UK National Ecosystem Assessment
Follow-on

Work Package 6: Development of the UK NEA Scenarios

Why:

The exploration of different ecosystem service futures using scenarios is a recognized part of any full ecosystem assessment. They enable people to explore the assumptions that are making about the drivers of ecosystem change and the impact they have on nature. Scenarios can be useful tools for decision makers because they can also help examine possible future policy goals, and to look at how robust existing policies might be if circumstances change in the future. In the first Phase of the NEA a range of stakeholders were involved in the design of scenarios; the follow-on phase is focusing on helping people to exploit them operationally at different scales across the UK, and looking at how scenarios building methods be refined so that these tools can used most effectively.

What:

Aim:
To deepen the analysis of the six scenarios developed in the UK NEA to facilitate the inclusion of a wider range of ecosystem services and explore how these influence well-being values

Summary:
The research will deepen the analysis of the scenarios from the NEA by developing the functional relationships that link land cover and land-use change to a wider range of ecosystem services to make them more robust. It will investigate the way responses might vary under different assumptions about climate change and under different socio-economic contexts. The project will also engage with stakeholders to review the assumptions and outcomes used in the first phase scenarios, exploring how these plausible futures challenge current thinking, and reviewing and testing the sensitivity of scenario outcomes to assumptions. It will also identify how scenarios can be 'down-scaled' to countries/regions, by examining how the major drivers of change would impact in different places.

Outputs/outcomes:

Output/outcome	*Status*	*Opportunity for input*	*Anticipated audience(s)*
Refining the analytical logic	In progress	Peer review, expert input	Academic, research
Stakeholder deliberation	In progress	Review of use in decision making contexts, via advice and workshop involvement	National/Local Government, Business

Methods/tools being developed:

- The development of a set of internet-based tools to support the dissemination and use of the NEA scenarios

Anticipated Case Studies:

- May integrate with case studies from WP4

Links to other Work packages:

- WP1: A better understanding of the vulnerabilities or natural capital under different assumptions about the future may make the asset check more useful as a tool for assessing risk.
- WP2:A better understanding of the macroeconomic implications of changes in ecosystem services will enable the plausibility of the scenarios to be improved.
- WP3a: Refined models of ecosystem service output under different conditions may help to ensure that scenario outcomes are more plausible and robust.
- WP3b: Marine scenarios developed in WP3 can help refine the initial set developed for the marine sector.
- WP4: Modelling how cultural ES indicators would change under scenarios will improve their use in a policy and management context.
- WP5: How shared values change over time is a key component of the current suite of scenarios and a link here would help conceptualisation of impact of values on responses, how shared values might influence how scenarios may play out and how shared values might change under different conditions.
- WP7: Common framework and joint workshop to develop a 'stress testing' methodology for policy measures; the use of a common set of scenarios developed during the UK NEA, framework and workshop.
- WP8: A link here would be useful to understand better decision-making in different scenarios. There is also a potential contribution via exploration of consultative, 'process-based' aspects of scenario application.
- WP9/WP10: Futures-orientated thinking and tools will include scenarios; the use of mapping tools linked to Bayesian Belief Networks to represent the links between drivers and scenario outcomes will be explored as a contribution to future tool sets.

Team:

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