

## **Integrating equity in applications of the ecosystem services concept in Ireland**

This is a Plain Language Summary of an article published [here](#) in the Ecosystem Services journal.

### **Background to this research**

Given the urgency of current climate, biodiversity and social crises, it is important that approaches to management, conservation and restoration of ecosystems are effective, equitable, and lead to immediate action. Researchers and practitioners draw on a wide range of approaches, concepts and frameworks to guide research, produce knowledge and find solutions. Although discussion of frameworks, concepts and language may seem abstract, how these abstractions are done matters as they inform the issues researchers and practitioners focus on, influencing how problems are described and solutions generated. This in turn influences how funding and resources are distributed.

### **Aims and purpose of the research**

This research examines the ecosystem services concept and how it is applied for ecosystem management and biodiversity conservation in Ireland. It asks how future applications might foreground considerations of equity and environmental justice as they unfold in the Irish context. This research explores how the ecosystem services concept is perceived, implemented and adapted in practice in Ireland and how power dynamics and equity could be incorporated in future ecosystem services research and practice.

### **Methods and research design**

This research used an ethnographic approach including semi-structured interviews with a range of key informants to examine how the ecosystem services concept is understood and applied in Ireland. Fieldwork began in 2019 and in-depth interviews continued into 2020 with 18 participants. A range of sectors including government departments, environmental non-governmental organisations (ENGOS), citizen groups, academia, policy makers, and local authorities were represented. Results from a survey conducted with Natural Capital Ireland are also included.

### **Results across three contexts of ecosystem management and conservation**

This research provides a deeper understanding of the perspectives and values of stakeholders, researchers and practitioners to better understand applications of the ES concept in Ireland. The three contexts where applications of the Ecosystem Services concept were examined were: Natural Capital and ES research; Agri-Environment schemes as Payments for Ecosystem Services (PES); and collaborative forms of governance for peatland conservation. Results reveals differing opinions on the value of ecosystem services.

### **Key takeaway**

Across these contexts, an overarching theme is the need for equity, inclusion, social dialogue, and a shift in focus from enabling the market to enabling and empowering civil society to act. The results of this research strongly suggest the need for a future agenda for ES research that better addresses equity in all its dimensions, across time and space, historic and intergenerational, and for humans and nonhumans alike.

**Natural capital and ecosystem services research in Ireland** – *Better awareness of the links between language, power and equity in Irish ecosystem services research.* In line with previous studies the findings of this research show that even where respondents recognise the benefits of natural capital and ecosystem services approaches, the use of jargon and complexity of the concepts and terminology limits engagement. Over half of those interviewed expressed a view that the language was either inaccessible or disliked by the general public and those outside of academia and policy circles.

**Agri-environment schemes in Ireland** - *Value all types of knowledge, change the system and design equitable and educational schemes to address the knowing-doing gap.* Key points of focus for interviewees included the implicit “hierarchy of knowledge” between expert and local knowledge and how they are valued unequally. The importance of education and technical support for participants in agri-environment schemes was also highlighted, as was the need to change the system so it is more equitable and fair, to surmount historic perverse incentives.

**Collaborative governance of peatlands** – *Value alternative ideas and concepts to guide governance of peatlands such as belonging, connection and inclusion.* Participants describe ecosystem services variously as a novel way to talk about and garner support for peatland conservation, while others question if it replicates what already exists in terms of power dynamics. Case study shows how collaboration with stakeholders can bring ethical considerations into collaborative projects.

**See Appendix 1 for further detail on the above contexts including questions generated by interviewees and solutions offered by them.**

## Definitions and key ideas



New concepts are continuously emerging in the fields of ecology, conservation and environmental management.

**Concepts** can be viewed as socially shared ways of thinking that may be supported by different people for different ends.

**Conceptual innovation** is a process through which new understandings and ways of framing a problem win acceptance in environmental policy.

**Environmental concepts** include landscape, sustainability, biodiversity, nature-based solutions, ecosystem services and natural capital. They evolve in particular historical periods and come with associated assumptions, ways of thinking and solutions.

## Why are concepts important?

**Concepts hold power: they *shape* research, policy and practice and therefore guide and inform *actions* in the real world.**

Concepts gain societal and policy traction if they address a particular need or develop new solutions, if they enable differing interpretations that appeal to a variety of stakeholders, and if they do not challenge too directly existing social, economic and political institutions and relationships. It could be said then that new concepts gain traction if they do not pose too major a challenge to ‘business-as-usual’.

*Concepts are performative:* they not only describe the world, but also change it, shaping certain understandings of reality, directing our attention and influencing priorities

New concepts require *societal acceptance*: They are taken up and applied and adapted by people

in interesting and unexpected ways depending on their interests. Sometimes, dominant or powerful organisations put forward certain concepts and understandings which are abstract, but come to be taken as representing reality.

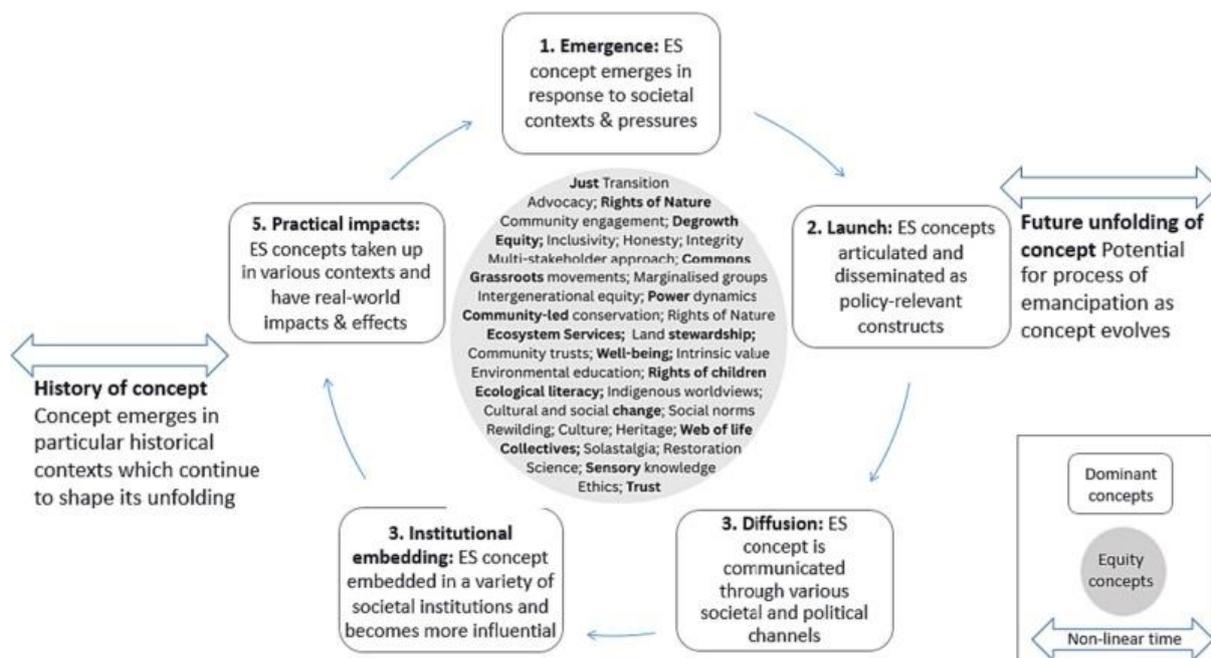
## The Ecosystem Services (ES) concept

Conservation and environmental management increasingly draw on the concept of ecosystem services to highlight human dependence on nature in the hope that this will secure the necessary funding and political will to support conservation goals (Mace, 2014). However, the human-centric focus and **influence of economics has led to critique about the risks of commodifying nature and side-lining nonhuman species**. In terms of equity, the ES concept has been critiqued for privileging expert and scientific knowledge over the participation of society including local communities and indigenous people. The lack of social and cultural analysis is also cited as a reason for the failure of the ES concept to generate transformative change and deal with issues of equity and power dynamics. Despite these critiques, ecosystem services is an increasingly powerful, global concept that is embedded in environmental policy as a way of framing interactions between people and nature. Yet, it cannot be assumed that this framing always ‘works’ in the interests of biodiversity and civil society, or that it will disrupt incremental, business-as-usual practices to achieve rapid transformative change. **We must continuously ask of the concepts we use ‘has this changed how we treat nature, has it improved the status of ecosystems?’** Ecosystem services remains a contested concept as issues of implementation, policy relevance, power and equity remain unresolved.

## A conceptual landscape that integrates equity

Concepts have histories and futures which are still unfolding as people exercise agency in how they are interpreted and applied. In the state and civil society organisations that we work in, we can shape how concepts are applied.

In the diagram below, the ecosystem services concept is shown as dominant but is still unfolding in Ireland as it is operationalized and embedded in a variety of contexts. Alternative concepts are shown in the centre of the diagram as they continue to contend for space and challenge dominant understandings. Together, this network of concepts can provide a more equitable underpinning and web of inter-related and symbiotic ideas that can support the cultural and transformative change needed for a more sustainable future.



## Appendix 1: Contexts and cross cutting themes with solutions offered by interview participants

Context Theme	Language, concepts and knowledge framing How language can shape understanding, thought, knowledge and action	Knowing-doing gap Overcoming barriers to action & implementing solutions through collaboration	Power and equity Awareness of power relations and dynamics and how they shape policy & funding priorities
<b>Natural capital and ecosystem services research</b>	<b><i>"It's about knowledge and are there other knowledges we are not accessing?" (05)</i></b> Need for participatory, action-oriented and engaged forms of research to create shared understanding; inclusion of different knowledge types and social dimensions; research metrics to recognise societal impact.	<b><i>"There's a sense of urgency now so you have to always question, 'is this working'?" (12)</i></b> Need for social research to understand barriers to implementation and action. Empowering action and implementation through inclusion of stakeholders in research. Translate research for local contexts.	<b><i>"If you could say who does this work for and why? And who doesn't it work for? (14)</i></b> Design research projects with awareness of power relations and differentials. Valuing expert and local knowledge. Empowering civil society to become partners in research projects.
<b>Agri-Environment schemes as Payments for Ecosystem Services</b>	<b><i>"It's being managed for agricultural production not carbon emissions so is there a way that we can work with farmers to change that balance?" (02)</i></b> Design equitable schemes that engage and collaborate with landowners and managers. Translate science to inform general approach but enable farmers to take action in their own contexts and in their own way. Include education and other intangible supports in agri-environment schemes. Multi-stakeholder approach.	<b><i>"It's a question of, are these ideas there as a plaything, or are they actually to be implemented in a practical way?" (07)</i></b> Effective mechanisms that lead to action through co-design processes for PES. Design of scoring systems linked with education and technical support. Scalable models. Creating new institutions, social norms and ethical motivations around payments. Meaningful payments and incentives that promote and reward good practice.	<b><i>"How should we invest in nature? The flip side of this question is how to stop pouring so much money into activities that are destroying nature?" (12)</i></b> Strengthening democracy. Managing vested interests/powerful groups. Remove perverse incentives. Foreground alternative economic models. Ideas about the Rights of Nature. Dealing with large scale processes and forces. More interaction between people who make policies and people who implement them.
<b>Collaborative governance for peatlands and ecosystem services</b>	<b><i>"It's not just a question of changing policy or of redistributing money, it's a cultural, political and social change and that is difficult but these are questions we have to ask" (12)</i></b> Use inclusive and accessible language. Recognise agency of civil society actors in deciding which concepts and ideas should influence policy and practice. Create processes for deliberation & dialogue. Include different types of knowledge (local, practitioner, tacit, social, cultural)	<b><i>"There's a groundswell of practitioners and communities who want to get on with it, but where is there for them to participate?" (01)</i></b> Shift from enabling and supporting the market to enabling civil society. Political and institutional support of civil society and community collective action. Replicate community projects and models such as Community Trusts and stewardship. Build more collaborative cultures of participation in government.	<b><i>"Is this just replicating what already exists in terms of the power structures or is it adding a different type of value?" (14)</i></b> Focus on well-being, community benefits, ethics of place and equity. Environmental advocacy and justice. Involve marginalised groups. Address people's basic needs to address climate change and biodiversity decline. Intergenerational equity, future generations. Evidence <i>and</i> values-informed decision making.