Indicators

An **indicator** is an observable value that is representative of a specific phenomenon of concern. Indicators provide a measurable proxy for scientists, managers, and policy- and decision-makers to understand trends in complex ecological processes such as ecosystem services. As such, **indicators** are highlighting the links between social and environmental change influencing the capacity of ecosystems to maintain provisioning, regulating, and cultural services. They are usually used for a specific purpose, for example to “provide a policy-maker with information about progress toward a goal” (TEEB 2010)[1] . In order to provide benefit, practitioners must effectively quantify the link between the indicator and the phenomenon of concern. Spatially-explicit approaches have been widely used to map a multitude of indicators, by merging theory and practice to advance sustainable planning and decision-making. In the analysis and evaluation of complex environmental interactions, remote sensing plays an important role and is widely used in the mapping and assessment of ecosystem properties and functions. The term “indicator” is most often used in the fields of ecosystem services, ecology, and environmental planning.

Examples of indicators for ecosystem services in mountain areas can be found in the 1st Report 2013-2014 of the Working Group “Mountain Forests” of the Alpine Convention.[2]

AlpES WebGIS

Indicators, their status, and mapped distribution for the AlpES Project will be located in the AlpES WebGIS as they are developed.

Additional Resources

Other Definitions/ Similar Terms:

- Biodiversity Information System for Europe: Glossary of Terms
- "What are indicators? On the definition of indicators in ecology and environmental planning." [3]

Indicators for Ecosystem Services:

- Indicators for mapping ecosystem services: a review[4]
- Report on Ecosystem Services and Biodiversity[5]
- A spatial assessment of ecosystem services in Europe: methods, case studies and policy analysis.[6]
- The Economics of Ecosystems and Biodiversity: Ecological and Economic Foundations, TEEB (2010).[7]

Related Alpine Space Projects

indicator, AlpES project, ecosystem services

1)
TEEB (2010). “The Economics of Ecosystems and Biodiversity: Ecological and Economic Foundations.” P Kumar (ed.). Earthscan, London

2)

"Mountain Forest" Working Group (2014). "1st Report 2013-2014 of the Working Group "Mountain Forests" of the Alpine Convention." Proceedings Report.
3)

Heink, Ulrich, and Ingo Kowarik (2010). "What are indicators? On the definition of indicators in ecology and environmental planning." Ecological Indicators 10.3: 584-593.
4)

Egoh, Benis, et al. (2012). "Indicators for mapping ecosystem services: a review." Report EUR 25456.
5)

Science for Environment Policy (2015). "Ecosystem Services and the Environment In-depth Report 11." Produced for the European Commission, DG Environment by the Science Communication Unit, UWE, Bristol. Available at: http://ec.europa.eu/science-environment-policy
6)

Maes, Joachim, et al. (2012). "A spatial assessment of ecosystem services in Europe: methods, case studies and policy analysis. - phase 2." PEER Report No 4. Ispra: Partnership for European Environmental Research
7)

TEEB (2010). "The Economics of Ecosystems and Biodiversity: Ecological and Economic Foundations." P Kumar (ed.). Earthscan, London.