



POLICY BRIEF

How to **MEASURE THE COSTS AND BENEFITS OF ECOSYSTEM SERVICES** at local and regional level

PB#1 focuses on **real examples of tools** used to measure and value ecosystem services, which facilitate **evidence-based policy and decision-making** for landscape governance, management and action.

Context and challenge

Ecosystem services (ES) are the **goods and services provided by nature at no direct cost** upon which human welfare depends. Since they are the driving force for the long-term conservation and restoration of the natural capital, it is important to **measure and quantify** the quality and quantity of such services. Any damage to natural ecosystems carries significant costs for society as it deteriorates the services they provide, which represent a significant

component of our economy. The ability to restore ecosystem services once degraded is limited due to the complexity of processes within and among ecosystems.

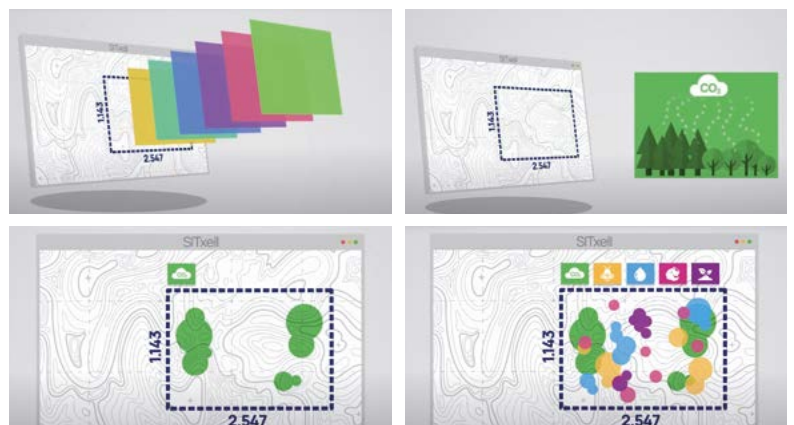
The challenge is to measure, quantify and demonstrate how ecosystem services can contribute to local and regional development. This is a complex task, involving not only economic and technical aspects, but also social and cultural ones.

PROGRESS in practice – Exemplary Tools

PROGRESS identified [various good practices](#) related to ES measurement. Some of these are highlighted below for transferability and replicability.

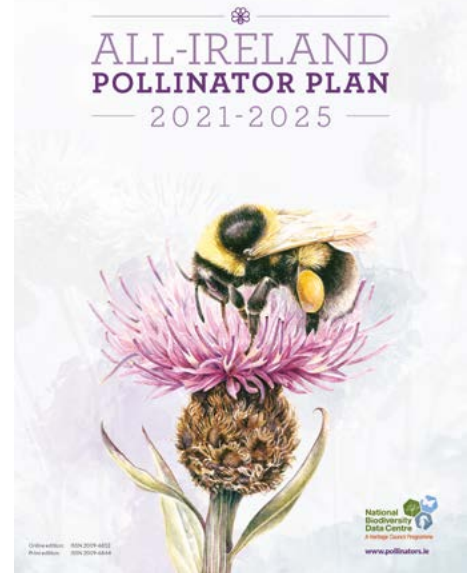
[SITxell](#) is a geographical information system which locates and measures ecosystem services in a region. Each ES provided by nature is incorporated as a layer of information which SITxell can then assemble in a way which offers all the ES knowledge available. It is a free territorial analysis system within everyone's reach, and a very useful tool for territorial planning processes at both municipal and regional level, to promote territorial balance and sustainability.

GOOD PRACTICE 1: SITxell: Territorial Information System for the Network of Open Areas in the province of Barcelona. (Barcelona Provincial Council, Catalonia-Spain)



GOOD PRACTICE 2: The All-Ireland Pollinator Plan (AIPP) Framework

The AIPP framework is an innovative, rich and accessible resource which allows public authorities, non-governmental organisations and other users to take positive steps towards the protection of pollinators and the key ecosystem services they provide. AIPP both tackles the cause of and improves the knowledge of pollinator decline, as well as raising awareness of it by engaging society and promoting collaboration. It also features the “Actions for Pollinators” online mapping system, which tracks the actions taken to promote pollinators. The full range of resources are available on the [AIPP website](#).



The [AIPP](#) is a common approach in Ireland and Northern Ireland to provide habitat with food and shelter for pollinators across all types of land so that they can survive and thrive. It creates a framework for pollinator sustainability initiatives through coordination and cooperation. It also provides targeted

and actionable information that can be used to raise awareness of the value of pollination services: It is estimated that insect-mediated crop pollination contributes up to €59 million per year to the Irish economy and almost €15 billion to the European economy.

PROGRESS “How to” recommendations on measuring ecosystem services

- 1 Include different ecosystem services in your measurements, using a set of integrated, well-defined and measurable strategic objectives as in the cartography layers of [SITXELL](#) or [NEES](#) mapping project.
- 2 Identify simple concepts that can be used to engage a wide audience to the ES messages. Positive and constructive messaging – solution-driven messages to communicate and raise awareness.
- 3 Communicate positive, clear and action-oriented messages, using different tools (media, local nature festivals, picnics and gatherings) and, like the AIPP framework, target new and varied audiences (farmers, councils, transport authorities, local communities, faith communities, businesses, schools, gardeners).
- 4 Activate a multi-sectorial steering group. Combine professional and highly specialized teams in ES measurement and liaise them with public officers and relevant stakeholders for analysis and management of ES data.
- 5 Coordinate and collaborate with a wide-range of stakeholders, including farmers, municipalities businesses and community groups. Involve technical experts and stakeholders of organisations in implementing good practice with knowledge of relevant data and projects to identify prioritised ES.
- 6 Use public consultation to engage citizens in the protection and promotion of ecosystem services.
- 7 Where possible, develop a partnership-driven approach to improve ecosystem services between public authorities, research centres and groups of research from other organisations and non-profits. The AIPP was developed on a voluntary basis without funding. It was achieved through a partnership building process.
- 8 Improve data and exchange information with other regions, especially in regard to ecosystem service assessments. Data can be used at different scales, from local to regional, and promote easy and free accessible information. It should be easily shared, analysed and researched by different stakeholders.



Visit [PROGRESS website](#) for further information and other good practices (Handbook 1, GP descriptions, GP videos, presentations and recordings of thematic workshops).

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What is Interreg PROGRESS?

Interreg Europe PROGRESS - PROMoting the Governance of Regional Ecosystem Services aims to initiate a process of policy change towards the conservation of biodiversity and the maintenance of nature's capacity to deliver the goods and services that we all need.

Project partners: National Association of Italian Municipalities Tuscany (ANCI Toscana), Coordinator, Italy; CREA (Ecology Research and Forestry Applications Centre), Catalonia-Spain; Eastern and Midlands Regional Assembly, Ireland; Riga Technical University, Latvia; Tolna County Development Agency, Hungary; University of Craiova, Romania.