

Science for Environment Policy

Addressing the mismatches of scale in biodiversity conservation

Biodiversity experts working in governance and science have called for greater integration of policy sectors, geographical levels and academic disciplines, in a stakeholder workshop. This would help ensure policy decisions realistically reflect complex relationships between ecological and governance processes in order to meet future biodiversity targets.

Several reasons can explain why the EU 2010 target to halt biodiversity loss was not met. One of these is the mismatch between ecological and governance processes. This can be spatial, for example a policy focus on species protection can sometimes miss the wider ecosystem issues, or temporal when the time needed to improve biodiversity does not match policy's focus on immediate and short-term economic interests or, indeed, electoral cycles.

In order to meet future biodiversity conservation targets, it is important to address the challenge of mismatches between ecological and governance scales. This issue was explored in an expert workshop held by the EU-funded SCALES project¹ in late 2010, designed to encourage dialogue between biodiversity policymakers and scientists. The outcomes of the workshop have been reported and explored by the workshop organisers. The workshop participants consisted of representatives from EU Directorate Generals, environmental NGOs operating at an EU and national level, academics, national ministries and sub-national level agencies. Within focus groups, the participants discussed the effectiveness of existing policies to address scale-related issues and explored new policy solutions. The outcome of the discussions indicated that policy frameworks current at the time (2010) do not always address the complexity of social-ecological processes. Importantly, they tend not to link biodiversity to broader socio-economic benefits as a basis for conservation. Although current studies are placing values on ecosystem services, more research and communication is needed on the complex role of biodiversity and ecosystem services in supporting sustainable socio-economic systems at local, regional, national and EU levels, the participants suggested.

The new EU Biodiversity Strategy² has now set a new target of halting biodiversity loss by 2020 and, during the workshop, there was some discussion around setting conservation objectives at an EU level. International targets are valuable incentives but participants suggested that there also needed to be more focus on the role of conservation professionals working at a local level, as it was also suggested that more should be done to 'scale-up' successful local level conservation initiatives to national or EU levels. Both these suggestions could be supported by the continuing development of successful EU initiatives like [Natura 2000](#) that provides a network of protected conservation areas and the [LIFE](#) programme that funds nature conservation projects and helps share best practices.

Lastly, participants agreed that the failure to integrate biodiversity conservation into other policy sectors, such as agriculture, was also an important issue when addressing biodiversity on a broad scale. This need for integration has been recognised by the EU, for example the Parliament Resolution on the 2011 Biodiversity Strategy stressed the need for reforms to common agricultural and fisheries policy to include issues around biodiversity.

Overall participants suggested a greater combination of top-down policy design with bottom-up identification of biodiversity issues and solutions. This could be aided by cross-scale communication platforms allowing stakeholders from different governance levels (EU, national, sub-national) to share concerns and solutions and also active, equal and meaningful local participation. More integration between scientific disciplines, including ecology, environmental sciences, geography and social sciences in land use planning, would also be beneficial. It was acknowledged that scientific knowledge has an important role, but it must be interpreted, evaluated and implemented in combination with the context-specific knowledge of concrete practices.



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1. SCALES (Securing the Conservation of Biodiversity across Administrative Levels and spatial, temporal and Ecological scales) is supported by the European Commission under the Seventh Framework Programme. See: www.scales-project.net

2. See <http://ec.europa.eu/environment/nature/biodiversity/comm2006/2020.htm>