Science-policy interface for biodiversity conservation: Bridging the knowledge gap, complying with a scientific imperative or preventing an environmental decline?

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Abstract

Beside its instrumental role in improving the quality of public policies, ecological knowledge is a strategic resource for those who produce it to support ambitious environmental initiatives. We aimed to analyse the direct and indirect impacts of both knowledge production and of its use for biodiversity conservation to assess its effectiveness as a strategic mode of action. We therefore based our analysis on several case studies involving different organisations (an ecology research centre, a conservation NGO and a science-policy body), which aim to produce knowledge to improve biodiversity conservation among other objectives. Knowledge generation and its use can indeed be effective in changing public policies when knowledge is a limiting factor in the specific context of action. However, in a context characterized locally by recent drawbacks and by strong political power from non-environmental stakeholders, scientific arguments were no guarantee for effective biodiversity policies. Nevertheless, increasing the resources of knowledge producers both in terms of expertise and access to decision-making spheres has been found to have potentially large indirect impacts. Finally, we show that environmental actors who produce ecological knowledge can use it to contribute to three strategies to improve biodiversity conservation - bridging the knowledge gap, complying with a scientific imperative or helping to prevent an environmental decline. The effectiveness of such strategies depends on their adequacy to the local context.

Keywords: Science, policy interface, conservation policies, strategy, biodiversity, impact

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