

Developing multi scale indicators for gauging High Nature farming systems in Europe

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The rural development policy community is calling for new transdisciplinary approaches to convey meaningful measures (e.g. indicator sets, indices) for assessing High Nature Value farming systems at different spatial scales (IEEP, 2009).

At broader spatial scales there has been huge efforts for example by IRENA (Indicator Reporting on the Integration of Environmental Concerns into Agriculture Policy) in developing a set of agri-environmental indicators at the European scale (Paracchini et al., 2010). Another European scale initiative was the High Nature Value farming project which worked on developing High Nature Value Farming area indicators. In parallel, there is a rich literature reporting local case study data on high nature value farming systems throughout Europe. Nevertheless, transforming the local case study data on a local level indicator set is yet far from being accomplished. Furthermore, is still missing cross scale work on integrating European and local scale high nature value farming indicators.

Land cover patterns, being dynamic landscape components, are essential features in High nature value systems. Thus, one promising avenue for devising indicators that bridge the agri-environmental and social spheres at different scales of analysis is that of land cover (vegetation structures such as grass, glades and forests) (Wiggering et al., 2006). However, landscape structure and composition will alter with changes in scale, and also across regions throughout Europe, and land cover patterns will also shift accordingly. Therefore, it is likely that the metrics/indexes framed at the European scale will not be transferable across scales in a straightforward way. There is thus the need to explore what are the set of indicators(including but not exclusively land cover)that can be framed in a comprehensive methodological approach for upscaling and downscaling HNV farming indicators (EEA, 2010). This paper particularly focuses on methodological issues in the light of the state of the art methodological approaches. It finishes by pointing out the challenges ahead for progressing on the development of multi scale indicators for gauging High Nature farming systems in Europe