# Using Quantitative Story Telling to support Agriculture, Environment and Land use Policy, 2008-2026.



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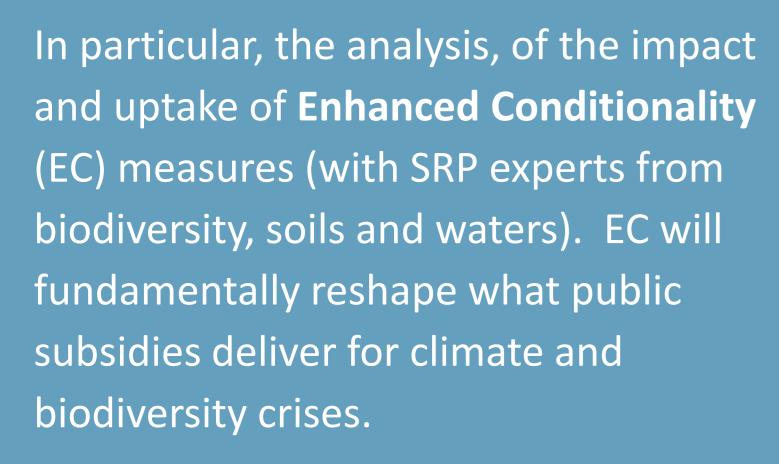
### RESAS

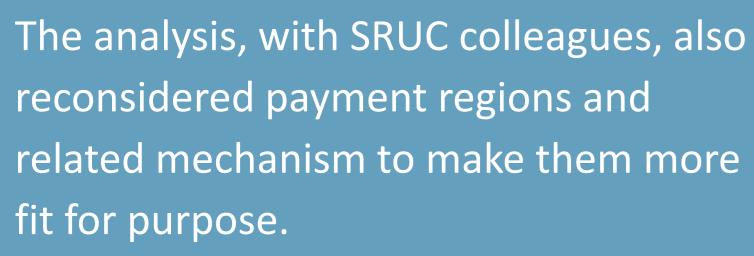
Rural & Environment Science and Analytical Services



## Abstract

Using capacity developed since 2008, in the Brian Pack Inquiry into Agricultural Support, work in the Strategic Research Programme (SRP) shaped the 2015 reform of payment regions. The 2022-27 SRP within the Land Use Transformation Project (JHI-C3-1) has continued to support development of policy options from the Vision for Agriculture.

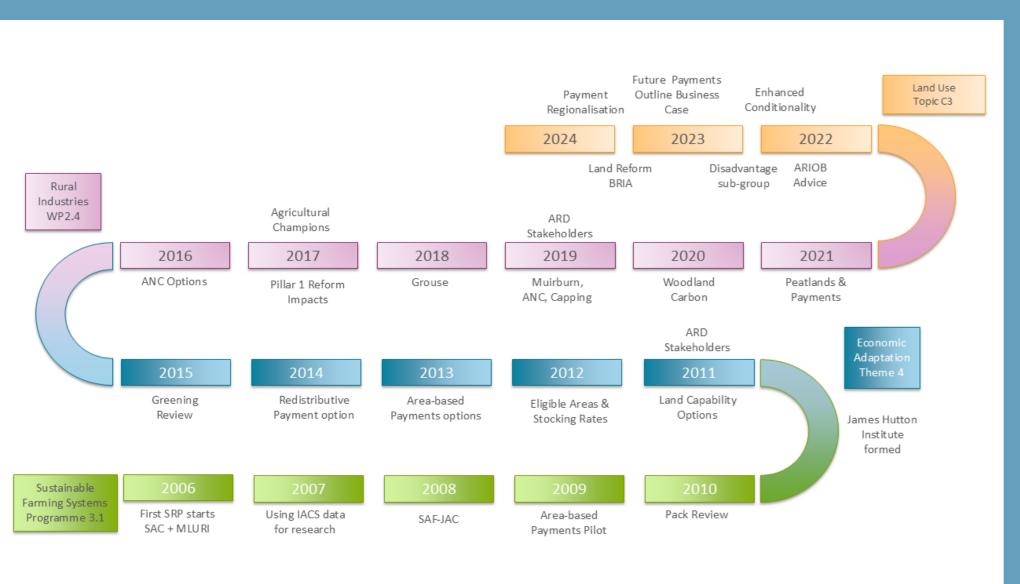




The analysis informed deliberations by RESAS analysts, RPID officials and policy teams before the Agriculture Reform Bill and by the Agricultural Reform Implementation Oversight Board. The research is also shaping the ARP Monitoring and Evaluation framework.



Timeline of policy-led projects in SRPs.



#### **Acknowledgements**

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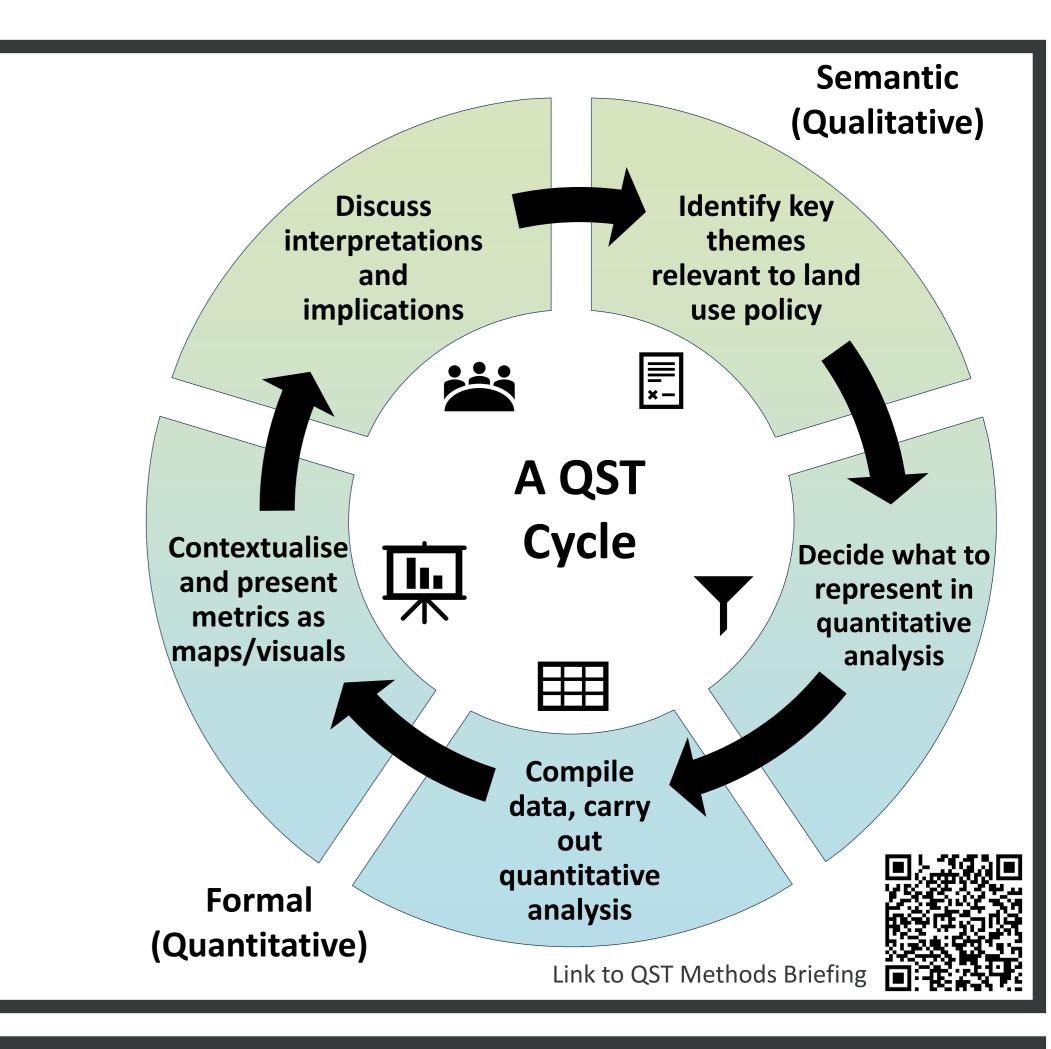
Land Use **Transformations** 

# **Quantitative Story Telling**

Quantitative Story Telling (QST) is a process designed to help researchers work with policy stakeholders to prompt and reframing of, reflection on, sustainability problems and to develop shared understanding of the issues even when conflicting stakeholder values mean Division that a consensus is challenging, see Saltelli and Giampietro 2017.



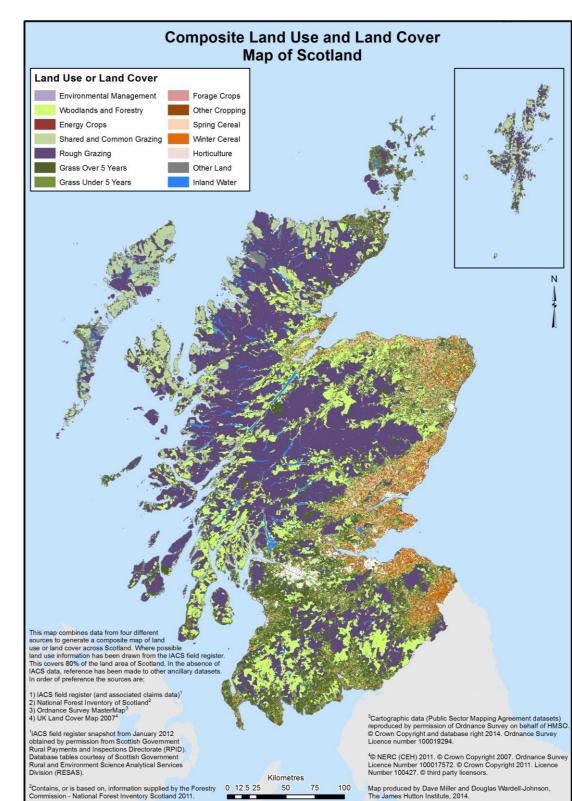
QST is a cyclical, iterative process that balances both "semantic" phases, working with stakeholders to understand how issues are framed what is included and excluded, and how evidence is interpreted - and "formal" phases, work to quantify these issues. QST typically incorporates data and expertise arising from different disciplinary perspectives (e.g., social, and natural sciences) as well as from stakeholders themselves.

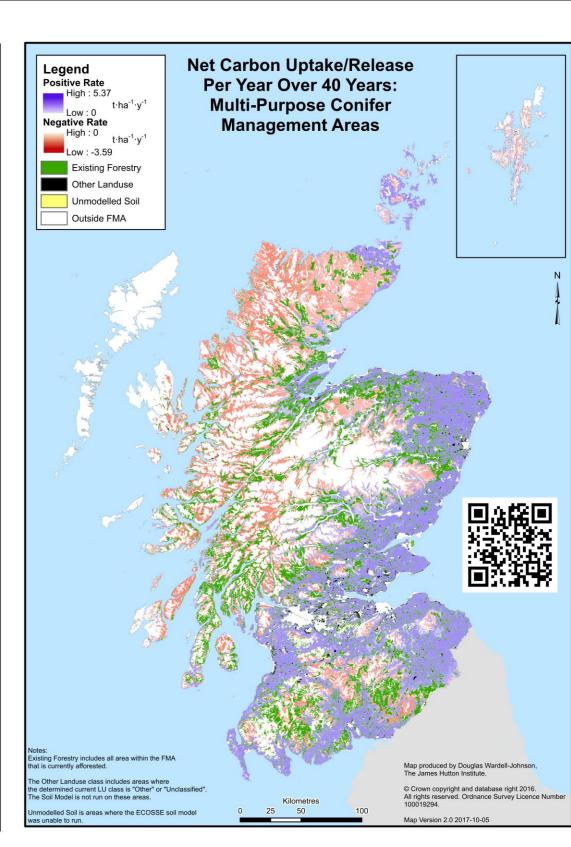


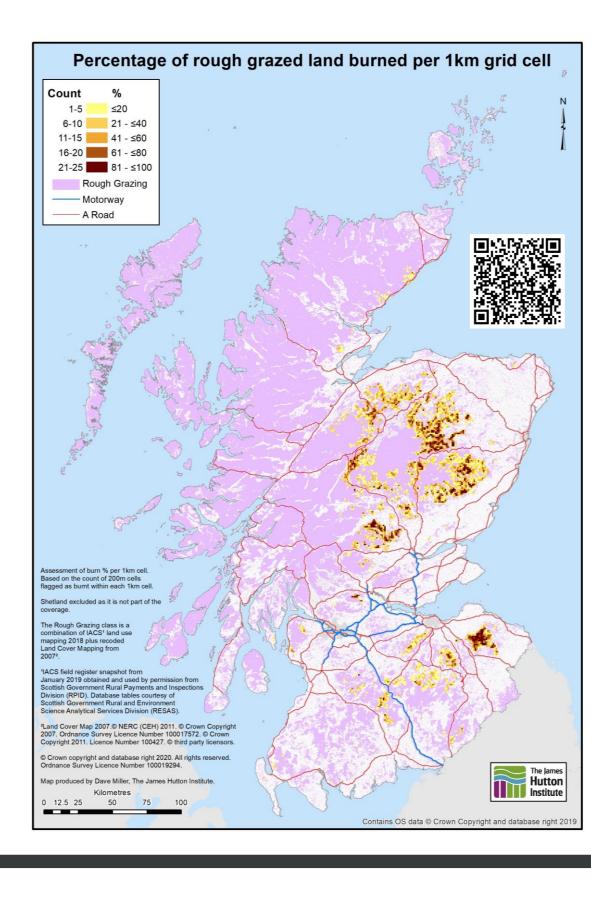
#### Results

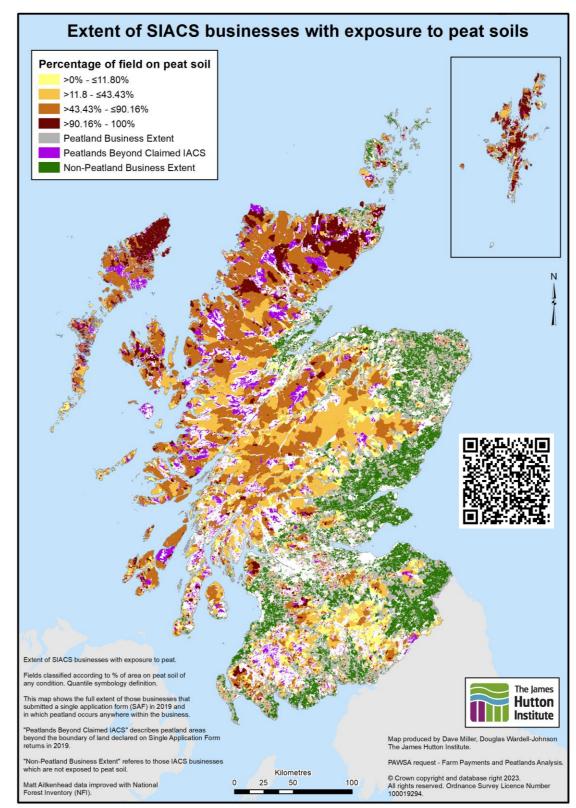
The maps integrate spatial biophysical and ScotGov administrative data to generate national coverage with field, holding or business granularity. The examples are:

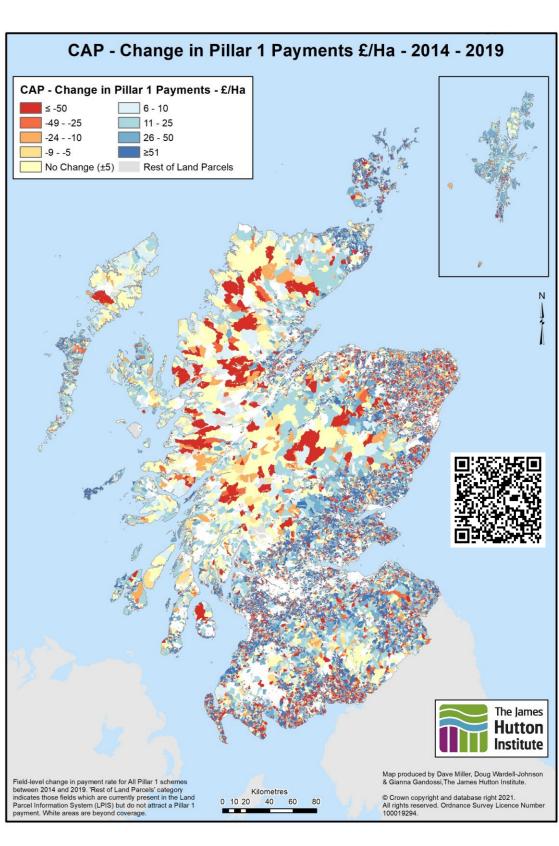
- 1. Land Use/Cover underpinned the design of the CAP payment regions.
- 2. Woodlands evaluates the C storage in potential of new woodlands.
- Grouse Moor Burn Intensity informed the ScotGov response to Wherrity Review.
- Peatland Exposure saw large land holdings contacted by Peatland Action
- Change in Payments assessed the impact of the 2015 CAP reforms.











# Monitoring and Evaluating QST

Two QST cycles have been studied. Primary data consisted of interviews with relevant stakeholders from ScotGov and Hutton. Secondary data were research reports, presentations, memos and meeting minutes. Events and people involved in QST cycles were tracked. The evaluation assessed process and impacts types: awareness, networks, capacity building, conceptual and instrumental impacts - see policy brief for results.

"I've never worked quite this closely in such an integrated way with an academic team. ... there's something really interesting and exciting about the idea and the way of doing it." (QST2 evaluation interview with ScotGov, August 2024).

**QST Policy Brief**