6th ESP Europe Conference 2026

Innovation in natural capital valuation by participatory approaches to improve decision-making

"Bringing in participatory approaches to widen the scope of natural capital valuation"

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Scottish Government
Riaghaltas na h-Alba
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Goal

- Explore a plurality of values through participation and deliberation
- Showcase a valuation framework and toolkit
- Highlight lessons on the potential use of the valuation framework

Integration of natural capital in policy

- Third Land Use Strategy 2021-2026
  - Encourage planning by a natural capital approach
- Fourth Land Use Strategy 2027-2032
  - Progress towards a net-zero, nature-positive economy by 2045
- Regional Land Use Partnerships (RLUPs) and Natural Capital Community Partnerships
  - Adopt a natural capital approach at a local level to support nature restoration through a fair and just approach involving multiple parties.

Steps of the valuation framework

Explore value plurality – literature review/ workshops

What stakeholders value as important ?

Plan scenario narrative (workshop)

What future for NC stakeholders envisage?

Prepare valuation toolkit +guidance

How to value at place?

Deliberation on land use management

GIS participatory mapping

Where are instrumental values and how change under scenarios?

Q method

How can value be categorised?

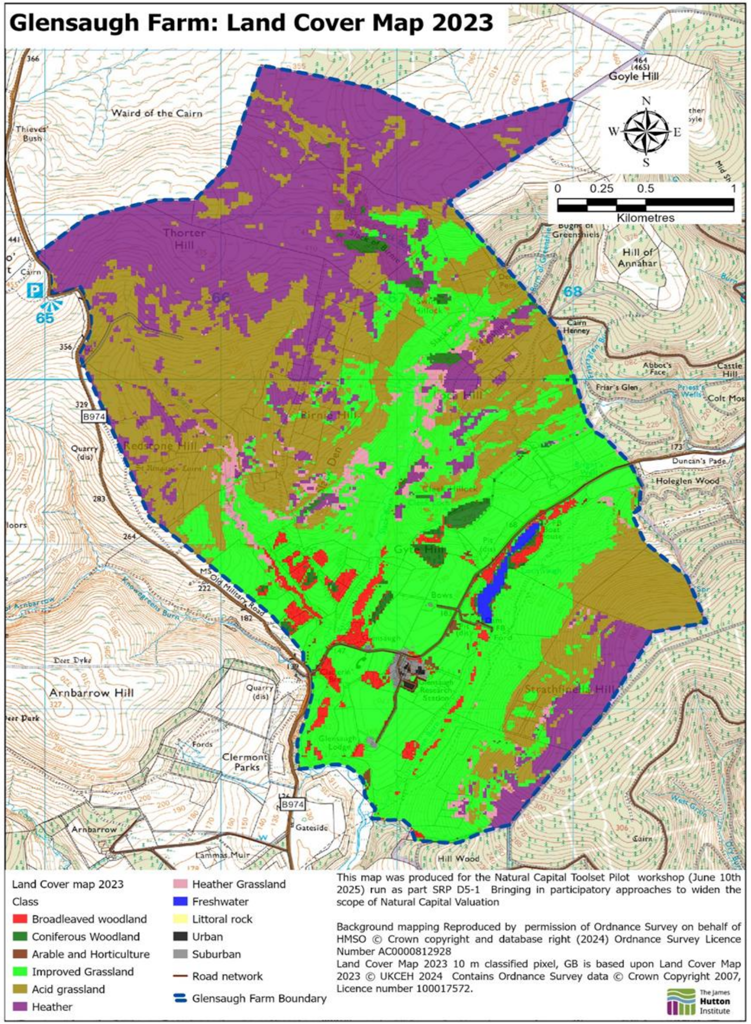
Photo-Elicitation/ interviews

What are people connection with nature?

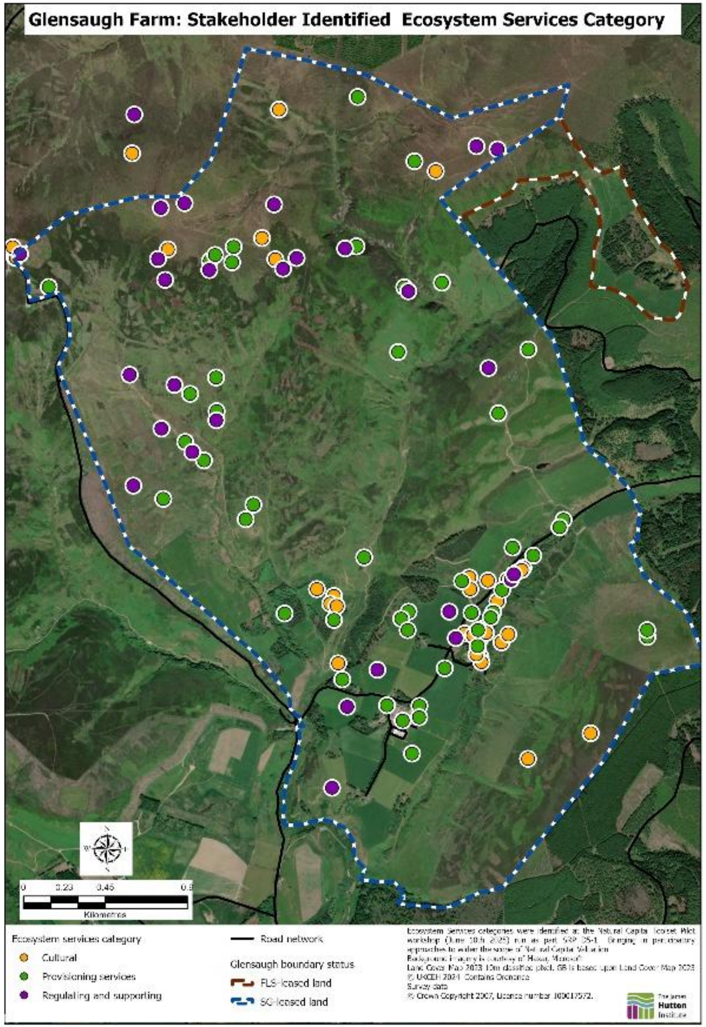
Implementation

At Glensaugh farm, the positive climate farm managed by the James Hutton Institute

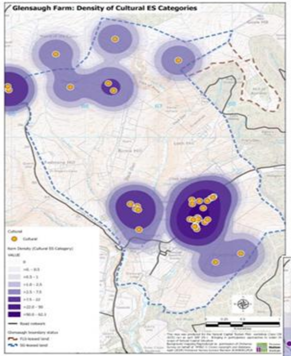
- Local stakeholders (The James Hutton Institute, Brechin Angling Club)
- SG agencies (Nature Scot, Forestry and Land Scotland)
- Private stakeholders: Scottish Woodlands



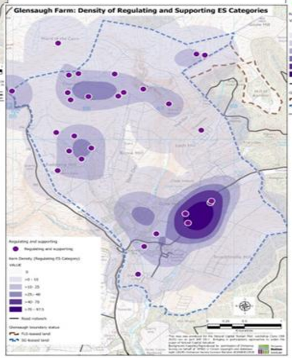
GIS participatory mapping



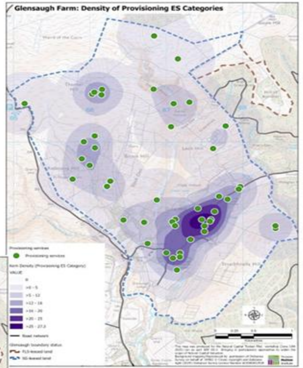
ES type	N. points	%
cultural	37	33.04
provisioning	47	41.96
regulating	28	25.00



Cultural ES

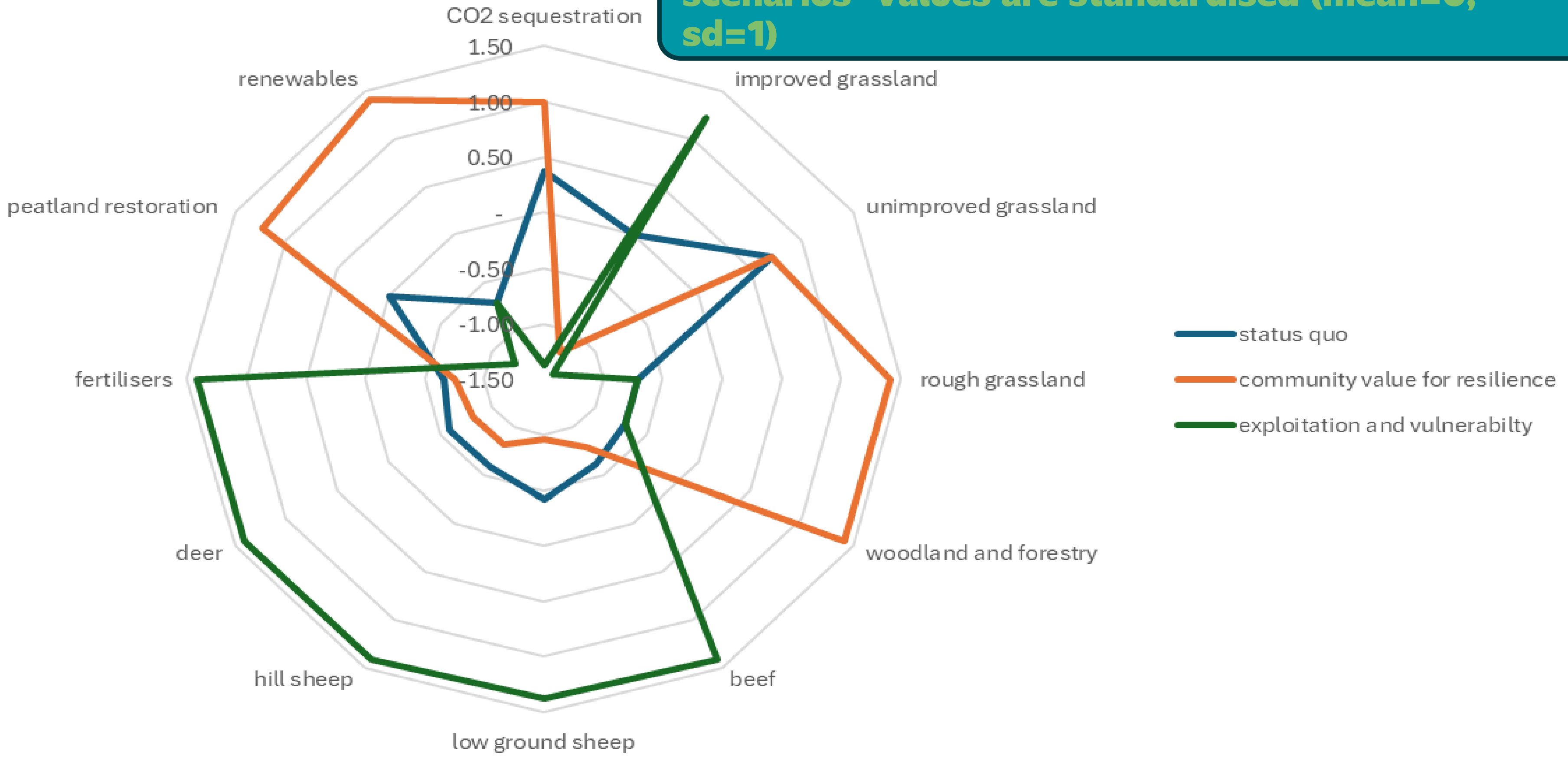


Regulating ES



Provisioning ES

Dependency and impact analysis under scenarios- values are standardised (mean=0, sd=1)



Photographic methods and interviews revealed deep personal and relational insights on natural capital value

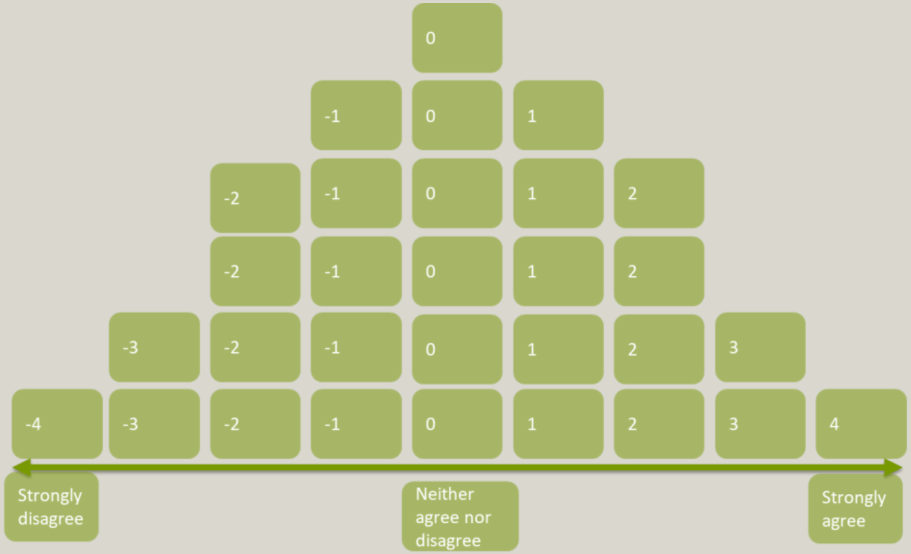
'I think it's like a doorway, right?... to the right way… once you open that gate, it's kind of like your, your doorway into just peace, you know, it's it's whatever you want.'

Q method

We asked stakeholders to rate their level of agreement with 30 statements about natural capital value using a triangular matrix.

The approach shows:

- Perceptions across individuals
- Aspects of nature that are important



The final deliberative workshop

- Present our approach to NC valuation
- Deliberate on NC values elicited at Glensaugh farm
- Discuss how the proposed valuation approach may support local-scale decision making

Q deliberation

CONSERVATIONISM

1. Improve woodlands.
2. Diversify tree species against climate risk
3. Farm production is not the most important reason for managing NC.
4. Develop community wellbeing.

PLURALISM

1. Consider plural values of NC, beyond economic benefits.
2. Connecting with nature: sense of closeness with heritage
3. NC support wellbeing

If your preferences overlap among these four groups, can you please rank them from the most to the least important ?

1. pluralism 3.23
2. conservationism 2.31
3. rationalism 2.23
4. post-productivism 2.00

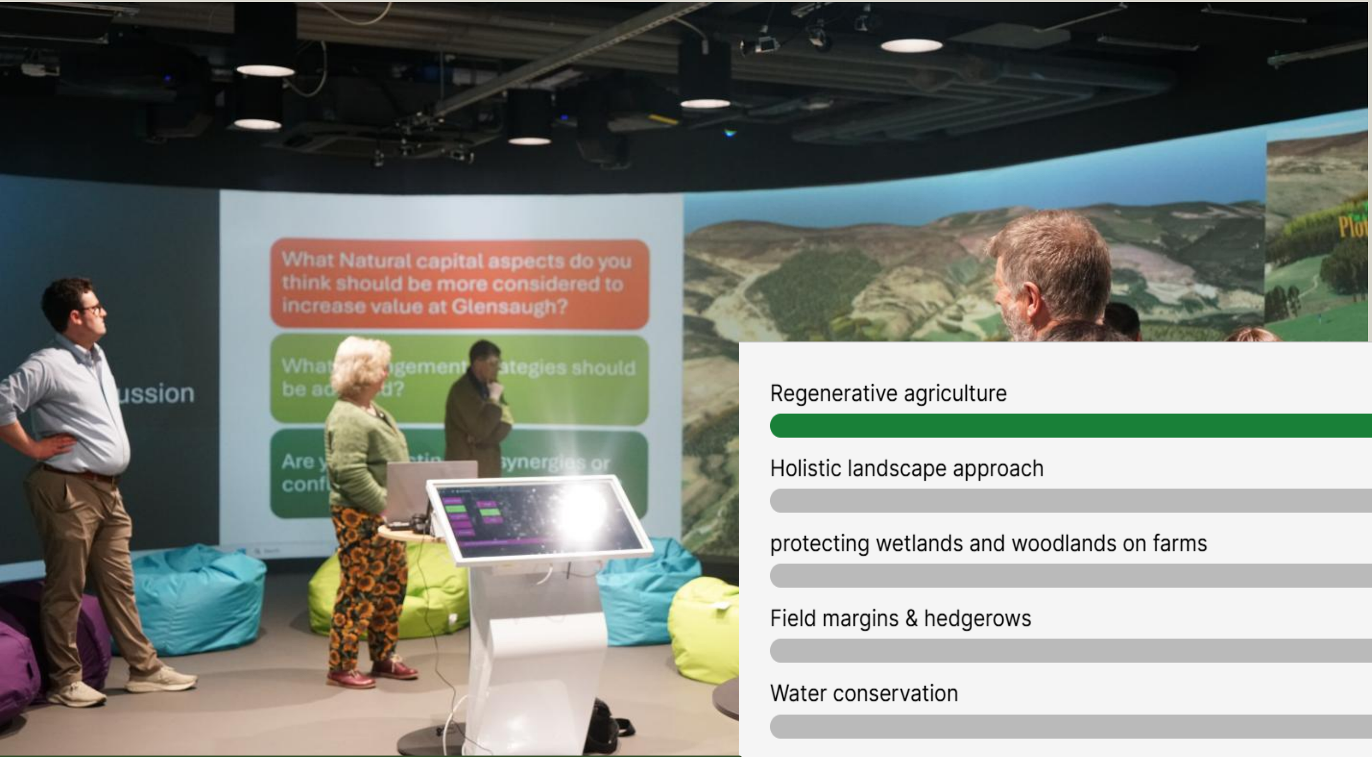
RATIONALISM

1. Production planned in terms of climate change (CC) impacts.
2. NC may generate income to protect it against CC.
3. Collaboration between investors and land mangers
4. NC support wellbeing

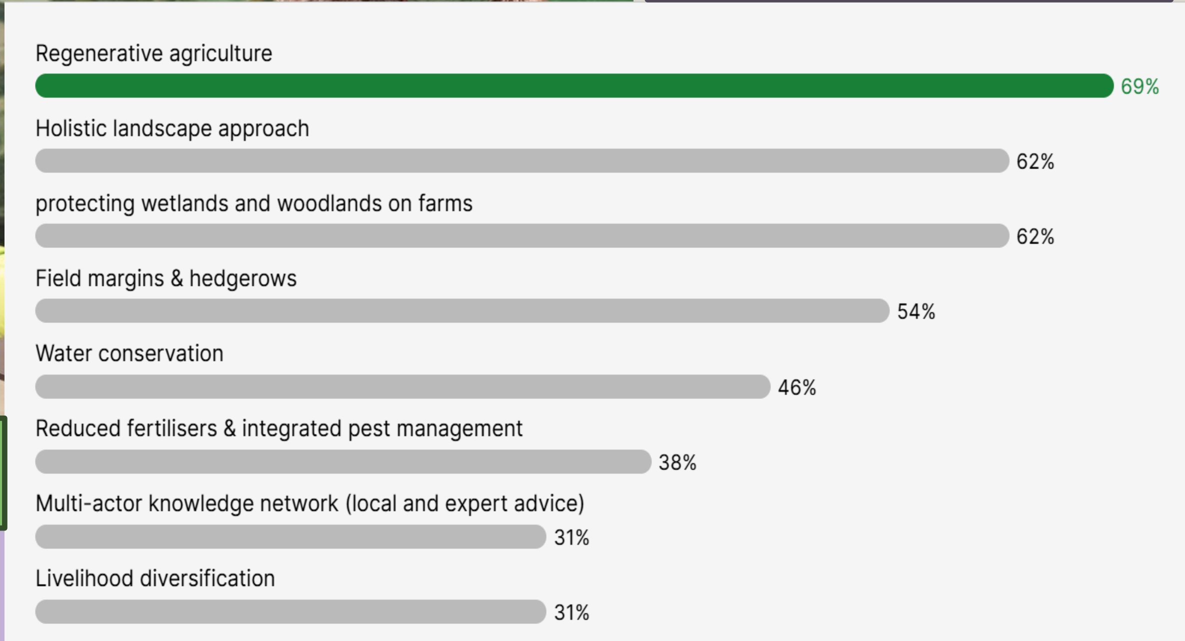
POST-PRODUCTIVISM

1. Profitability of timber and food but not at the expenses of environmental services.
2. No focus on relational values but on physical and mental wellbeing
3. Decisions mainly driven by experts

Deliberating on management preferences



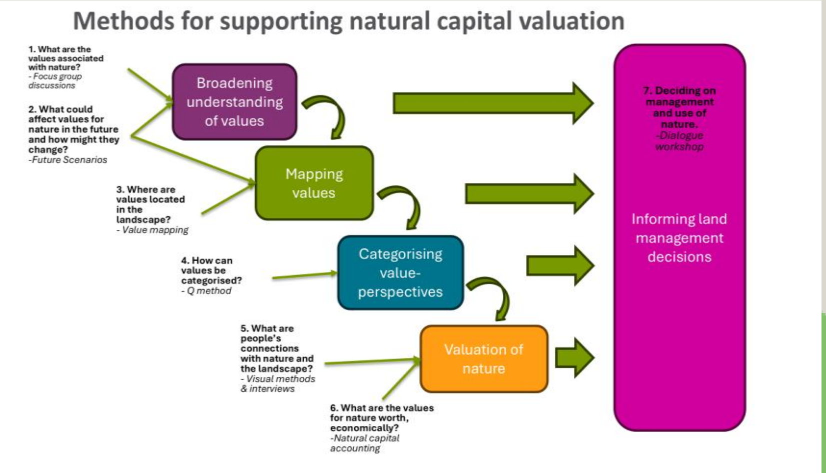
Regenerative agriculture is a holistic farming approach that rehabilitates ecosystems by focusing on soil health, biodiversity, and water management.



This rank is aligned to the value preference discussed earlier

Does the toolkit help supporting decision making?

- Engagement and facilitation
  - Improve consultation
  - Contribute to conflict resolution
- Local authorities / community engagement
- Different scales
- Toolkit needs facilitation
  - Advise on support for analysis
  - Templates to support analysis and presentation of results



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