How can land advisers incorporate ecosystem services thinking into their everyday practice?

New approaches to the valuation, appraisal and management of the natural environment promise to transform the way we manage land and pay for a range of goods and services.



Living With Environmental Change Policy and Practice Notes

Note No. 04 December 2013 **The Living With Environmental Change Partnership** brings together 22 public sector organisations that fund, carry out and use environmental research and observations. They include the UK research councils, government departments with environmental responsibilities, devolved administrations and government agencies. The private sector is represented by a Business Advisory Board.

Incorporating ecosystems thinking into practice has far-reaching implications for the land-based professions. For example, agricultural lawyers, planners and chartered surveyors working in areas including valuation, estate and property management, construction, and environmental services all have a part to play, as well as professionals in the agricultural supply industry such as agronomists and nutritionists, and environmental advisers and ecologists advising on wildlife and land management. Many projects and types of land management can bring integrated and added benefits for wildlife, water and carbon, or the cultural value and natural beauty of our landscapes. The challenge is to capture this added value for clients, opening up new opportunities, keeping them on the right side of regulation and other interests, while improving the financial viability of their operations.

How can land managers market their ecosystem services?

Schemes often only pay for the income foregone of undertaking work to protect and enhance the natural environment. Now private funding is increasingly being invested in land management, providing potential new income streams, for example:

- Ofwat has supported £52 million worth of catchment management work to deliver water quality improvements.
- The Forestry Commission's UK Woodland Carbon Code has secured private investment for 133 projects covering 14,200 hectares, which should remove over 5 million tonnes of carbon dioxide from the atmosphere.
- The Rivers Trusts have set up Angling Passport schemes across the UK to enable anglers to pay fishery owners to improve river quality.
- Water supply management schemes such as that being developed by South West Water on the Exmoor Mires can lever funding for peatland restoration and management from economic improvements in the management of the local water supply, along with enhancing opportunities for carbon capture and storage.
- Biodiversity offsetting is being trialled on a voluntary basis in England if development cannot be relocated to a less sensitive site, or if valued biodiversity cannot be safeguarded on-site.

There is an important role for professionals in assessing, negotiating, brokering and formalising these arrangements.

How can impacts on nature's services be assessed?

Viewing nature as a provider of ecosystem services leads to a more positive evaluation of the best way to manage it for long-term economic, social and environmental benefit. It involves holistic recognition of the services being provided, their current status and the opportunity to enhance them while developing or safeguarding revenue:

- Some of the skills and knowledge needed will already be familiar to land advisers but new tools might be required as well.
- It is possible to adapt existing valuation tools (eg Cost-Benefit Analysis) and assessment tools (eg Environmental Impact Assessment) to consider a wider range of environmental costs, impacts and benefits (see EATME Tree in "Useful resources").
- A number of tools now measure the economic and/or social value of nature, such as benefit transfer, social return on investment, and corporate ecosystem valuation.
- Non-monetary valuation methods can help prioritise benefits that are hard to monetize, such as aesthetic or spiritual benefits from spending time in the natural environment. A widely used example is Multi-Criteria Evaluation.

How can I unlock the value of a healthy natural environment for my clients?

A simple series of steps can help to guide the process:

Identify the range of benefits that could be derived from land management which may have a market:

- Match the interests of likely investors (eg local corporations in the food and drink sector, hospitality and water utilities), with the opportunities your client may be able to offer investors (eg water management, carbon storage, recreation).
- Some of the top opportunities in the UK are based around improving water quality, reducing flood risk, climate regulation and offering cultural benefits, for example linked to recreation and health.

Capture the value of these benefits:

- Negotiate agreements between investors and landowners for changes in land management that can deliver sought-after benefits (whether bilaterally or as part of a recognized scheme).
- Consider participating in an eco-labelling or certification scheme, or setting one up locally.

Measure and report the benefits to investors:

- Establish methods and protocols for monitoring the delivery of benefits.
- Where these protocols already exist as part of an established scheme or initiative, landowners may still need guidance on data collection and reporting from land-based professionals.

What are the challenges and how can they be overcome?

- Language can create barriers. Terms such as natural capital, ecosystem services, the Ecosystems Approach, payments for ecosystem services and so on may be unfamiliar but all refer to the relatively simple idea that nature is another form of valuable capital that provides us with all our needs.
- All areas of professional activity, including valuation, financial appraisal, development planning, agronomy and soil management, and animal health management will increasingly encounter ecosystem services and will need to reflect their impact.
- But there is still much to do to translate research into workable schemes, practical forms of evaluation, agreement and monitoring, and the management of relationships between groups and individuals (including multiple layers of tenure and other landed interests).
- There is a need for a more entrepreneurial approach from the professional community, not only identifying new opportunities and challenges, but also developing the markets for them.
- There are opportunities for advisers to bring local landowners and managers together in order to exploit natural opportunities that no individual could develop alone.

How can land managers and advisers maximize the benefits from ecosystem services?

Considering ecosystem services can offer new insights in strategic land management:

- The UK Woodland Carbon Code and the Peatland Code offer immediate opportunities for woodland creation and peatland restoration using private funding, based on the carbon and other ecosystem service benefits of this work.
- Land-based professionals could also develop local schemes (e.g. Angling Passports and Visitor Giving schemes) or bi-lateral agreements with local corporations.
- Advisers and planning professionals should ensure their voice is heard in the development of policy around ecosystem services, to contribute their knowledge and experience of the complex factors that influence land management.
- It will become increasingly important to develop landscape-scale partnerships to deliver benefits collaboratively from natural resource management.
- Professionals need to consider strategic issues that may affect a wider area than the individual farm or estate or plan, for example at the scale of habitats or water catchments.

- Landowners, occupiers and farmers will need professional support in appraising the opportunities and risks associated with new markets. Getting the right advice could be as important for the continuation of existing land management activities as it is to the development of new opportunities.
- When giving advice on new opportunities, advisers will need to understand the interrelationships between farming, agricultural and other tenancies, payments under the EU Common Agriculture Policy, stewardship schemes, and capital and income taxation.
- Interdisciplinary and inter-professional working will be important to ensure clients receive well synthesised, integrated advice.
- Environmental impacts need to be assessed on the basis of evidence from as many different sources (and disciplines) as possible, and to consider impacts on as wide a range of ecosystem services as possible.
- Advisers should aim to incorporate ecosystem services, and the ways to provide tangible benefits for clients, into their personal development planning.

Further information

This note was written by Charles Cowap (chartered surveyor, Knowledge for Professional Practice) and Mark Reed (Birmingham City University) drawing on research insights from across the LWEC partnership, with comments from the Landbridge Advisory Group and Alister Scott and Claudia Carter from the National Ecosystem Assessment Follow-On initiative.

Useful resources: The EATME tree guide to tools for operationalising ecosystem services and the Ecosystems Approach produced by the Follow-on to the National Ecosystem Assessment: www.eatme-tree.org.uk MAGIC Searchable, map-based information about ecosystem services: www.magic.gov.uk

BESS Ecosystem Service Mapping Gateway: www.nerc-bess.net/ne-ess
The Biodiversity Planning Toolkit compiled by the Association of Local
Government Ecologists: www.biodiversityplanningtoolkit.com

The ecosystem valuation toolkit (developed by Earth Economics): www.esvaluation.org

The Public Goods Tool, which assesses a farm for the sustainability and public good outputs that can be expected from multi-output farming: www.goo.gl/EznTrn

 $RSPB's\ Planning\ Naturally\ report:\ 12\ principles\ for\ spatial\ planning, following\ the\ Ecosystems\ Approach:$

www.rspb.org.uk/Images/planningnaturally_tcm9-349413.pdf Angling Passports scheme:

www.theriverstrust.org/pinpoint/angling_passports.html

Biodiversity offsetting: www.gov.uk/biodiversity-offsetting
Payment for Ecosystem Services LWEC Policy & Practice Note no 1:
www.goo.gl/OZG8Ng

Challenges for international professional practice: from market value to natural value, RICS 2012: www.goo.gl/X8tVSj

Could advisers of land managers work more effectively across professions? LWEC Policy and Practice Note no 3: www.goo.gl/KTVKtg

Inter-professional working: Landbridge Professional Development Resources: www.goo.gl/Ekg97K

Landbridge website: www.landbridge.org.uk

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