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Mapping and Assessment of Ecosystems and Their Services: Developing a Knowledge Base for Mainstreaming Ecosystem Services Into EU Policies

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ABSTRACT

The concept of ecosystem services is integrated in current biodiversity policies at global and European level. In particular, the EU Biodiversity Strategy to 2020 integrates the sustainable use of ecosystem services as underpinning element of human economies to complement the non-utilitarian conservation approach to biodiversity, thus contributing to the Europe 2020 target, in particular through the resource efficiency flagship. The Europe 2020 strategy aims at building smart, sustainable and inclusive growth for the European Union. It establishes resource efficiency as the guiding principle for other EU policies. For environmental policy, it requires demonstrating that protecting the health, vitality, resilience and productivity of natural ecosystems and securing the services they provide is good for economic growth as well as for the environment.
Action 5 of the EU Biodiversity strategy, in particular, addresses some of the knowledge gaps with respect to natural capital and ecosystem services and calls the EU Member States to map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020. This ambitious action requires innovative use of data and models and is of crucial importance for setting priorities to restore ecosystems, promote the use of green infrastructure and ensure the no net loss of biodiversity and ecosystem services across the EU.
Much of the ambition incorporated in the biodiversity targets is dependent on mainstreaming biodiversity and ecosystem services into other policies that affect the use of natural resources. At the EU policy level, this is most notably the agriculture policy (including forestry), but also regional and environmental policies should be the target for incorporating ES in their decisions. Achieving biodiversity targets requires demonstrating that changes in these policies are beneficial to human well-being through the enhanced flow of ecosystem services. It also requires prioritizing investments and making them cost effective based on a sound knowledge base and assessment methods. This paper will help exploring how such assessments might be developed under Horizon 2020.