



HOW TO EVALUATE A LAND?

IN THE CONTEXT OF ECOSYSTEM SERVICES



VALUATION DEPENDS ON FUNCTIONS & MANAGEMENT

Soil ecosystem services valuation depends on functions and management. Non-sustainable practices produce many disservices and soil degradation.



INCREASED CONCERNS

Increasing anthropogenic and climate change pressures have increased concerns on soil health and efforts to improve soil management practices.



SUSTAINABLE PRACTICES

Sustainable practices maintain and improve soil ecosystem services



AUTHORS

Jaroslava Janků, Jan Jehlička,...
Tomáš Herza (2022)



Ecosystem services offer a necessary holistic view

Soil needs to be evaluated in the whole context of its quality and value it provides – concept of ecosystem services offers this holistic view.

EJP SOIL INNOVATION HIGHLIGHTS

ADHIKARI AND HARTEMINK (2016)



TOWARDS CLIMATE-SMART SUSTAINABLE MANAGEMENT OF AGRICULTURAL SOILS

EJP SOIL is a European Joint Programme on Agricultural Soil Management addressing key societal challenges including climate change and future food supply.

The goal is to improve the understanding of agricultural soil management by finding synergies in research, strengthening research communities and raising public awareness.

1100+ scientists, 24 countries, addressing multiple aspects of soil management across different European agroecosystems.

EJP SOIL SCIENTIFIC PAPER FRAMEWORKS TO ASSESS AND EVALUATE THE SOIL QUALITY

The frameworks can be divided into two groups:

Group 1: a framework of indicators describing the current state of the soil system assessment for evaluating the quality of the agricultural land.

Group 2: a framework of indicators focused on changes in the soil quality and applied soil management.

Soil quality concepts to consider in regional planning

TARGET EJP SOIL EXPECTED IMPACT AND MISSION SOIL OBJECTIVES

Fostering understanding of soil management and its influence on climate change mitigation and adaptation, sustainable agricultural production and environment

SOIL MISSION: Conserve SOC, soil structure and soil biodiversity; prevent erosion

HIGHLIGHT FACTS FROM:

Scientific paper defining ecosystem services, the various linkages between soil properties, their functions and benefits, and the assessment of soil quality



Applicability:
all climatic zones according to Metzger et al. (2005)
<https://doi.org/10.1111/j.1466-822X.2005.00190.x>

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