

Show thumbnails in outline

Abstract

Keywords

1. Introduction

2. Method

2.1. Valuation of ecosystem services (ES)

3. Allocation of ES to economic activities

3.1. Indicators for the economic benefits generated by using ES

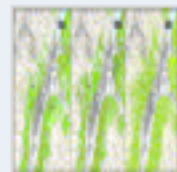
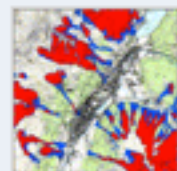
4. Case study

4.1. Study area



4.2. Input–Output Table (IOT) and data sources

4.3. Quantification and valuation of ecosystem services and data sources



4.4. Scenarios

5. Results

Table 1

Table 2

Table 3



Table 4

6. Discussion

Acknowledgments

ANALYSIS

## Integrating the valuation of ecosystem services into the Input–Output economics of an Alpine region

Adrienne Grêt-Regamey<sup>a, b</sup>,  , Susanne Kytzia<sup>b</sup>

<sup>a</sup> WSL Swiss Federal Institute for Snow and Avalanche Research, Research Unit Ecosystem Boundaries, 7260 Davos, Switzerland

<sup>b</sup> ETH, Eidgenössische Technische Hochschule, Institute for Spatial and Landscape Planning, CH-8093 Zurich, Switzerland

<http://dx.doi.org/10.1016/j.ecolecon.2007.02.026>, [How to Cite or Link Using DOI](#)

 [Permissions & Assistance](#)

[View full text](#)



[Purchase \\$39.95](#)

[Rent the full-text article on DeepDyve](#)



- ▶ For just **\$0.99**
- ▶ 24 hour access
- ▶ Read-only
- ▶ Non-printable

### Abstract

Traditional economic accounting mostly ignores the benefits provided by nature, and thus falls short in giving incentives for improving the way the economy uses natural resources. In this study, we develop a general framework for integrating the value of ecosystem services into an Input–Output Table. In particular, we integrate regionally valued ecosystem services on the supply side of an Input–Output Table to quantify what natural resources offer to economic development. Using several different indicators, we show the benefits of the ecosystem services under the status quo and a scenario for regional development. Our results suggest that economic activities should be encouraged to use the ecosystem services more intensively, while landscape development should aim at providing the required services. We conclude that such an approach can provide a platform for decision-makers to learn quantitatively about the dependency of the regional economy on natural services.

### Keywords

Input–Output economics; Geographic Information System; Ecosystem services; Economic valuation; Regional economy; Alpine region