



OPINION ARTICLE

Unveiling nature's worth: Embracing social valuation in ecosystem services assessment

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Abstract

The concept of ecosystem services (ES), which highlights the direct and indirect benefits ecosystems provide to human well-being, has gained prominence in science and policy over the last few decades. This opinion article emphasizes the importance of social valuation in ES assessment, particularly in developing countries where communities rely heavily on natural resources. While economic valuation dominates ES assessments due to its ease in communication with policymakers and business sectors, it often overlooks non-monetary values such as cultural, spiritual and ethical dimensions. Social valuation captures these broader values, fostering community engagement and recognizing diverse perspectives. By integrating social values into ES assessments, decision-making becomes more equitable and inclusive, promoting sustainable management practices that align environmental conservation with socioeconomic development. This article advocates for the widespread adoption of social valuation to enhance the understanding of human-nature relationships and improve policy outcomes for sustainable resource management.

Keywords

ecosystem services; ES assessment; social valuation; sustainable resource management

Introduction

Ecosystem services (ES) are the direct and indirect contributions of ecosystems to human well-being (1) and are co-produced by the interactions between ecosystems and societies. Human society has been benefiting both directly and indirectly from nature since millennia. However, the ES concept is relatively new in science literature and research agendas. The concept of ES first gained popularity through the publication named "Function of Nature" (2), and then "The Value of the World's Ecosystem Services and Natural Capital" (3) promoted the concept on a global scale. Since then, the concept of ES has evolved and has taken international policy literature by storm in over two and a half decades (4). The prominent policy literature that stresses the role of ES as central to societal well-being includes the Post-2020 Global Biodiversity Framework (5), the United Nations Decade on Ecosystem Restoration (2021–2030) (6), and the United Nations Sustainable Development Goal (7).

Due to the increased global attention on ecosystem services, assessing and valuing them has become critical. ES assessment typically follows three main dimensions: ecological, economic, and social (8-10). Ecological dimensions focus on measuring ecological functions, employing indicators such as resilience and diversity (11). The economic dimension assigns monetary value to ES, while the social dimension entails human attitudes and perceptions regarding the importance of ES (12). Economic/monetary

valuation is the most preferred approach (13). About 77% of the literature focuses on economic valuation, while 23% of publications concentrate on biophysical valuation methods and socio-cultural valuation (14). Economic valuation is most favored due to its perceived pragmatism in communicating with political and business institutions (15) and its comparability with other economic goods. However, economic valuation has limitations. It often overlooks non-monetary dimensions/community values (16) and might not capture the full range of benefits that ecosystems provide, such as intrinsic, ethical, or cultural values. These overlooked values can be captured using a more comprehensive method i.e., social valuation.

Social valuation, also known as socio-cultural valuation, describes the principles, importance, or preferences expressed by people towards nature (17). Social values depict the human-nature relationship (18) and acknowledge that people value things beyond financial terms, including spiritual, recreational, or cultural aspects. The social valuation method employs non-monetary metrics to capture social values, perceptions, and preferences around ES. Social valuation helps identify priority ES, informs decision-making for livelihood improvement, poverty reduction, and environmental conservation in developing countries (19). Although the idea of the sociocultural value of ES was conceptualized and emphasized early (20), assessments mostly focused on ecological and economic valuations until recently. Sociocultural value has grown significantly in prominence over the last five years, with value pluralism underlined as an important goal in ES assessments (17). One such example is the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES)'s most recent advances, which endorse nature's services to people while emphasizing the cultural context of nature's benefits (21). This approach acknowledges that ecosystems are not only valuable sources of goods and services, but they are also inextricably linked to human well-being, cultural practices, and quality of life.

Social valuation adopts a broader perspective, encompassing not only economic values but also the full spectrum of social and cultural values associated with ES. This approach entails engaging with communities and stakeholders to grasp their perceptions, preferences, and relationships with nature. Social valuation can capture non-monetary values, such as the role of ecosystems in cultural identity, well-being, and quality of life. It proves particularly beneficial for raising awareness, fostering community engagement, and recognizing the diverse ways people interact with and benefit from ecosystems. By incorporating local knowledge and values, social valuation can contribute to more equitable and participatory decision-making processes. In ecosystem management, social valuation is often implemented to achieve policymaker's objectives, such as river restoration projects and water and natural-resource management (22). Social valuation is especially relevant for valuation studies in developing countries, where landscapes are shaped by long-term community activities (19), and for communities (rural/tribal) that are highly dependent on ES for livelihood and income generation (23).

Overall, social valuation offers a transformative approach to assessing nature's value, bridging academic biases and empowering local perspectives for more people-centric decision-making. By integrating social values into ES assessments, we can

better address the link between environmental conservation and socioeconomic development, fostering a holistic and sustainable management approach. Embracing social valuation is crucial for enhancing decision-making processes and ensuring equitable resource management, particularly in developing countries and regions reliant on natural resources for livelihood sustenance.

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Authors' contributions

All authors contributed equally for concept development, draft preparation and writing.

Compliance with ethical standards

Conflict of interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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