

EAWG3: workshop report

Integrated Frameworks to support the Ecosystem Approach

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Key Messages and findings

- The Integrated Framework was developed by the RESAS EST theme with the aim of i) linking research fields, ii) linking to policy topics and iii) guiding practice on the ecosystem approach.
- The framework received broad support from research, practice and policy representatives.
 - It can help researchers to relate their work to each other, and for external communication.
 - It can align with existing policy processes such as Strategic Environmental Assessment.
 - It can help to guide management as per the Ecosystem Approach.
- To be useful, the use of the framework must be flexible, with links to suitable tools and related processes clearly signposted.
- Problems with terminology persist, although a pictorial framework can help to overcome some of the apparent complexity these can cause.
- The framework as presented at a high level does not explicitly address or overcome any of the problems of working across and linking scales.
- The framework will be used in ongoing RESAS research and in future may be revised.

Introduction

The third workshop of the Ecosystem Approach Working Group (EAWG) was held at the 'Melting Pot' meeting venue, Edinburgh, on the 30th April 2012. The workshop was attended by representatives from a range of public agencies, third sector organisations, Scottish Government, and representatives from the RESAS funded research themes within the Environmental Change and Land, Food and People research programmes 2011-2016 (see Appendix 1 for the list of participants).

The main objectives of the workshop were: i) to stimulate discussion on the topic of frameworks for the ecosystem approach, their purposes and their potential use in research, policy and practice; ii) to introduce an Integrated Framework; iii) to explore how the Integrated Framework could fit with case studies from policy, practice and research; and iv) to suggest improvements to the framework.

Prior to the workshop, invited participants were sent a briefing note by the Ecosystem Services Theme team (EST) which introduced and explained the Integrated Framework they had developed (see Appendix 2). The workshop aimed to explore and discuss this framework. The full agenda for the day can be found in Appendix 3.

This paper draws on the presentations and subsequent discussions during the workshop, the notes taken during breakout group and open discussions, as well as the feedback from the evaluation forms provided at the end of the meeting. It is therefore based on the expressed views of those attending the workshop and may not represent the full range of views of EAWG members.

The paper is split into three parts; i) general discussion about the Integrated Framework ii) considering the framework in relation to case studies, iii) conclusions about revising and using the framework, and next steps.

Developing an Integrated Framework

The first presentation by Kit Macleod described the range of frameworks that are already in use in various topic areas related to understanding ecosystem services and environmental management. The form a framework takes may vary markedly according to its purpose.

As no single existing framework seemed entirely appropriate for guiding our work on the ecosystem approach, the EST researchers have developed their own Integrated Framework. This was done by reviewing the properties and purposes of many other frameworks, and distilling from them a set of key components that could be incorporated into a single framework. It was hoped that this single framework would achieve multiple purposes relating to research and practice for the ecosystem approach (see briefing note, appendix 2). The second presentation of the morning, by Iain Brown, described the steps in this framework. Iain also gave an example of how it could be used, linked to scenarios analysis as a tool to consider implications of decision-making for alternative future pathways. The team hoped that the framework could be relevant for different audiences and purposes, across scales; i) for researchers to understand how their work contributes and links to other work relevant to the ecosystem approach, ii) to aid practitioners in implementing environmental management in line with the ecosystem approach, iii) to aid policy makers and external stakeholders in understanding how their own processes may fit with the ecosystem approach and identify relevant data.

There was broad interest and support for the Integrated Framework, as well as detailed discussion about the detail of the example presented by Iain Brown. It was felt that discussing the framework with planning officials in Local Authorities was important: although this sector is vital in terms of land-use decision making, it might not be willing to adopt additional complicated frameworks. Other audiences whose actions could help to widen consideration of an EA could include SRDP¹ policymakers, since SRDP could affect economic incentives influencing individual land-managers. Targeted guidance notes could help to reach such audiences.

A problem for using the framework is the multiplicity of scales at which decision-making can or does take place, and that different forms of information become available at different scales. Furthermore, different scales are interlinked (e.g. landscape and local). There was no obvious solution to managing this, nor did the framework explicitly flag up the need to think about this (substages of the framework e.g. within step 1 and 2 can do this, but as presented at the workshop this was not clear). However, it somehow needed to be taken into account by those seeking to research ecosystem services and apply the ecosystem approach. Integrated farm management and LEAF farming were suggested as examples of initiatives linking local resource management to higher-scale policy, and so potentially relevant for further work on the ecosystem approach or applying this framework.

Regardless of who uses the framework, flexibility was valued. For 'simple decisions', working through a complex procedure would be disproportionate. For some situations, some steps may require more elaboration than others. A way to use the framework would therefore be a simple 'first pass' to scope issues, with any successive iterations involving more detailed work or data gathering.

¹ Scottish Rural Development Programme www.scotland.gov.uk/Topics/farmingrural/SRDP

Relating the Integrated Framework to case studies

The main activity for the afternoon focused on introducing and discussing three case studies to which the Integrated Framework could be relevant.

Case study relevant to agencies and practice: the Carse of Stirling

Zoë Kemp from Scottish Natural Heritage described “Stirling Ecosystems Approach Demonstration Project”. (Appendix 4 is an information note on this project.) Options for managing this project had recently been scoped by consultants, and work was shortly to commence. It will involve the management of a section of the Forth catchment between the M9, Carse of Forth, Touch and Gargunnock Hills.

This group felt that the framework was relevant to the project, but only if it could be applied flexibly (i.e. not all steps worked through in great detail). In addition, to enable effective and meaningful monitoring, some consideration of measures of success was needed early on in the process. The final change suggested was one of wording: this project (and probably many others) clearly had no specific single decision-making event, so it was felt to be more useful to say “make a plan” than “make a decision”.

It was expected that the framework could be useful or relevant to guiding management at other case studies and scales. Examples included the second round of River Basin Management Planning², and the Galloway and Southern Ayrshire Biosphere Project³.

Discussion in this group highlighted that understandings of the term an “Ecosystem Approach” still vary: for example, assessing ecosystem services does not equate to implementing an ecosystem approach. Referring to the terminology list produced for EAWG1 may help circumvent such differences. There was also debate about the term “scenarios”. The terminology could be unhelpful and confused with other concepts, but the process of working with stakeholders to define endpoints was deemed useful.

Case study relevant to policy processes: Strategic Environmental Assessment

Lewis Hurley from the Scottish Government described Strategic Environmental Assessment. (Appendix 5 contains the slides from this presentation.) This is a statutory process that may have many similarities to the EA, since it mandates consideration of a wide range of environmental issues and impacts during the process of choosing a new development or intervention. However, to date there has been little explicit consideration or explanation of how these two concepts could interlink.

The EA may encompass the best existing ideas about environmental management and planning. However SEA as statutorily specified probably doesn’t fit all of the principles of the EA, in particular the decentralisation of decision making to the lowest appropriate levels (although the example of SEA applications in the Cairngorms seemed compatible with the ethos of the EA). Furthermore, stakeholder consultation usually occurs only in latter stages of the SEA process.

SEAs are legally required for certain situations, so to encourage uptake of the EA it is very useful to consider how an EA and SEA may link. The scoping of options encouraged by an SEA can fit well with an EA. However, assessed plans do not have to take account of new options suggested by an SEA. Furthermore, time lags between planning and the SEA can make the process slow. How effective an

² http://www.sepa.org.uk/water/river_basin_planning.aspx

³ <http://www.gallowayandsouthernayrshirebiosphere.org.uk/>

SEA process is depends not only on how it is carried out but also the plan and assessor: more informed assessor and processes result in more effective assessments.

As regards recommendations for improving the framework and its use, there was consensus that terminology was confusing or complex for all types of stakeholders (including that on scenarios – seen as uncontrollable futures, or options – controllable future choices). This can make the EA appear too complex and complicated when really it is not. In fact, the pictorial Integrated Framework was helpful for overcoming this problem, but it also needs to be flagged how it can be linked to existing processes. This group strongly recommended that links between the EA and existing processes needed to be clearly communicated, or interest and adoption of the EA would be limited.

Case study relevant to research: Lunan waters research

A variety of research had been carried out in the Lunan catchment (Appendix 6 are the slides from this presentation.). The group discussing this case study felt that the Integrated Framework did not exactly fit with the frameworks that had been used during the research in the area, although often these frameworks could link to or nest within this (for example, a focused on the services → functions → benefits chain can fit within stage 2). Most stakeholders relate to or consider multiple issues, so any framework that appeared to be too simplistic by being based around single concept would not be seen as useful. The Integrated Framework was relevant to multiple issues – working through the framework could help to ‘distil’ the key and subsidiary issues, and to identify how these relate – and it was important that this message may not be lost in later iterations or revisions to the framework.

Feedback on the representation of the framework suggested that scoping social structures and processes, and supply and demand for key resources, was a key part of scoping systems. However, the current diagram might imply this required only biophysical research insights. The framework was helpful for identifying not only how research areas might connect, but also research gaps, and the strong need for participatory research. However, the issue of how or when to work across scales was unresolved and unacknowledged by the framework, at least as presented.

The group discussion following the presentation of the Lunan waters case study also encompassed other research areas. For example, the framework was seen as helpful for helping researchers on livestock to identify and assess risks, and how pathogen control could be linked to more diverse resilient ecosystems, and linked to the delivery of other ecosystem services. In this way, the framework can act as a bridge between disciplines and topic areas that might not otherwise connect. It may perhaps also facilitate communication to external audiences e.g. to funders and policy-makers. However, in doing this the desire for simplification must be balanced against the need not to lose any of the guiding principles of the CBD.

Concluding thoughts and next steps

There was general support for the Integrated Framework. However for its utility in a variety of situations would depend on:

1. Flexible application of the framework. Each step should be considered but not necessarily applied in a great level of detail (for example, a lengthy process of scenario construction may not be appropriate for some situations).
2. Highlighting where the framework may link to existing frameworks and processes in use. Across sectors and objectives there are already a lot of frameworks, so a new framework that appears to add competing or additional complexity is unlikely to be used. To counter this, it will be useful to identify if and how this framework dovetails with existing frameworks and processes (such as that for SEA).
3. Providing information about how each part of the framework can be implemented. This is also called the 'toolkit' approach: for example, if the framework were a web-based diagram, it would be helpful to click on each box to reveal options for techniques and methods.
4. Practical testing of the framework. Three case studies of research, policy and practice case studies were presented in the afternoon and seen as helpful for considering how the framework could be used: however, attempts to actually use the framework are needed, in order to know if and how the framework is useful and if and how it needs refinement. Some feedback suggested that any single framework is unlikely to be useful for all situations and purposes, and attempts to achieve this could render it 'unwieldy'. Whether or not this is the case may become clear with future testing.

There was also specific feedback on how to improve the framework at this time, specifically:

1. "Decision-making" in most real-world management decisions is complex, the result of many smaller incremental decisions, rather than a single and instantaneous event. Therefore, "make a plan" was suggested to replace "make a decision".
2. It was felt that the indicators or criteria to enable monitoring and evaluation had to be considered at the same time as the issue was defined.
3. Showing the decision-making process in both linear and circular form can be confusing since it is not clear if the circle is duplicate or additional. Therefore, this could be removed.

Proposed refinements of the framework

The EAWG team have made an interim proposal for revising the framework, based on comments made at the meeting. Although the issue of scale was deemed important it may come up through more detailed consideration each stage so is not presently labelled. If you wish, we would welcome your thoughts on this version of the framework (appendix 7). The Ecosystem Services Theme team will decide on these or other changes, and it is fully expected that the process of use and improvement will be an iterative.

Next steps

The Integrated Framework remains a work in progress and it is fully expected that feedback over time will cause it to evolve. We will make the framework available on the Theme website (shortly to be launched) and there the latest modifications will always be available. We will consider whether we

can provide click through links to tools or options that can help expand each of the steps in the framework (for example, clicking on 'options appraisal' could provide methods for carrying this out, clicking on a 'risk assessment' box could lead to a description of RESAS-funded research on this topic). Some of this also relates to the action plan of Scotland's Land Use Strategy, for example, linking scenarios to economic tools.

Taking on board the feedback and comments from the participants of EAWG3, the Ecosystem Services Theme will use the framework in its ongoing work. In particular it will shortly commence 'on the ground' case studies of what it means to implement the ecosystem approach. Next year it will also examine the fit between the EA and one or more existing policy processes such as SEA or River Basin Management Planning.

RESAS researchers welcome other thoughts on the framework, and about any possibilities for implementing the framework beyond the RESAS programme. We would also welcome discussion on any attempts to use this framework to assist in applying the ecosystem approach to land management decision making, or that considers how it aligns with other frameworks and processes.

For more information or to discuss using the framework, please contact ecosystems@hutton.ac.uk

Other key points

Scenarios. Lots of meanings can be attached to the word 'scenarios' and so its use –or the use of alternative related terms such as 'drivers', 'goals' or 'options'- can be contentious. Understandings can vary between different sectors and individuals (e.g. from: specific policy goals; normative desires for future states; descriptive visions of the future world; quantitative predictions about future states of resources). There can also be variation in how scenarios are constructed or derived (i.e. based on pre-existing assumptions, multi- or specific-stakeholder led). It is important for any communication on this subject to make clear or check in what sense this and related terms are used, and to be mindful that many sectors already use scenarios in certain ways. Guidelines may be helpful in order to help with communication and clarity on good practice in the use of scenarios. Different approaches are not necessarily incompatible and this may be a useful topic for a future EAWG meeting.

Scale. As already noted, this is a continuing challenge for work to understand and manage environmental assets: how to work across scales, and how to link work across scales and across areas to ensure interlinkages and connections are properly accounted for.

Planning. A frequent theme in the meeting and in the evaluation forms was the need to ensure planners and local authorities were linked to discussions about the ecosystem approach and relevant frameworks. For many situations, the planning system is the venue where many decisions about land-uses are made, and hence it has significant implications for some aspects of natural resource management and ecosystem service delivery.

Terminology. There is still confusion and mixed meanings when discussing topics related to ecosystem services and the ecosystem approach. Future efforts will be taken to explicitly define all terms which may be problematic, during communication both within and beyond EAWG.

These points will be taken into account when planning future EAWG meetings. To learn more about past and future EAWG meetings, please visit www.hutton.ac.uk/eawg