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# WalES : the Walloon platform for Ecosystem Services

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## Résumé

### Introduction

Beyond the intrinsic, aesthetic and spiritual values one may assign to nature, the reasons to manage it are multiple due to its central role in a wide panel of ecological functions crucial to human wellbeing and development. For instance, biological structures and ecological processes provide us with food, raw materials, water and energy, protect us against erosion or floods, control water quality, pest impact, pollination, give us large enjoyable spaces for recreation, sport and leisure activities, etc. Despite contributing considerably to economic development, social welfare and health, natural resources have often been considered as inexhaustible and unlimited which has caused dramatic damages in economic, social and environmental issues.

This is mainly explained by the fact that many ecosystem services (ES) are ‘public goods’ or ‘common goods’: they are often open access in character and non-rival in their consumption. **Market and policy decisions often fail to capture most ES values** with the exception of a few marketed provisioning ecosystem services ‘ES’ (e.g. food, timber). This systematic under-valuation of ecosystem services and failure to capture the values is one of the main causes underlying today’s biodiversity crisis<sup>1</sup>.

**ES valuations** can serve as methodological baseline for **decision support tools** aiming at more sustainability thus **guiding and accelerating transition**. To sustainably manage the supply and the demand of ES, the policy level needs to gain knowledge on where and which services are provided<sup>2–4</sup> and who are the stakeholders involved. ES maps provide an explicit link between the biophysical data of the ecosystem and expectations of main concerned stakeholders<sup>2</sup>. There are an essential tool to help for more holistic and transparent decision processes. Additionally, ES valuations allow highlighting ES hotspots, bundles and tradeoffs and priority areas for action<sup>5</sup>. At last, ES valuations can serve as policy efficiency barometer by measuring ES before and after a specific measure.

The importance of the ES in policy is reflected at several levels. **At the European level,**

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the Strategy 2020 for biodiversity (resulting from the United Nation convention on biological diversity) presents the objective to ‘preserve and enhance ecosystems and their services’. Under this objective, one of the actions requested to member states is to ‘map and assess the state of ecosystems and their services in their national territory by 2014’<sup>6</sup>. Recently, the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) was launched to guide the flow of scientific information related to biodiversity and ES to governments and practitioners<sup>7</sup>.

In this context, the **Walloon government** decided to work on the ‘development of the implementation of the ES concept into practice within the Public Service of Wallonia (SPW)’ (Walloon governmental decision 24/04/2014). **To put the ES concept into practice**, a common platform, entitled ‘**WalES**’, is currently being designed.

This conference on sustainable development and transition will be the opportunity to make this project known to potential future user of the platform. After explaining the theoretical framework of ES valuation and their role as policy support tool, some successful foreign experiences where ES valuations have guided policy decisions will be presented. After the context established, the objectives and procedure of the ongoing WalES platform set-up will be presented. First outcomes and expectations of the platform in terms of decision support tool towards more sustainability will be discussed and presented. The objectives, procedure, first outcomes and expectations in terms of sustainable management are briefly presented below.

### Objectives

The objectives of the WalES platform are multifold:

- **Developing a common interface** between administrations and scientists and multiple actors to share up-to-date information, methods, tools, means, experiences, multiple data flows at multiple levels, etc. in order to organize a common information system on ecosystem services and develop a common methodological platform.
- Providing a **planification tool** through the assessment and mapping of ES to highlight ES hotspots, priority areas for action and discrepancies between ES demand and supply, all providing valuable information to optimize planification.
- Providing an **impact assessment tool** assessing ES before and after a project (e.g. infrastructure building) or a political measure (e.g. agri-environmental measures) in order to test their efficiencies and their impacts on sustainability.
- **Communicating** to the public the importance of ES and the dependency of humans, society and economy upon them, hence demonstrating the emergency to take actions.

### Procedure and outcomes of the WalES project

Since the platform aims at serving policy making, its development **consults actors** in an iterative way and by different means. Through an accompanying committee, different actors from distinct background follow and guide the project from its premises to its finalization. Among them, policy makers, Directorate Generals from the Walloon Region, university scientists and Governmental research agencies are involved. Additionally, consultations with the civil society are planned. Such participatory approaches are known, especially in ES valuation science, **to improve the procedural quality of the assessment** and provide assessments **better answering the needs and questions** of the different parties.

As first step, all Directorates General of SPW have been consulted in order to identify fields within the distinct missions of SPW for which the development of ES-based tools would be feasible and desirable. **From there, the project structure, method and objectives have been established.**

**In a second and on-going step**, all structures, **research projects and actors involved are being inventoried** in order to get insight into what is being done, what is

already accomplished and what remains to be done.

Simultaneously, a **common and shared information system** detailing all data and data flows which could serve as **indicator or proxy or models for ES measurements**, collecting all **experiences and methods on ES valuation** available at the Walloon and more detailed scales and proposing standardized or recommended ES evaluation method are developed. This common and shared database will be made available on the net for dissemination of ES holistic approaches and should be updated on a participative way.

Subsequently, **ES assessments and maps of the Walloon regions will be developed** in order to fulfill the requirements of the Biodiversity Strategy 2020. A **conceptual and methodological framework** will be designed and submitted to stakeholders. After consultation with stakeholders, a Walloon ES classification with corresponding indicators will be setup and a methodology for mapping and assessing ES at various scales will be developed.

However, the framework and information system are not only defined as a simple recurring reporting tool. The holistic approach should be put in practices on a large spectrum of activities on the fields of agriculture, forestry, water management, nature conservation, rural development plan, urban development, landscape management, tourism activities, ... and all field experiences should be shared to demonstrate how it works and what are the limits. The ability of ES approach as decision support tool by different stakeholders will be assessed.

Concurrently, a **website will be established in order to accomplish the communication objectives of the project**. Besides communicating the importance of ES assessments and conservation for sustainability, the website will serve as interactive platform where the methodological framework, the Walloon ES classification and the database of all indicators and proxy available will be made available to all stakeholders or researchers needing some baseline. It thus also serves as a **facilitating tool for future research on ES** providing theoretical and practical information to ensure their sound scientific background and their practical policy implementation.

## **Conclusions: implications of the project in terms of sustainable development and transition**

The link between ES and sustainable development has now been the center of political and scientific attention for a while<sup>1,8–10</sup>. Much research is being carried out developing frameworks, tools and models to assess and map ES<sup>11–13</sup>. More recently, the importance of the ES concept as decision support tool for policy makers has been put forward. It is stated that ES assessments could guide policy decisions towards more sustainability by adding social and environmental criteria to the economic ones usually relied on<sup>14</sup>. **In that sense, ES assessments could accelerate the transition by providing sound information upon which sustainable policy decisions could be made.**

However, to date, despite being a hot topic, ES assessments serving policy decisions are sparse<sup>15</sup> and the challenge for real integration remains<sup>16</sup>. The WalES project is thus a real opportunity for the Walloon government and science to bind together to contribute to filling in this gap while simultaneously comply with European baseline by providing the requested national ES assessments and mapping. This conference will be the opportunity to present the initiative and its potential uses as policy support tool.

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**Mots-Clés:** Governance, ecosystem service, policy support tool, sustainable planning