

Ecosystem Services

CAN ECOSYSTEM SERVICES WORK FOR YOUR CONSERVATION PROJECT?



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Ecosystem services – the direct benefits that humans receive from ecosystems – present an opportunity to achieve conservation in places where traditional conservation approaches may not work. An *ecosystem services approach* seeks to integrate ecosystem services into decision-making by (a) using scientific assessment tools to understand people’s dependence and impact on the services provided by ecosystems and (b) applying policy mechanisms that incorporate ecosystem service values into the decisions made by governments, businesses, NGOs and individuals. An *ecosystem services approach* can enhance conservation strategies by providing access to new sources of long-term financing, supporting greater impact at a wider scale, and opening new avenues for advancing conservation with institutions that do not traditionally consider the environment in their decision-making. However, an ecosystem services approach may not always be the best way to achieve conservation. Success depends on an enabling context and effective project design. It is therefore critical to screen an ecosystem services approach early on. Screening can help to evaluate key strengths, weaknesses and information gaps that need to be addressed if an ecosystem services approach is taken forward.



Drinking water © Markus Spring/Flickr Creative Commons

The Screening Criteria

Who should use the screening criteria?

Conservation practitioners interested in using an ecosystem services approach to help achieve conservation.

Why screen? To determine if conditions are favorable for an ecosystem services approach to conservation. Screening will help evaluate key strengths, weaknesses, and information gaps that need to be addressed if an ecosystem services approach is taken forward.

When should the screening criteria be applied?

Screening should be conducted during project conceptualization and design, before significant investments have been made. The screening criteria are intended to support an informal evaluation of the opportunity, based on existing knowledge and information.

What is the next step after screening?

If the screening process indicates favorable conditions for an ecosystem services approach, then the next step may be to seek technical assistance to support a more comprehensive feasibility assessment (in areas where the screening process identified information gaps) and project design. If only a few criteria are met, it may be worth re-considering whether to pursue an ecosystem services approach.

This document describes the ten most important criteria that influence the likelihood of success of an ecosystem services approach to conservation. The ten criteria fit within two categories: a) the cost-effective and verifiable delivery of ecosystem services and conservation benefits; and, b) various legal, institutional, social and economic conditions.

The “Top-Ten” Criteria

Delivery of services & conservation

An ecosystem services approach is more likely to succeed when there is clear evidence that it will deliver both ecosystem services and conservation benefits cost-effectively.

1. Service delivery: The case for an ecosystem services approach will be stronger when there is scientific evidence that a specific action will increase or maintain availability of the services demanded, without loss of other important services.

2. Measurability: The link between project actions and changes in services must be clearly and cost-effectively measurable in order to verify service delivery. Measuring changes in service delivery can be challenging. In some cases it may be more cost-effective to measure a closely linked activity as a proxy for delivery.

3. Conservation delivery: Project actions designed to improve the delivery of the service must also deliver the intended biodiversity benefits and help achieve conservation objectives.

4. Scalable and replicable: Even where an ecosystem services approach is likely to deliver both conservation and ecosystem services effectively, the costs can be high for “one-time” projects. It

may therefore be beneficial to choose sites or projects that can either deliver large-scale benefits on their own or be replicated at lower cost in other areas with similar ecosystem attributes and policy settings.

5. Superior to alternatives: In some cases, technological substitutes that do not provide any conservation benefits may offer more cost-effective ways to achieve service delivery than the proposed conservation-based alternative. In other cases, a conservation approach that does not explicitly focus on ecosystem services might be more cost-effective and less risky than an ecosystem services approach for achieving a project’s conservation goal. For these reason, alternatives should be considered realistically and explicitly.

Legal, institutional, social, and economic conditions

An ecosystem services approach is more likely to succeed in a situation where the legal, institutional, social and economic conditions provide a supportive and appropriate framework.

6. Providers and beneficiaries: There must be high, sustained demand for the service to generate ongoing private and/or public support for the project actions. There must also be a potential source of

supply from service provider(s) that are willing and able to ensure uninterrupted service provision through feasible changes to land use or management. Coordination among providers, as well as exchange between providers and beneficiaries, should be feasible and cost-effective.

7. Costs and benefits: Benefits must be sufficiently high to cover the costs of service provision. Some entity must be willing and able to pay for the service (e.g., through private payments or government funding). If private costs (including opportunity costs) are greater than private benefits, a subsidy may be required to create incentives for providing the service.

8. Legal context, institutional and field capacity: An ecosystem services approach is more likely to succeed when there are regulatory drivers that provide a legal framework for ecosystem services. A successful approach relies on a system of clear property rights to create incentives for service provision and make service providers accountable and reduce their risk. Strong institutions are critical for building stakeholder confidence in an ecosystem services approach and ensuring its long-term viability. Implementing an ecosystem services approach also requires significant field and technical capacity.

9. Stakeholders, equity and political viability: The support of stakeholders who are affected by, and directly involved in, an ecosystem services project is a critical factor influencing the likelihood of success.

It is also extremely valuable to have someone locally who will champion the approach. The distributional implications of an ecosystem services approach may affect its political feasibility. For example, a situation where there are clear winners, particularly among the poor, and where any potential losers can be compensated, may be more likely to gain public support.

10. Economic context: Various economic factors can influence the success of an ecosystem services approach over time through secondary impacts that undermine incentives for ecosystem service provision and conservation. Relevant economic factors include a) existing or new subsidies or taxes, b) changes in commodity prices, and c) changes in prices for ecosystem services.

Future Work

Further research is required to refine these criteria, in particular to determine which criteria matter most, how the criteria interrelate, and how different conditions affect the choice between alternative instruments for providing ecosystem services. Future application is planned to test the criteria in screening potential ecosystem services approaches for conservation projects of The Nature Conservancy, WWF-US and The Natural Capital Project.

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For further information, contact:

Emily McKenzie

The Natural Capital Project
and WWF-US
emily.mckenzie@wwfus.org

Belinda Morris

The Nature Conservancy
bmorris@tnc.org

Bruce McKenney

The Nature Conservancy
bmckenney@tnc.org

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