Landscape Convention are not captured by the state-of-the-art international assessment and monitoring programmes. Apart from the paradoxical lack in direct competence of the EU in the area of landscape, the reasons are as follows:

1 limitations with regard to data-driven indicator frameworks which fall short of adequately addressing the large variety of cultural characteristics;
2 the focus on singular, often protected sites of special interest; and
3 the lack of bottom-up mechanisms to provide regionally adequate interpretations of the existing international assessment results.

These shortcomings can be overcome by engaging in new forms of institutional cooperation and by establishing new structures of governance. The implementation of European land use policies – especially those related to the objectives for Rural Development and instruments such as the agri-environmental measures and compliance programme – require more integrated, region- and problem-specific implementation procedures.

The example of the Landscape Character Assessment as performed in the United Kingdom can serve as a stimulus for developing a European-wide approach in which local and regional...
authorities are as much involved as national government agencies and the institutions of the European Union. By means of readily available, digital and/or internet-based information access, the observed information and interpretation gaps can be filled without the need to engage in costly and time-consuming data gathering exercises. Other than being considered an isolated, research-driven exercise, a regionally based approach to landscape assessment will strengthen the policy-science interface in exactly those places where it is the most relevant: close to the stakeholders, decision-makers and public.

Obviously, a wider and more integrated approach towards policy implementation, assessment and monitoring cannot be expected to start as an immediate, Europe-wide and top-down organised programme. It will require incentives, examples for good and best practice and the identification of priority regions. However, existing European land use change and sustainability impact assessments as performed by the European Environment Agency, the Joint Research Centre and many EU projects are very capable of identifying critical regions where social or environmental problems can be expected to aggravate over the next decades. Therefore it is important to demonstrate that spatial planning tools can offer adequate ways of tackling concrete spatial issues related to sustainable development at the regional level, e.g. reconstructing agricultural land use,
introducing landscape-level urban development schemes and working towards cultural identity objectives. The above mentioned region-based assessment programmes and new forms of governance will allow to guide policy implementation in the identified ‘high-priority’ areas by introducing a new dimension of spatially integrated planning concepts. This means, that the EU’s current financial schemes such as structural funds and less favoured area will need to be complemented by more sophisticated spatial development programmes backed by local and regional authorities.

The following elements should at least be recognisable in an innovative policy and research agenda for sustainable landscape development in the European Union, enhancing a real paradigm shift.

4.2. Landscape Agenda for Euroscape 2020

Assessment

- A close linkage between EU policy implementation (e.g. rural development) and a landscape-functional approach is required: regions need to demonstrate that they fulfil minimum standards regarding the description and target setting for landscapes.

- A sector-oriented landscape monitoring and reporting process should provide the basis for integrative measures. Sectors to start with are tourism, agriculture, forestry, energy, nature conservation.

- A European Landscape Character Assessment should initiate bottom-up mechanisms involving authorities, stakeholders and researchers to arrive at clearly defined European Landscape Assets.

- A strong ERA-Net initiative should coordinate the landscape research efforts of all European countries.
EUROSCAPE 2020

**Governance**

- Integration of landscape concerns into current and future legislation at all governance levels should strongly be promoted.

- The implication of the European Landscape Convention should be considered in order to engage in a proactive process of institutional support for landscape development.

- Successive introduction of the bottom-up definition of landscape character, polycentric regions and anchor points should complement the top-down scenario approach.

- Establishment of a European Landscape Observatory should play a key role in the development of European-wide regional planning schemes.

**Spatial vision**

- A clear spatial vision for Europe should be developed, focussing on vital bridges, possibilities for rural retreat, and energising remote regions.

- Priority regions should be identified for launching spatial regional development plans with clear references to landscape visions in which European and regional/national objectives are integrated.

- An appropriate Rural Development Strategy 2013 – 2020 should be designed, including landscape quality aims.
REFERENCES

4 The EU projects are: SENSOR (see Helming et al. 2007 under note 3), ELCAI: Perez-Soba M & Wascher DM (eds. 2005). Landscape Character Areas. Places for building a sustainable Europe. Policy Brochure as deliverable from the EU’s Accompanying Measure project European Landscape Character Assessment Initiative (ELCAI), funded under the 5th Framework Programme on Energy, Environment and Sustainable Development (4.2.2). 33 p. [see also note 25]
6 Adapted by the authors after the “Conceptual framework of landscape functions” of Kienast F, Bollinger M, De Groot D, Potschin M & Haines-Young R (2008). Landscape function assessment at the European level (SENSOR publication in prep.)
7 Prevailing concepts for indicator assessments of land use policy such as the Driving Forces – Pressure – State – Impact – Response mechanism (EEA, OECD) associate demographic, climatic and land use change with principle driving forces, and policy development to guide or counteract such trends as both a driving force and a response. Ecosystems, by contrast, are considered as places where driving forces can impact as pressures on their state. With regard to the underlying economic aspects of these cause-effect relations it appears that the in average marginal proportion of agricultural production at the national GNP and the minor role of natural ecosystems in relation to the total national land cover, does not lend itself for an accounting system that is entirely based on ecosystem goods and services.
11 Fresco L (2006). Biomass for Food or Fuel: Is There a Dilemma? The Duisenberg Lecture. Singapore, September 17,
2006. University of Amsterdam / Rabobank. 35 p.;
Fresco L, Dijk D & De Ridder W (2007). Biomass, food and
sustainability: is there a dilemma? Updated version, Univer-
sity of Amsterdam / Rabobank. 51 p.
12 Ingersent KA & Rayner AJ (1999). Agricultural policy in
Western Europe and United States, Edward Elgar, Chelten-
ham, UK/Northampton, USA.
16 ELCAI project: see note 4.
20 Regione Piemonte (2004). L’agenda della pianificazione ter-
22 Deambrogio F, Paves B & Cristaldi L (2004). Progetto collet-
tivo: interazione tra Parco e agricoltori. In: Atti Convegno Inter-
23 EURURALIS. see www.eururalis.eu
24 See note 4
Petersell J, Wrbka T, Plutzar C, Schmitzberger I, Kiss A,
agricultural landscapes: the SINUS approach, Land Use Policy 21: 307–320;
27 Perez-Soba M et al. (2007). Forsight Analysis of Rural Areas of Europe. FARO-EU (Foresight Analysis of Rural areas Of Europe) is a EU FP6 Specific Targeted Research Project, with a two year duration (Jan 2007-Dec 2008). http://www.faro-eu.org/
35 Anchor points for landscape planning on the basis of traditional landscapes were first introduced by Antrop, M (1997). The concept of traditional landscapes as a base for landscape evaluation and planning. The example of Flanders Region. Landscape Urban Plan. 38, 1-2: 105-117.
36 “... Even more markedly, the processes of re-territorialisation and re-clustering are far more important than those of globalisation and fragmentation because it is precisely through them that a new urban will arise (note: civitas, not urbs, e.g., not the new urbanism of Calthorpe). This is equally true on the economic, socio-cultural and political fronts and it is exactly this that will need to be the focus of more detailed and targeted research.” Boelens L (2006). Beyond the Plan; Towards a New Kind of Planning. diSP 167 (4): 25-40.

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