

#### 4.3 Sustainable Land Use: A Matter of Perception?



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Dr G.B.M. Pedroli is a senior landscape researcher in physical geography and landscape ecology, with an academic background, at the University of Amsterdam. He specialised in landscape studies, both in consulting assignments and contract research. He is engaged enthusiastically in the future of Europe's living landscapes, developing methodology for landscape and nature conservation planning from a sustainable development perspective, and developing methodology to integrate natural sciences, complex land use requirements and landscape perception and appreciation in the management. He has a keen interest in involving civil society in the process of decision support for these purposes. Bas Pedroli coordinates several EU projects related to landscape and is active in various scientific networks (Uniscap, Landscape Europe, Civilscape, Petrarca). Since 1997, he has been employed by Alterra Wageningen vR (Landscape Centre) in the Netherlands; and additionally as an associate professor at Wageningen University (Soil Geography and Landscape Group) since 2008. His most recent publications related to the conference topic are 'Europe's living landscapes. Essays exploring our identity in the countryside' (2007) and 'Values of rural landscapes in Europe. Inspiration or by-product' (2007).

Bas Pedroli started his presentation with a picture of a typical Dutch landscape, with small houses and open space used for agriculture, but also visited by migrating birds and the people of Amsterdam, who need some rest. The second picture showed the same landscape from different angle, with flat meadows in the foreground and the Dutch capital dominating the skyline, glooming in mist – or was it fog?

” What is the relevance of such a focus on landscape? Landscapes are an ecological and social expression of human interaction with their environment. The Council of Europe said once: *‘Landscape, mirror of our innermost selves.’* Landscapes also affects human needs in terms of living, identity, recreation and shaping: this is the quality of life. Human minds are also influenced in terms of perception, connection and understanding. Finally, landscapes are socially shaped entities that offer opportunities for sustainable governance.

Designing sound policies for landscapes is not evident. There appears to be various paradoxes. The first is that many policies have a great deal of impact on landscape, but landscape is not a clearly addressed competence. The second is that landscape is a notion that is inherently complex and integrated of character, but science and policy prefer clear-cut cause-effect relationships. The third is that European landscape diversity is an asset, but this makes it difficult to develop EU-wide policies for it. The last paradox is that landscape is a common good and everybody acknowledges its values, but its societal importance is hardly debated.

Landscape development challenges policy-makers in various ways. The coming revision of the CAP (CAP 2013) will have an effect on rural development and biodiversity, although the role of landscapes remains unclear. Societal developments in Central and Eastern Europe also consist of new problems because these are new growth poles with specific rural problems. Energy policy and climate adaptation will also have major consequences for rural development. There are also higher requirements for quality of life and environment, combined with a shifting relationship between town and countryside: rural retreat, remote areas, etc. For all these

changes, there is a growing demand for improvement of participative processes.

There are great advances in multi-criteria analysis, sustainability assessment and modelling tools (e.g. *SENSOR*, *SEAMLESS*, *A-TEAM*, etc.), although the applicability in practice lags behind. Real world impact of EU policies is poorly understood and the problems of multi-scaling and governance remain. The uncertainty in a risk society is also a huge problem for landscape research. Despite this list of difficulties, it is important to emphasise that many examples of good landscape research are available, integrating cultural heritage, biodiversity and public perception. Such approaches consider landscape identity to be a key issue. This good research praxis results in achievements such as the inclusion of a landscape chapter in the Dobris SotE Report, the launching of the European Landscape Convention as a key policy instrument, and the inclusion of Landscape Indicators as part of *IRENA*, *LUCAS* and *Geoland* (CEC 2008).

Current landscape assessments are rather abstract, top-down, data- and expert-driven with a focus on land cover data. International assessments are generally missing micro-structural elements and cultural aspects. At the European level, landscape spatial concepts as a basis for sustainable design are not included in large-scale strategies. There is also a lack of knowledge about how the public perceives landscapes. Thus, many factors obstruct good landscape management, and these blockages make stakeholders aware of the challenges. Three separate challenges (understanding landscape transformation, assessing baselines for global change and regionalising the urban-rural conflict) have one denominator in common: safeguarding landscape as a common good<sup>2</sup>.

These challenges can be met by innovative, integrated research approaches. The ultimate goal is to develop high value research

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2 Bloemers, T., S. Daniels, G. Fairclough, B. Pedroli & R. Stiles (eds., 2010): Landscape in a changing world. Bridging Divides, Integrating Disciplines, Serving Society. Science Policy Briefing *ESF-COST* no. 41, Strasbourg / Brussels. 16 p. [www.esf.org/publications/science-policy-briefings.html](http://www.esf.org/publications/science-policy-briefings.html).

with landscape as the platform. To reach this goal, three research strategies are to be developed. (1) There is a need for structural evaluation of principles underlying change and continuity. (2) There is a need for a global synthesis of long-term landscape development. (3) There is a need for a comparative analysis of regional type areas.

Research needs are in relation with policy needs. Developing the abovementioned multi-track research strategy must lead to (1) the establishment of a policy monitoring system for landscape development on the basis of land use criteria and functions; (2) the application of existing land use modelling tools in various spatial and temporal scales in sample cases to narrow down the band width of possible futures; (3) the development of new rural functionality approach, supporting Rural Retreat, Remote Areas and Vital Bridges; (4) experimentation of new forms of governance involving local and regional authorities, citizens and entrepreneurs.

The current models are sufficient to support EU policy development because they are able to predict trends in land use and abandonment. However, they fall short in supporting policies for multifunctional landscape development of (even rural) areas. This makes steering and evaluating the various functions and services in rural development plans difficult. So there is a need to integrate bottom-up and top-down analysis of land use.