Integrated Catchment Solutions Programme

# Yorkshire landscape recovery – synthesising academic and practitioner expertise

Yorkshire Integrated Catchment Solutions Programme (iCASP), University of Leeds

DEFRA TEST & TRIAL #352

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Acronyms

| Acronym | Description |
|---|---|
| LR | Landscape Recovery |
| ELM | Environmental Land Management |
| iCASP | Integrated Catchment Solutions Program |
| UoL | University of Leeds |
| CSFF | Countryside Stewardship Facilitation Fund |
| NFM | Natural Flood Management |
| AES | Agri-environment scheme |
| BPS | Basic payment scheme |
| AONB | Area of Outstanding Natural Beauty |
| SSSI | Site of Scientific Interest |
| T&T | Test and Trial |

# Contents

# Executive Summary

This report details the work carried out within two groups of a total of 34 upland Yorkshire farmers with respect to their views regarding the Landscape Recovery scheme. The viewpoints of 22 stakeholders in organisations that span the agri-environment sector within Yorkshire and academics involved in the same field were also collected. Through structured interviews, workshops, questionnaires and quantitative social science methods this Test and Trial aimed at using these three sources of information and insights to answer 6 questions:

a. How to balance the delivery of national and local environmental priorities in selection and design of projects,
b. How to align Landscape Recovery projects to wider Defra initiatives such as Biodiversity Net Gain and Nature for Climate projects,
c. How to blend public and private finance in funding projects,
d. How to construct agreements for different land ownership structures e.g., individual and group agreements, tenants, commons,
e. How to construct long-term agreements (30+ years), potentially incorporating conservation covenants, to safeguard investments in land use change and associated environmental outcomes and
f. How to incentivise farmer participation and collaboration in landscape recovery projects and determine appropriate payment mechanisms.

Findings indicate a significant convergence of opinions across farmers, stakeholders and academics on what would constitute a barrier to apply for Landscape Recovery. Loss of income support such as the Basic Payment, lengthy contractual agreements, the aging farmer population in those areas, perceived lack of alignment between local and national goals, the requirement of additionality and managing small land parcels were presented by these groups as significant issues. Stakeholders interviewed highlighted the potential that private financing such as Biodiversity Net Gain can play in supporting farm income, as well as the need for improving clarity around net zero requirements and distribution of risk between farmers and investors. Although popular with stakeholders, farmers saw little potential in using Biodiversity Net Gain as it was perceived as applicable for “development-oriented” lowlands and not upland areas. A ‘Recovery-oriented’ scheme such as Landscape Recovery was perceived as non-beneficial for farmers with land in or in proximity to national parks. A number of stakeholders believed that the variability of funding and business opportunities available to a farm business depends too heavily on its geographical location. Stakeholders also saw the changing of focus from yield to net margins, financial recognition for providing environmental public goods, and new markets for revenue generation as the major opportunities for farmers.

In terms of areas of opportunity for farmers in the Yorkshire area the activities of peatland restoration, tree and shrub planting, reductions in grazing intensity were identified. Biodiversity protection was suggested to be supported by academics through rotational grazing, restoration or creation of bigger, better and more joined up semi-natural habitats and by protecting and enhancing vegetation along streams and riparian habitats. With respect to ecosystems that could offer both opportunities and require attention in the delivery of public goods three were the most prominent: blanket bog and unimproved grassland (in particular, hay meadows) were highlighted as the top habitats to protect in the region by stakeholders, whilst waterways were also highlighted as features on which upland farmers could have significant impacts. Interestingly, grassland/hay meadow restoration was not mentioned by academics.

In order to incentivise participation of farmers in Landscape Recovery and in the Environmental Land Management scheme, creating and maintaining a "cultural and social" capital was suggested. Well-functioning groups of farmers from neighbouring areas who have experience in knowledge exchange, farm visits and applications for group funding was considered as a key component to incentivise small scale upland farmers to apply in Landscape Recovery. The role of Countryside Stewardship Facilitation Funds in creating and preserving such groups of farmers was considered by farmers as important. Other practical aspects such making training and guidance should be eligible costs in Landscape Recovery, having low amounts of bureaucracy and payments covering income foregone were also identified as means of increasing participation. There also seems to be need for some organisation to coordinate LR as it appears too burdensome for farmers. It also would be beneficial from legal viewpoint to create a single contracted legal entity with the ability to subcontract farmers.

This report's findings highlight that upland areas provide important flows of downstream ecosystem services (e.g., flood mitigation, water quality). These wider societal benefits need to be acknowledged appropriately in terms of resource available and payment mechanisms. Farmers, stakeholders and academics agreed that enhancing farmers' understanding of the opportunities associated with the land and improving soil health could provide environmental public goods as well as ecosystem services. Finally, a need for more knowledge exchange on carbon markets and other private payments for ecosystem services schemes that can support farmers, especially in uplands is required.

## Key recommendations:

**Key recommendation 1:** Set up regional, independent academic-farmer knowledge exchange hubs for ELMs to ensure use of latest science in project designs, connections between national and local environmental priorities, and landscape-scale thinking in the national context.

**Key recommendation 2:** Include a national selection priority to LR about *maintaining* areas of high biodiversity value, as some areas find the 'recovery' focus too challenging yet they need the funding to keep biodiversity maintained.

**Key recommendation 3**: Consider strategic targeting of information about different Defra schemes to different types of land holdings/operations to maximise alignment, uptake and environmental benefit.

**Key recommendation 4:** Develop outreach and training opportunities for farmers and farmer groups to learn about private finance opportunities, especially those relevant to uplands farmers

**Key recommendation 5:** Develop standards for carbon calculators and codes, to increase integrity of the carbon market and for stakeholders (farmers and buyers) to gain confidence in those markets

**Key recommendation 6:** Using public funding to support soil health monitoring which would reduce cost of carbon market, rather than finance actions which compete and challenge additionality

**Key recommendation 7:** DEFRA to support the governance structure where LR schemes take effect through contracts between the funding body and a single legal entity and further contracts between the single legal entity and individual participants: e.g, providing templates for the constitution of the single legal entities and for the sub-contracts

**Key recommendation 8**: improve accessibility of the LR component for tenants, with one option being that landlords could only oppose/dispute participation if, for example, LR actions by the tenant would materially affect the value of the freehold reversion

**Key recommendation 9:** Create relevant contractual templates and provide finance and advice to support the development and operation of commons councils in England

**Key recommendation 10:** A way forward might be achieved if the contract between the funding body and the single legal entity is for 30+ years, while the sub-contracts with individual participants are sufficiently flexible to accommodate changes in both area and participation (although it may require considering in such a way as not to breach the head-contract)

**Key recommendation 11:** the LR component should operate in such a way that participation does not jeopardise Inheritance Tax Relief or, indeed, other tax reliefs

**Key recommendation 12:** Ensure true value of upland ecosystem service benefits to wider society are recognised in value of upland LR payments.

**Key recommendation 13:** Support generation of scientific evidence about how improvements in soil health impact upland farm businesses

**Key recommendation 14:** Create free, independent farm advisory services, perhaps aligned to academic-farmer KE hubs (recommendation 1)

**Key recommendation 15:** Support framework and development of farmer-led regional groups/clusters (e.g. as with CSFF)

# 1. Introduction

## 1.1 Overview of project

This Test and Trial (T&T) is delivered by the Yorkshire Integrated Catchment Solutions' (iCASP) team with support from leading academics at the University of Leeds (UoL) and professional partners (farm advisors, landowners, public and private organisations). After Brexit, the Sustainable Farming Incentive, Local Nature Recovery and Landscape Recovery (LR) Schemes are being introduced as components of the Environmental Land Management (ELM) Scheme across England to replace payments to farmers under the EU Common Agricultural Policy. This T&Ts project involves informed thinking on the development and design of the ELM Scheme, with focus on the LR component in which multi-actor collaboration and co-creation of bespoke intervention plans and contracts are key elements.

The main purposes of this T&T were to:

a) Engage with and "give a voice" to upland livestock farmers in two regions in Yorkshire, with a view to them considering a collaborative application to, and implementation of, a LR Scheme
b) Demonstrate a process whereby academic input on national priorities and scientific evidence is combined with local knowledge/expertise to balance national/local and LR priorities
c) Communicate academic knowledge on different forms of contract and on legal issues (building on previously funded research) and to corroborate these with stakeholders' views to inform LR advice and payment mechanisms.

In particular, it was possible for farmers to feedback opinions, drivers and perceptions of collaboratively applying to enter into a LR Scheme. The farmers who participated have a proven track record of collaborating and working together under the established Countryside Stewardship Facilitation Fund (CSFF).

Finally, this T&T examined how such groups of farmers could benefit at the LR application stage (setting of goals, identifying key and achievable priorities, aligning priorities with local capabilities and environmental needs etc.) from an academic-knowledge-translating organisation. The Yorkshire Integrated Catchment Solutions Programme (iCASP) takes academic knowledge and translates it into practice for the purposes of delivering and managing public goods at the catchment scale, with the aim of bridging the gap between stakeholders' expertise and capabilities and academic outputs.

## 1.2 Project Objectives

The objectives of this T&T are to:

a) Produce evidence-based statements as to the key activities upon which farmers in the South Pennies and Esk Valley should focus when considering an LR application, including biodiversity, carbon sequestration and general provisioning of public goods.
b) Scope the preferences, challenges and opinions that local farmers consider when applying and delivering a LR scheme, this being undertaken through face-to-face workshops with small- and medium-scale farmers who have prior experience of collaboration
c) Evaluate the potential for private finance to blend with government LR funding, taking into consideration local stakeholder views and any potential conflict between funding sources.

d) Explore some of the potential legal issues to be addressed for the purposes of a LR implementation contract (including any need for landlord's), by means of expert knowledge and face-to-face workshops.

The above points b) –d) were addressed primarily through workshops with two CSFF groups in the Humber/Yorkshire region: the South Pennine Farmers group and the Esk Valley group.

## 1.3 Study area

The chosen study area for the T&T was the Yorkshire region, and in particular its upland areas – the Pennines and North York Moors. Farming in the uplands of Northern England is limited by factors including climate, slope and topography. Most of the uplands in this region falls under the definition of "Least Favourable Area" (LFA). Within the LFA are the Severely Disadvantaged Areas (SDA) and the Disadvantaged Areas (DA). Two CSFF groups were chosen as case studies: one in the Esk valley (Esk valley group) and one in South Pennine (South Pennine Farmers group) area. The participating farmers came from upland areas where beef and sheep farming dominate, with there being a heavy reliance on subsidies and diversification. Importantly, the project includes areas both within and outside of National Parks and Areas of Outstanding Natural Beauty (AONB) and generates insights from farmers often under-represented in agricultural policy discussions and planning. Although there are similarities between the two groups, they are also distinct in terms of size and financial and development opportunities in the wider area. In the general Yorkshire area, 49% of people employed in farming are full time workers, with another 38% employed part-time. Of all farming activities in the general Yorkshire area, the activities undertaken by the two groups of CSFF members (grazing livestock) are by far the least profitable, generating on average £19.3k per year, lower than the England average.

The two case study CSFF groups also offered an opportunity to explore the generation of "cultural and social capital" in farming (Burton and Paragahawewa, 2011), as created through established and well-functioning groups of farmers (Riley et al., 2018), strengthened by the role of intermediaries and advisors (Prager, 2015; Riley et al., 2018). As more fully explained in the following sections, these two groups have been operating for several years, attracting an increasing number of participants and engaging in several nature recovery and enhancement projects steered by facilitators. They therefore provide valuable insights into how upland farmers may engage with LR Scheme in the future. The selection of case studies was informed by previous iCASP work with 10 CSFF groups in the region, as part of the Horizon 2020 CONSOLE project.

### 1.3.1 Esk Valley CSFF group

*Figure 1 Esk Valley location*

The Esk Valley CSFF network consists of upland and lowland farmers with common interests in improving water and soil quality within the Esk river catchment, which extends from the source of the river on the North York Moors to the sea at Whitby. The network covers 30% of the land area, comprising 10,514 hectares in both the upper and lower reaches. There are 59 members in this CSFF group. The area encompasses a range of land types, from heather moorland to arable fields. It includes areas comprised within the North York Moors National Park and areas classified as a Site of Specific Scientific Interest (SSSI), Special Area of Conservation (SAC) and Special Protection Areas (SPA). There is little woodland in the region, with less than 13% coverage, and what there is tends to be in linear strips. In the 1950/60s the Esk Valley was noted for its hay meadows; there are few left today. The majority of the waterbodies are under Good Ecological Status according

to the Water Framework Directive, while the stream pH is 6.0 for more than 68% of the Esk grasslands (compared to 53% for the whole of the U.K.). The CSFF aims to support efforts by the Esk Pearl Mussel and Salmon Recovery Project through improving the water quality in the river. For the Pearl Mussel, pristine water quality conditions are required. This needs collective action from farmers in both upper and lower reaches of the catchment to reduce pollution and sedimentation problems. There is a long history of collective action in the River Esk catchment seeking to improve its ecological status. In addition, as a salmon and trout river that has supported recreational fishing, previous action and funding has often been directed to improving habitat for those species, and the economic benefit that would provide.

*Figure 2 Esk Valley region and Zebra Pearl Muscles*

Along the entire length of the catchment the types of farms vary according to the land and immediate microclimates. In the upper reaches there are flocks of hill sheep and suckler beef herds. Lower down in the valley one finds dairy farms, whose number have reduced over recent decades leaving a smaller number of large dairy farms. There are also some small pockets of arable land in the valley and potatoes are typically grown. The farms tend to be small compared to the average size of farms in the Yorkshire Dales; the average farm size is about 100 hectares, although there are 8 big dairy farms in the CSFF group. The farms are a mixture of owner-occupied and tenanted operations across the whole catchment. Farms belonging to the group cover approximately 1/3 of the whole Esk catchment. Large numbers of the farmers are reliant upon farm subsidies and agri-environmental schemes to stay in operation, and many of the farmers also have second jobs.

*Figure 2 South Pennines location*

### 1.3.2 South Pennines CSFF group

The South Pennines Farmers CSFF network was set up in 2017 with the purpose of delivering key environmental benefits in the wider area, especially in light of the threat of extreme weather events, such as the damaging floods of 2015. Group members' land holdings are in the proximity of, but not included in, SPAs, SACs and the South Pennines Moor (an SSSI which are expected both to have beneficial impact on the environmental quality of services and to be benefited from improvements in land management. Given the relatively high altitude (approximately 400m above sea level) of many of the land holdings, farmers here were interested in moorland restoration and enhancement, grassland habitat creation, and enhancing and expanding riparian

habitats to benefit flood risk management and water quality. Farmers in the group do not engage in any organized forestry; and woodlands within their land holdings are currently unmanaged.

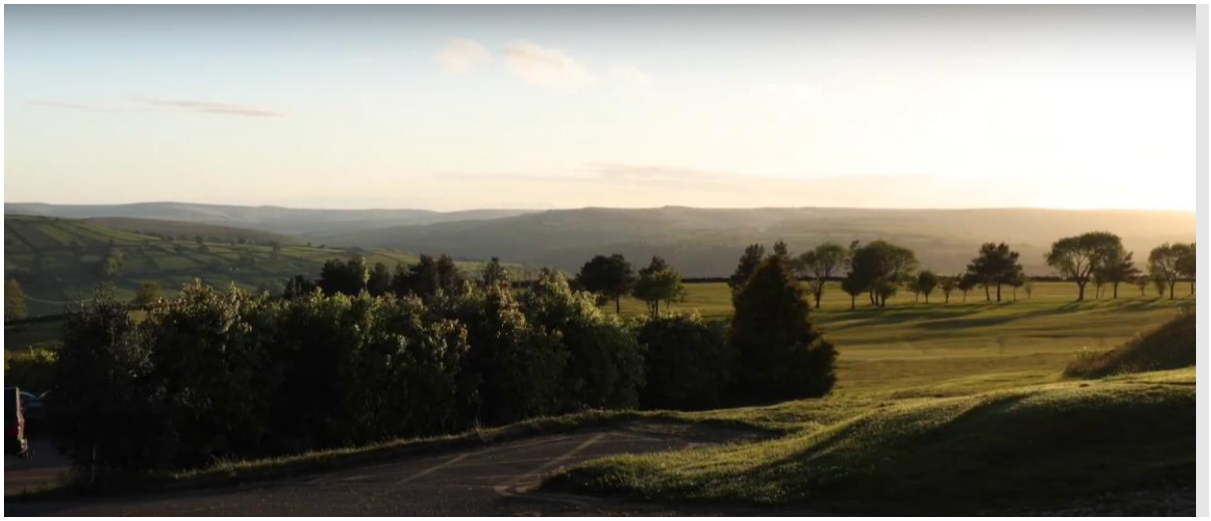

*Figure 3 South Pennine farming landscape*

The majority of the South Pennines CSFF network have small holdings (the average size being 30 hectares) and are involved in sheep and beef farming. There are no dairy farmers or arable/mixed farmers in the network. Because of the short growing season, most sheep are sold for fattening in lowland farms. Many farmers have been engaging in off-farm activities to supplement their farm income. Farmers in the area have been dependant for income on the Basic Payment Scheme and various agri-environment schemes with, on average, 75% of farm income coming from subsidies. The majority of the farms are not rented.

# 2. Methods

This T&T started in December 2021 and was completed in October 2022. The coronavirus pandemic affected hosting of in-person events, so the project team decided to delay the farmer workshops (section 2.2 and 2.3) so that they could be held in person. Similarly, the lambing season could have potentially impacted farmer attendance for in-person events.

## 2.1. Stakeholder interviews

We interviewed stakeholders in a structured manner from a range of national and regional organisations to gain their perspectives on LR in Yorkshire, and in particular, to explore local priorities, obstacles, opportunities and potential funding for upland farmers in the context of LR. The questions in the interview aimed to identify whether there was any consensus as to the situation farmers are currently facing, with a focus on those based within the uplands, as well as the activities that they should focus on to achieve national and regional environmental aims. The questions also aimed to identify stakeholder views on private finance and current ELMs schemes, in particular the LR scheme, and what areas future policy should focus on to facilitate the uptake and growth of these within the agricultural sector. Stakeholders were also asked about the support they provide to LR applications. The list of the 12 questions asked can be found in Annex 2.

Stakeholders interviewed were employed by organisations that span the agri-environment sector within Yorkshire. The role and respective employer of each stakeholder are listed in Table 1. The public bodies represented were from Yorkshire branches of the Environment Agency, Natural England and the Forestry commission as well as local councils and a Local Nature Partnership. These public bodies

are involved in administering public funding, developing tools and providing advice to farmers within the Yorkshire region in order to achieve national and locality-based environmental aims. The regional National Farmers Union advisor and Carter Jonas Land agents were included due to their roles in representing the farming community legally at the local and national level. Non-profit organisations listed were either represented by stakeholders with Yorkshire-focused roles, examples being The National Trust and The Rivers Trust, or were regional-based such as the White Rose Forest. The conservation-based interests of these organisations require a close working relationship with farmers within the Yorkshire region. This is also true for the utility company Yorkshire Water who have a significant commercial interest in the activity of farmers and are actively shaping agricultural practices within the region, e.g., the Beyond Nature Scheme. Stakeholders from carbon credit schemes were interviewed due to the potentially important role these Payments for Ecosystem Services and carbon credit/offsets schemes will have on Yorkshire Farmers. Finally, stakeholders from National Parks and Estates located within Yorkshire were interviewed as these were entities that managed land on a scale that fell within the scope of LR scheme and thus offered relevant viewpoints on this scheme. It is important to note that the views expressed by stakeholders are their own and do not reflect the position of their respective employer.

Stakeholders were contacted via email requesting a virtual online interview to discuss their perspectives on the current landscape within the agricultural sector, environmental priorities and the new funding streams for farmers. Of the 30 stakeholders contacted, 22 agreed to an interview. Prior to the interview, participants were provided with a list of twelve questions that outlined the structure of the interview though they were informed that these questions were a guide and there was no requirement for them to provide an answer if they felt they lacked an acceptable level of knowledge. Whilst the questions provided were used as a guide for all interviews a range of follow-up questions were often asked to stakeholders to expand upon their answers. The interview length ranged from 20-60 minutes with the majority being in the range of 50 minutes in length.

**Table 1. Role and employer of stakeholder organisations interviewed**

| | Stakeholder Role | Organisation |
|---|---|---|
| **1** | Community Engagement Officer | Aire Rivers Trust |
| **2** | Conservation Officer | Calderdale Metropolitan Borough Council |
| **3** | Land Agent | Carter Jonas |
| **4** | Co-owner | Denton Hall Estate |
| **5** | Agricultural Officer | Don Catchment Rivers Trust |
| **6** | Senior Environment Advisor | Environment Agency |
| **7** | Lead on Soil Carbon Code Pilot | Farming and wildlife advisory group |
| **8** | Business Development Advisor | Forestry Commission |
| **9** | Yorkshire Partnership & Expertise Manager | Forestry Commission |
| **10** | Co-founder | Green Farm Collective |

| | | |
|---|---|---|
| **11** | Peatland Code Coordinator | IUCN |
| **12** | Grassland-Fungi Project Officer | The National Trust |
| **13** | Humber River Basin Catchment Farming Coordinator | Natural England |
| **14** | Nature Recovery Senior Advisor - Yorkshire and North Lincolnshire | Natural England |
| **15** | Senior Environment and Land Use Advisor | National Farmers Union |
| **16** | Lead Officer | North Yorkshire & East Riding Local Nature Partnership (NYLNP) |
| **17** | Future Farming Policy Officer | North York Moors National Park |
| **18** | Land Agent | Raby Estate |
| **19** | Head of Woodland Creation | White Rose Forest |
| **20** | Proposal Coordinator | Wild Ingleborough |
| **21** | Senior Farm Conservation Officer | Yorkshire Dales National Park |
| **22** | Catchment Manager | Yorkshire Water |

## 2.2. Esk Valley workshop

A workshop took place in the Fox & Hounds Inn near Whitby on the 9th March 2022. The workshop attracted 19 participants: 17 were farmers, one was a member of a local government agency and another a farm advisor. Most of the participants are active members of farmer meetings in the general Whitby area or organised through the now-discontinued (but still active through other means) Esk valley CSFF group, which comprised of approximately 30 farmers.

At the start of the workshop, a questionnaire containing seven questions to participants and then at the end of the workshop we distributed a second questionnaire that comprised of 10 questions. The questions included Likert-scale type questions and open-ended questions and is reproduced in Annex 1. In the open-ended questions, participants were asked about types of agri-environment activities, their priorities regarding public good provisioning and how participants achieve farm production and delivery of public goods. These questions were repeated in both questionnaires. Fourteen complete pairs of questionnaires (referring to pre- and post-workshop collected questionnaires) were collected and analysed[1]. Before the workshop, the academics had been asked to list what they see as priorities for Landscape Recovery actions in each area, and these were presented by one of the academics who attended the workshop that at the start of the discussion. This was followed by an overview of the ELM and Landscape Recovery schemes which was given in this case by their CSFF coordinator. The remainder of the workshop took place as a free-form dialogue between the academic team, CSFF

[1] Questionnaire collection was fragmented with some participants not filling in the second questionnaire and with few not filling in them at all (also due to late arrivals). Some questions in the pre-workshop questionnaire were left unanswered from the farmers when some terms were not explained to them. For example, some questions in the pre-workshop questionnaire asked about ELMs Landscape Recovery but several farmers indicated that the workshop was the first time they heard about the term, and this was also one of their main reasons for attending and therefore more missing data exist.

coordinator and the farmers in the room. Before the post-workshop survey, a Q-methodology exercise was conducted by one the academics (see section 2.4).

*Figure 4 Esk Valley workshop held at the Fox and Hound Inn 09/03/22*

## 2.3. South Pennines workshop

A workshop for farmers in the South Pennines region took place on the 11th May 2023 at the Hebden Bridge Golf club and lasted for a total of 1.5 hours. It attracted 15 participants, all farmers and members of the South Pennine Farmers CSFF group and regular attendees of farmer meetings and discussions through the years. The CSFF group reached a total number of approximately 60 members before it was discontinued. Similar to the Esk valley CSFF group, the CSFF group of South Pennine farmers' legacy is the continued involvement of several of its members in aspects of land management in their area. Participants were presented with the same pre- and post-workshop questionnaire as in the Esk valley workshop. A member of the T&T academics team presented on ELM and LR, the priorities identified by the team, and led the free form dialogue with the participants. Before the post-workshop survey, a Q-methodology exercise was conducted by one the academics (see section 2.4).


*Figure 5 Dr Emmanouil Tyllianakis talking about the South Pennine workshop held 11/05/22, full video available on Youtube: https://www.youtube.com/watch?v=SdFH90E13dk*

## 2.4. Q-methodology

In order to understand better the preferences of farmers that participated in the two workshops, the social science method of Q-methodology (Stephenson, 1953) was used. Q-methodology enables grouping of survey participants in statistically distinct groups based on differences and similarities in their viewpoints on a certain topic and is seen increased use in socio-environmental research amongst farmers (Sneegas et al., 2021). This quantitative approach uses ranking of statements which are placed within a "Q-sort". Additionally, Q-methodology identifies statements that participants had a consensus opinion on; either positive or negative, and therefore, are not part of the aforementioned groups of statements. Overall, Q-methodology enables users to assess common drivers and characteristics of small samples of survey participants for a specific topic (Davies and Hodge, 2007). In this case, it allowed us to determine how opinions on contract, socio-economic, environmental and legal characteristics of Landscape Recovery could be grouped for Yorkshire upland farmers. An example of a completed Q-sort is available in Figure 7.

Q-methodology requires that the context around a specific topic (Doody et al., 2009) (in this case, detailing contract, socio-economic, environmental and legal characteristics of the Landscape Recovery scheme) to be presented in a series of statements. Such statements need to be representative of the variety of opinions around the topic to allow for agreement and disagreement around them. To this end, we came up with a list of 22 statements covering contract aspects (e.g., whether the 20-year length of Landscape Recovery is feasible for the participant, the availability of training as part of costs covered in the scheme, the requirement to collaborate with adjacent farms or whether compensation should cover income foregone etc.), environmental (e.g., scheme supporting climate change adaptation goals in the UK, scheme supporting wider delivery of public goods, etc.), socio-economic implications of the scheme (e.g., participation in the scheme reducing income uncertainty for farmers, scheme fitting different farm types and levels of income, scheme increasing the visibility and appreciation of farmers for delivering public goods etc.) and policy-oriented aspects (e.g., how well does the Landscape Recovery scheme fit with wider UK policy, how well the Landscape Recovery scheme fits with the participant's farm goals etc.). The 22 statements were then presented in the form of cards to participants and they were asked to place them in a grid (called "Q-grid") with statements placed in the extreme left being the ones that participants disagreed with most/did not interest them at all and those in the extreme right those with the opposite effect. The completed grids are then called "Q-sorts".

Q-grids were then analysed through factor analysis, using a varimax rotation, using the statistical software Stata (version 15.1) and the *qfactor* command (Akhtar-Danesh, 2018).

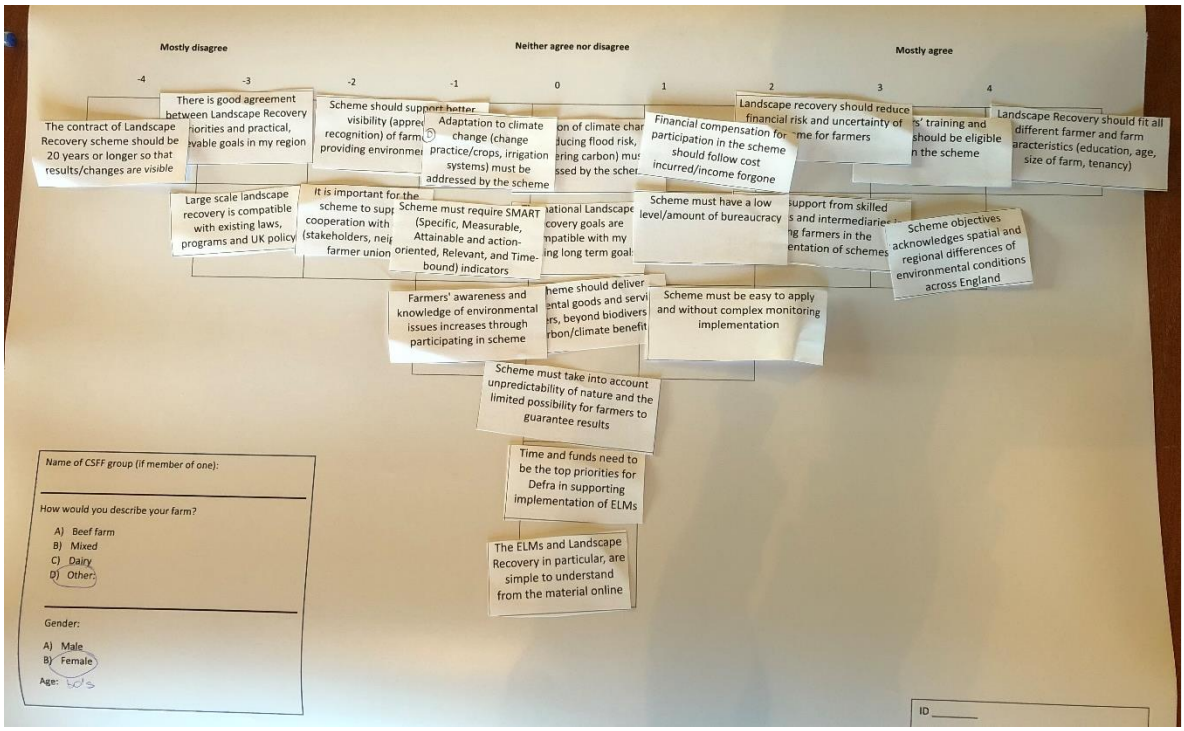


*Figure 6 Example of Q-Grid methodology used at farmer workshops*

## 2.5 Summaries from academics on participation in AES, blended finance and legal issues

Academic literature and lessons from previous research projects was summarised by researchers from the University of Leeds. This builds on projects including H2020 CONSOLE, Global Food Security funded Resilient Dairy Landscape, Natural Environment Investment Readiness Fund project UK Farm Soil Carbon Code, and iCASP project Soil Carbon Code.

The specific academic summaries include:

(a) Employing awareness-focused approaches to improve environmental outcomes (transition from awareness to behavioural change) (Martin-Ortega/ Chapman);

(b) Meta-analysis of attributes affecting agri-environmental schemes adoption based on the evidence from the EU (Tyllianakis/Martin-Ortega);

(c) CONSOLE discrete choice experiment on farmer's willingness to accept participation in agri-environmental schemes to delivery biodiversity/environmental features, including the effect of advice provision, collaboration requirements and other contract features (Tyllianakis/Martin-Ortega);

(d) Guidance and advice to farmers on blended finance (Ziv)

(e) Legal issues generated by the LR scheme (Cardwell);

Outputs of items (a) to (d) are provided as Annex 3 and refer to published (or in review) academic publications. Item (e) is provided as Annex 4.

# 3. Findings

This section contains evidence produced through three different sources: stakeholder interviews, farmer workshops, and Q-methodology. Further outputs from the academic team are found in Annex 3 and Annex 4.

## 3.1 Stakeholders' interviews

This section summarises the findings from the interviews of 22 regional and national stakeholders (Table 1). Some of the 12 questions are grouped together and we provide these below. See the full list in Annex 2:

**Q1 & 1B) Regional interest in LR scheme**

Stakeholder knowledge of potential and submitted proposals for the LR scheme were limited to regional bodies such as national parks, AONBs and charities such as the Wildlife Trust. Individual farmers had offered land within identified proposals, Wild Ingleborough being an example. However, there was no knowledge across the stakeholders of farmer-led proposals. Interviews took place between January and July 2022, with the first round of LR proposals closing in May 2022. It is therefore possible that those organizations have later learned of, and been involved with, the LR proposals of that round – but if so, their involvement with those proposals was short.

**Q1C) Resources available for prospective LR scheme proposals from stakeholders**

Over half of the stakeholders interviewed (57%), had the available resources to provide advice to prospective LR scheme proposals (albeit as mentioned above they were not asked for it). The conditions of this advice varied depending on organization. Government and civil bodies were able to offer advice on a free ad-hoc basis. Advice provided by private sector bodies such as land agents and the NFU was offered through paid consultancy or on the expectation the advice having substantial weight within the proposal respectively.

**Q2) Challenges facing Yorkshire farmers**

Stakeholders highlighted a range of challenges currently facing farmers that could be classed under four themes; economic, societal, scheme-related and climate-related.

- Economic: Loss of Basic Payment and the uncertainty surrounding ELMs were the most common statements provided by stakeholders under this theme. Loss of basic payment was highlighted as particularly acute for upland farmers who are looking at an 80% revenue loss. One stakeholder highlighted that the reliance of upland farmers on BPS results in these farmers being worse off under an income-forgone model such as ELMs. Other factors highlighted by stakeholders may compound this issue in the near future, such as the rising price of inputs and market variability for farm goods. The main issue brought about by uncertainty surrounding ELMs was an inability to financially model business changes under the new schemes and therefore plan for the future. Areas that were highlighted for improved clarity were payment rates and the ability to stack agri-environment schemes and carbon markets. Stakeholders also suggested that the current complexity of the emerging funding landscape could be disproportionately harder for small upland farms to navigate due to their smaller resource pool.
- Societal: An aging work force, public perception and poor communication between government bodies and farmers were common societal issues. Competition with large

organisations for land purchasing and reclamation of tenanted land by landowners are two factors brought up by stakeholders that could be limiting opportunities for young farmers. The poor public perception of farming, as a driver of many environmental issues, has generated a hesitancy amongst farmers to engage with the public. Stakeholders highlighted that this perpetuates the poor understanding of the positive impacts of farming. Several stakeholders believed that there is a poor knowledge exchange between urban centres (where policy is made) and the rural areas (where it is implemented). An example provided was the perceived exclusion of farmers from policy decisions.

- Schemes: Poor distinction between farming environments, lack of trust and funding requirements were challenges associated with the new ELM schemes. A number of stakeholders believed that the variability of funding and business opportunities available to a farm business depends too heavily on its geographical location. The lack of trust identified by stakeholders focused on the fate of land entered into an ELMs contract, and whether the land would qualify under a protected category at the end of the contract. The concept of conservation covenants strengthen this fear and generate hesitancy around ELMs, and specifically LR. Funding requirements stakeholders perceived as challenging were additionality to land already in good environmental health, and the incentivized practices requiring significant investment. Investment is an issue for upland farmers due to the majority being small businesses with small resources/savings.
- Climate: The changing weather patterns resulting in longer drier periods and heavier rainfall events were identified as challenges farmers are facing with increasing frequently.

**Q3) Opportunities for Yorkshire farmers**

Stakeholders felt there were a number of opportunities farmers could engage with, and they can be categorised under four themes: economic, business-related, societal and scheme-related.

*Economic:* Stakeholders saw the changing of focus from yield to net margins, financial recognition for providing environmental public goods, and new markets for revenue generation as the major opportunities for farmers. Shifting the focus of the farm business to that of margins could enhance farm efficiency thus reducing input costs. Recognition of environmental public goods through financial rewards was identified as an opportunity in which farmers will be rewarded for practices they might have performed anyway. This ties in with the final major opportunity which was the growing number of private-financed Payment for Ecosystem Services schemes (PES) being developed and offered at both the local and national level. Depending on their implementation, the variety of land-use schemes introduced in the ELMs may allow farmers to be price-makers instead of price takers. Notably, the majority of stakeholders stated that clear guidance is required for these opportunities (to develop as it allows sufficient planning.

*Business*: Greater variety of business opportunities, public desire for local production and collaboration are the key areas identified from stakeholders' comments surrounding this theme. The variety of funding schemes available to farmers provides an opportunity to diversify their food production business rather than intensify. One stakeholder identified that diversification of the farm business into environmental avenues could translate to a premium on their produce. This aligns with stakeholders seeing the public interest in local food production as an opportunity, the phrase 'Yorkshire Brand' was brought up in multiple interviews and was referring to the strong food and drinks industry developed within Yorkshire that farmers within the region could utilise. This also ties strongly with the final opportunity for farmers which is collaboration. Multiple stakeholders identified that collaboration of farmers through organisations such as CSFF groups or farmer clusters could allow

the variety of production systems within the region to benefit the individual farmer. This could be seen through distribution of costs, resource sharing and more robust investment opportunities.

*Societal:* Growing recognition of the positive societal impact of certain agricultural practices, such as maintaining the cultural landscape and delivery of agri-environmental public goods was highlighted as a key opportunity from multiple stakeholders.

*Schemes:* A framework was provided through T&Ts of how farmers' viewpoints could be used to shape policy. Stakeholders commented that this inclusion in policy design could lead farmers maintaining environmentally-friendly farming practices even after funding is ended as they would see the wider benefits in such practices.

**Q4 & 7) Key activities for farmers to focus on for conserving local biodiversity and deliver public environmental goods**

Stakeholders' responses with respect to actions to conserve biodiversity were varied but most could be loosely categorized under the areas of restoration and maintenance of good soil health, land owners enhancing their understanding of the habitats on their land, nature-based solutions and expanding natural habitat coverage and connectivity. Soil health, including peatland, was the most common activity suggested by stakeholders with them outlining the multiple ecosystem services this provides such as enhancing water quality and performing carbon sequestration as well as supporting high biodiversity. Nature-based solutions were highlighted as preferable interventions due to these allowing the system to regulate itself with minimal human intervention.

Three key areas were identified by stakeholders on how farmers could deliver public goods on their farm: (i) farmers improving their understanding of their business and land to allow identification of economically viable activities, (ii) improving soil health and (iii) increase infiltration rates and water holding capacity of land. Stakeholders who recommended gaining a greater business understanding an sight into farmers businesses highlighted that impact of the activity is affected by how sustainable it is in economic terms. This improved understanding of their land and business could also be utilised by farmers to improve environmental farm efficiency thus reducing pollution. Improving soil health, which included peatland health, was identified by stakeholders as an action that could impact multiple areas of public interest such as carbon sequestration, water retention and improved water quality. One interviewee highlighted that hydrological restoration is an area in which upland farmers could have a significant impact on. This could be achieved through improvements in soil health but also leaky dams or weirs as part of Natural Flood Management schemes.

**Q5) Knowledge of funding opportunities, future or present, within the Yorkshire Region that could support ELMs funding**

Funding opportunities within the Yorkshire region that were highlighted by stakeholders could be categorized as government, private and NGO derived funds. Revenue streams such as biodiversity net gain (BNG) and carbon credit schemes were the most frequently mentioned by stakeholders. However, multiple stakeholders highlighted that BNG, in particular, may not be a significant source of income to upland farmers due to the proximity rule, stating that BNG credits should be prioritized within close distance to development, whilst most expected development will be in the lowlands and far from uplands farms. Knowledge of government schemes outside of ELMs was limited to schemes such as natural flood management and reverse auction opportunities provided by local authorities and NGOs.

**Q6**) Opinions on the role for private finance for supplementing ELM schemes

Stakeholders' opinions on the role for private finance as an agricultural revenue stream centred around three themes: future of carbon credits market, carbon markets and contracts.

- Carbon credits market: There was a marginal consensus amongst stakeholders that private finance could be an adequate source of income for farm businesses. A growing interest in private investment was noted from stakeholders within farming organisations, a carbon-credit scheme and an estate within the region. Potential benefits of private finance identified by stakeholders included increasing land value through market demand, agreements being largely independent of national politics and the ability of farmers to rely on private finance contracts financially i.e. bank loan applications. The areas for concern highlighted by stakeholders were the perceived complexity of schemes and a possible lack of understanding of the investment opportunities available as well as how to access them. A related observation made by multiple stakeholders was an economy of scale associated with the developing market with smaller land owners usually lacking the resources to experiment within the market and often being seen as higher risk investments by private finance. Solutions to these issues that were proposed and supported by stakeholders were intermediaries between farmers and investors and a GIS mapping system. Intermediaries could aid land owners in identifying investment opportunities as well as grouping smaller farmers together into packages that are more appealing to investors. Stakeholders agreed that a GIS mapping system i.e Rural Payment Agency, could allow farmers to see potential investment opportunities on their holding as well as aid in the financial modelling of change of practice vs business as usual.

- Government regulation of carbon markets: With regards to carbon markets, the consensus focused on government regulation of the market, in particular improving clarity on the net zero requirements of farms who intend to sell carbon credits as well as the regulation of carbon calculators. The majority of stakeholders confirmed an uncertainty within the agricultural sector around future government requirements for selling carbon; this is generating hesitancy in engaging with the carbon market. Further hesitancy in engagement is driven by the lack of a government carbon calculator certification, which, in turn, causes uncertainty around the validity of schemes.

- Contracts: The comments surrounding contracts focused on the disparity in resources between investors and farmers, distribution of risk and flexibility within contracts. The most common statement regarding contracts focused on the observation that farmers were uncomfortable entering into agreements directly with large organizations due to the disparity in resources to develop and enforce contractual agreements. Stakeholders also identified that the majority of risk surrounding investment failure falls on the farmer and that this was unlikely to change due to the farmer being responsible for completion of the work. Insurance schemes for these contracts were a suggestion to protect the farmer from failure to meet agreement criteria due to factors out of their control. Stakeholders also highlighted that grouping of land through trusted intermediaries could reduce the risk for both parties as the individual piece of land would make up a smaller portion of the total investment. It was also suggested that short term contract length could enhance market evolution as it allows flexibility for both parties, one suggestion as to how this could be achieved with regards to the carbon market was the accreditation of certain crops for carbon sequestration. Stakeholders highlighted that short-term contracts may provide a smoother transition for farmers into this developing market.

**Q7B) Opinions on ELMs**

Stakeholders' opinions on ELMs focused on five areas: ELMs aims, design, payments, contracts and communication.

- Aims of ELMs: A key opinion under this theme was that there should be flexibility within ELMs so that national aims can be partially aligned with what the farmer would like to achieve with their business. The proposed LR scheme was highlighted as a step in the right direction, as the grant application step include a "bottom-up" plan of interventions proposed by project developers. Another point made by several stakeholders that aligns with the previous point was that there is currently too much of a re-wilding focus to ELMs, which misses the opportunities around restructuring the farming system to be regenerative, whilst providing resources to the farm business to do this. This rewilding focus was also indicated by other stakeholder comments - such as ELMs seemed to lack information on how, if farmers would enrol in them, would benefit farm businesses as well as provide public goods. Furthermore, current ELMs do not feature landscape heritage, beauty and public engagement as predominant funding requirements.

- Scheme design: A small number of interviewees believed that ELMs is well suited to addressing local environmental aims such as flood mitigation and biodiversity loss. However, a prominent opinion expressed by stakeholders was that ELMs needed to have more of a locally driven approach to scheme implementation. Stakeholders highlighted that there are multiple strategies happening within any geospatial area and that a locally driven approach is needed to integrate ELMs with these. This would also address a minor point made during the interviews by several stakeholders that the broad-brush approach of national policy does not distinguish enough between upland and lowland farming, and the differing opportunities and challenges they have. Stakeholders stressed that there must be mechanisms for people on the ground to impact policy for local delivery to work. Several stakeholders stated that permanent land-use changes (e.g. planting of new woodlands) relies on "economy of scale" and thus are not viable for smaller businesses; this results in a funding disparity between large and small landowners. Stakeholders representing estates suggested that the LR scheme is not an option to be put forward to tenant farmers as it would be an area outside the scope of their tenancy agreement. A final point relating to scheme design was the absence of a clear system for evaluating ecosystem services, thus preventing effective impact comparison of different proposals.

- Payments: A common view from stakeholders was that the requirement of additionality in ELMs does not reward good farming practices performed prior to ELMs and thus end up promoting environmental and land degradation does not incentivise good practice. Payment by outcomes was seen as a payment mechanism that could recognize maintenance of good agricultural practices that would be overlooked by schemes focusing on additionality. Another common view was that current ELMs payments are not high enough to incentivize farmers to forgone (marginally) productive land as part of ELMs agreement. An important comment relating to this, made by stakeholders representing estates, was that placing land into an ELMs scheme may impact upon the capital value of the entire holding and thus either the way land

is valued needs to be changed or ELMs payments need to compensate for that.

- Contracts: Stakeholders representing estates highlighted that LR scheme contracts should be a minimum of 25 years to achieve landscape wide change. However, the majority of stakeholders agreed that small land owners would be hesitant to enter their land into such a long agreement. Stakeholders also highlighted that LR scheme contracts are likely to be a multi-generational agreement due to their length and the aging population of farmers. Stakeholders agreed that flexibility within the contract will be essential for the LR scheme to be an attractive scheme for small-scale landowners. This flexibility was also attractive to stakeholders representing estates who did not want to be tied into bad practices for multiple decades.

- Communication: Stakeholders representing farmer groups commented that there is a lack of clarity surrounding ELMs. This has a significant impact when it comes to uptake of schemes that may result in permanent land-use change. Stakeholders suggested that improving communication on ELMs would not only help land owners, but would also facilitate cross-regional projects. This collaboration on a larger scale, this is important at landscape scale as areas managed are impacted by neighbouring regions outside of local control. Further suggestions relating to communication around ELMs would be regular feedback on land-owner progress in relation to ELMs aims and where further changes could be made, focus within ELMs to encourage farmer-led groups, and improving communication to better the relationship with farmers.

**Q8) Priorities regarding priority habitats within the Yorkshire Region**

Stakeholders had diverging views on what farmers' priorities should be with regards to priority habitats in the Yorkshire region - with the majority being split between three areas: blanket bog, unimproved grassland and woodland.

**Q9) Priorities regarding streams and rivers within the Yorkshire Region**

The majority of stakeholders identified improving water quality as a key priority for streams and rivers within the region with improvements in soil health and reducing inputs being two areas to focus on. The second most common answer was removing barriers for migrating fish.

## 3.2 Landscape priorities in the upland Yorkshire region

The academic team were tasked with providing evidence-based statements about the likely impact of plausible land-use changes in the Yorkshire region on different types of ecosystem services and habitats. The purpose of these statements was to provide, in a condensed form, local and regional priorities for farmers, given the existing policy, land management and environmental challenges they face while considering how LR might fit within those priorities. The list of priorities are listed below.

First, regarding activities aimed at carbon sequestration, the following three actions were suggested for the Esk valley and South Pennine areas:

a) Peatland restoration
b) Plant trees and shrubs
c) Change grassland management and reduce grazing intensity

Secondly, the following actions were suggested in order to achieve biodiversity protection for the Esk valley and South Pennine areas:

a) Grazing lands: rotational grazing (especially of un- or semi-improved pastures)
b) Restoration/creation of semi-natural habitats ("*bigger, better and more joined up*")
c) Protecting & enhancing vegetation along streams and riparian habitats (especially upper Esk valley, around and upstream of current pearl mussel populations)

Thirdly, with respect to wider public goods provisioning for the Esk valley and South Pennine areas:

a) Riparian vegetation/leaky dams/NFM: can moderate flows and reduce flood risk.
b) Rougher and more dense grassland vegetation at the soil surface will reduce flood peaks
c) Woodland/species-rich grasslands: typical habitats of the North York Moors and Cleveland Hills Landscape Character Area, makes Esk Valley attractive for walkers, cycling, recreation
d) Hedges/tree shelter belts: provide demarcation and visual contrast between fields

The above statements reflect the variety of available options for local, upland farmers, the existing land management practices in these areas and the most recent science advances (e.g. on upland grassland management and its role in NFM). Additionally, the prescribed activities are considered to have additional beneficial effects if employed from several farmers in adjacent land holdings and in a coordinated fashion. Interestingly, academic knowledge and stakeholder-identified priorities are in agreement regarding priority activities and habitats (see Q8 in previous section). As priorities, these prescribed actions could fit broadly under any of the three ELM schemes. Priority actions mentioned by stakeholders but not from academics refer to primarily grassland/hay meadow restoration and saltmarsh protection.

## 3.3 Esk valley workshop

### 3.3.1 Discussion findings and insights

During the workshop participants were presented with a summary of LR goals, timelines and expected outcomes and were offered the opportunity to discuss and ask questions of iCASP academics and researchers. The paragraphs below summarise some of the most important discussion points.

There was a general curiosity around LR and its implementation, with respect to the specific environmental and farm conditions in the wider Esk valley. Therefore, the workshop covered both the reaction of the participants to the stated goals and design of LR, and thinking of potential avenues of implementing some of the requirements in their own locally.

One of the main concerns voiced was the type of actions that would fit within LR. This referred to the Esk valley being in general good environmental and ecological status (given being in or in proximity to a National Park) in terms of soil and water health. Therefore, participants inquired whether LR intends to pay for projects that achieve considerable changes/improvements in the land. Farmers perception was that enrolling in ELM schemes would not benefit those farming in or close to national parks. Another issue raised, of a financial nature, was the increased level of fixed/operating costs (as well as inflation) for farmers and whether LR payments would reflect the recent (or potential future) increases in costs. Another issue was the proposed 20-year contract length for LR rendering such a decision into a cross-generational issue. Given that the average age of the Esk valley CSFF group participants is 59 such a decision appears rather important for both older and younger farmers. The 20-year length was also considered to complicate issues between tenants and landlords regarding decision-making for the farm. Finally, participants expressed their feeling that LR seems designed for land-managing

organisations such as the RSPB and The National Trust instead of farmers (landlords or tenants) as such organisations appear to have a much more certain long-term plan and appear to be in a much better position to absorb LR payments (also given the size of the land they manage).

Participants of the workshop engaged significantly with the idea of private financing as a requirement of LR. This was not seen as an obstacle but more of an opportunity as they feel that the environmental benefits of their land management, were cascading to other organisations such as Yorkshire Water. An idea was proposed as a potential avenue to explore within an application for LR of using Yorkshire Water, as a partner in as a partner in a LR application.

Overall, participants felt they would require more information before considering whether to apply for a LR scheme. The total land area managed between participants and/or the wider CSFF group in the Esk valley was considered large enough to make a LR application, but clarity is required regarding the type of activities LR would fund and the level and type of compensation it would provide. However, the length of the contract was seen a major obstacle when considering applying for LR. That said, there was interest in working together collectively at scale on the Esk, albeit not as part of a LR scheme which was little understood.

### 3.3.1 Pre-and post-workshop survey

Comparing the responses to questions appearing both in the pre and post-workshop questionnaires, there was a very small increase in positive responses. In detail, participants' strength of feeling towards the benefit of the involvement of academics and use of expert knowledge in a LR application increased after attending the workshop. Similarly, participants felt more strongly after the workshop that natural science evidence would be beneficial if they were to apply for LR. On the other hand, in the pre-workshop survey participants stated they were not familiar with private financing options that could be used in a LR application, and this did not change after attending the workshop. Finally, after attending the workshop, participants stated they were less likely to collaborate with neighbouring farmers in a LR application, a considerable difference with how much they indicated they were willing to do so before the workshop.

Participants' priorities and future goals were not influenced by their participation in the workshop. Their priorities mainly referred to them having a financially viable business/farm and general income security. Regarding the public goods they are interested in/committed to delivering, these reflect the general area's priorities (water quality provisioning, grassland maintenance and carbon sequestration). Participants did not elaborate on how they co-deliver food production and public goods, they simply stated that they try to do both.

Regarding the quality and outcomes of the workshop, participants stated that "a potential application to LR with an academic organisation as coordinator such as iCASP" would be helpful (this question scored highest of all questions in the post-workshop questionnaire). The presence of the academics in the workshop was considered as beneficial and helpful in future plans farmers have about applying for LR.

### 3.3.2 Sorting of Q-set statements

The following statements were the ones the workshop participants mostly identified with (starting with the most agreed with/desired statements all the way to less agreed with/desired ones):

1. Farmers' training and guidance should be eligible costs in the scheme

2. The scheme should deliver environmental goods and services by farmers, beyond biodiversity and carbon/climate benefits
3. The scheme must have a low level/amount of bureaucracy
4. Allow support from skilled authorities and intermediaries in aiding farmers in the implementation of schemes
5. Financial compensation for participation in the scheme should follow cost incurred/income forgone

The selection of these statements corresponds with previous evidence (Tyllianakis and Martin-Ortega, 2021) that farmers require support (see statement 1 and 4), low bureaucratic burden (statement 3) and adequate compensation (see statement 5).

The statements the farmers least desire/agreed with are presented below (less preferred/desired appearing at the end):

1. Landscape Recovery should fit all different farmer and farm characteristics: education, age, size of farm, tenancy
2. Adaptation to climate change (e.g. change practice/crops, irrigation systems) must be addressed by the scheme
3. Mitigation of climate change (e.g. reducing flood risk, sequestering carbon) must be addressed by the scheme
4. Scheme must take into account unpredictability of nature and the limited possibility for farmers to guarantee results
5. Scheme objectives acknowledge spatial and regional differences of environmental conditions across England
6. The contract of the Landscape Recovery scheme should be 20 years or longer as it takes a long time for results to be observed after implementation of the actions.

The suggested LR agreement/contract length of 20 years is strongly opposed to. Participants were not as concerned with LR accounting for climate unpredictability or different types of farmers and farming practices; farmers appear to be more concerned with LR working for them and for their needs.

The above rankings were based on the 14 usable Q-sorts of the 22 statements presented to the participants of the South Pennines workshop.

## 3.4 South Pennines workshop

### 3.4.1 Discussion findings and insights

During the workshop, participants were presented with a summary of LR goals, timelines and expected outcomes and were offered the opportunity to discuss and ask questions to iCASP academics and researchers. The paragraphs below summarise some of the most important discussion points.

There was a noticeable interest for other ELM schemes such as the Sustainable Farming Initiative (SFI) trial for which several participants were already considering applying for and Local Nature Recovery (LNR) but a general lack of knowledge around LR. Therefore, the workshop gravitated towards informing participants and scoping their initial reaction to the goals of LR.

Participants were primarily preoccupied with the responses related to the difficulties that enrolling in LR would entail for them as individual farmers and as a group. Issues raised referred to the stated divergence between local goals and LR goals, such as the ongoing local Twite habitat protection. Lack of guidance, unless coming from specialist farmer advisors, seemed to be perceived as a major obstacle in even considering applying for LR. This was exacerbated by lack of clarity for the level of payments offered by LR, as well as lack of clarity for specific public goods LR wants to focus on (for example, whether wildlife corridor creation and maintenance is considered to be within LR's targets). Other obstacles highlighted were the size of the combined holdings (members of the CSFF group had between them 1000 hectares of land) and the average age of farmers (average age in the CSFF group is around 67 years, making the 20-year commitment unattainable without inter-generational considerations). Somewhat in contrast to the Esk workshop, the requirement to procure private finance as part of the application was perceived as daunting by participants, given the legal implications of such an agreement. Finally, land ownership was acknowledged as a complicating factor with most workshop participants being both owners and tenants of their land.

Overall, the LR scheme appeared to not fit pre-established public good provisioning goals for participants. Concerns were voiced that LR scheme details appears to be too "top-down" designed, with farmers given little to no voice. In particular, according to participants, upland sheep and cattle farmers are not offered viable options within any of the ELM schemes.

### 3.4.2 Pre-and post-workshop survey

Similar to the Esk valley workshop, small differences were observed in the average scores participants placed on some questions in the pre- and post-workshop questionnaire. In detail, participants found the presence of academics and their explanations for the goals of Landscape Recovery very helpful and that increased marginally in the post workshop questionnaire. Similar to the Esk valley farmers, South Pennine workshop participants stated a very low level of knowledge of private financing options and that did not improve after the workshop. Requiring scientific-based evidence and collaborating with other farmers within a LR application were slightly lower in the post-workshop questionnaires.

The focus of the farmers appeared to be on flooding (echoing the goals of this group of farmers when creating the CSFF group where most of them were members of since 2016) and biodiversity protection. Financial viability of their farms was also quite prominent as a priority for achieving protection in the area (reflecting issues of land abandonment in the area and sub-optimal land management of land due to the need for out-of-farm income to support farm activities).

For the specific post-workshop questions, participants found the need for academic and advisory help during the 1st application or development phase of LR, as well as the workshop's impact for a potential future application for LR as very important, similar to the desirability for a format with an academic organisation as coordinator of a LR application. The use of the Q-methodology was deemed neither helpful nor unhelpful.

### 3.4.3 Sorting of Q-set statements

The following statements were the ones the workshop participants mostly identified with (starting with the most agreed with/desired statements all the way to less agreed with/desired ones):

1. Landscape recovery should reduce financial risk and uncertainty of income for farmers
2. The scheme must have a low level/amount of bureaucracy
3. Financial compensation for participation in the scheme should follow cost incurred/income forgone
4. Farmers' training and guidance should be eligible cost in the scheme

5. Scheme must be easy to apply and without complex monitoring implementation

Several similarities between the two groups are observed, with contract-related statements being the ones that are of more important to participants such as level of bureaucracy, compensation levels and training.

The statements the farmers least desire/agreed with are presented below (less preferred/desired appearing at the end):

1. Large-scale landscape recovery is compatible with existing laws, programs and UK policy
2. It is important for the scheme to support cooperation with others (stakeholders, neighbours, farmer unions)
3. Adaptation to climate change (change practice/crops, irrigation systems) must be addressed by the scheme
4. The contract of Landscape Recovery scheme should be 20 years or longer so that results/changes are visible

As with the ”most agreed with” statements, some similarities exist between the two groups (for example, the length of LR is deemed undesirable). Nevertheless, South Pennine workshop participants seemed to not want collaboration with others as part of LR (a somehow suprising finding as such farmers have been engaged in collaborative activities in the past 5 years in terms of funding aquisition and advice) nor to want climate change adaptation to be delivered through LR.

The above rankings were based on the 11 usable Q-sorts of the 22 statements presented to the participants of the South Pennines workshop.

## 3.5 Q-methodology results

In total, 23 Q-sorts were collected from the two workshops. After removing incomplete grids (grids where not all statements were placed within the grid, i.e. statements were missing) or grids that participants completed in a collaborative manner, 16 Q-sorts were retained for further statistical analysis. Given the small sample size, no distinctions can be made between grids from the two different locations.

Results for a two-viewpoint solution can be seen in Table 2 below. The higher the value participants in a factor placed on a statement, the higher the reported value in the table below. Each viewpoint included 15 statements and the mean value (reflecting how important or less important a statement is) of each statement. Each viewpoint had an equal number of farmers that it described the most (7 farmers, with 2 extra farmers not belonging in either viewpoint). The bottom of Table 2 presents statements that workshop participants had a consensus opinion on and as a result did not influence the grouping of participants in ether viewpoint.

From the results of the Q-methodology it appears that the workshop participants in the Esk Valley and South Pennines in the first viewpoint (Viewpoint 1) are concerned with practical, implementational characteristics when evaluating the prospect of enrolling in the LR scheme. Economic returns, level of bureaucracy and the availability of support during the implementation of the scheme is important to them. These “pragmatic” workshop participants have different priorities to those grouped in the second viewpoint (Viewpoint 2). Workshop participants grouped in Viewpoint 2 are preoccupied with social and environmental aspects when considering enrolling in LR. In particular, these participants focus on the wider impact of the scheme, both on the environment, farmer social cohesion and farmer education and awareness-raising, taking a more “socio-environmental” approach. Both viewpoint

groups of workshop participants appear to find the 20-year length of LR as undesirable and consider the goals of LR as incompatible with those of their region and their farm.

Workshop participants were in consensus regarding some contract characteristics, mainly relating to training and guidance being included as an eligible cost in the scheme and having measurable and specific indicators to assess results achieved in the scheme. Finally, participants seemed to agree that the scheme does not fit all different types of farmers or their own individual goals as farmers nor does it sit well within existing UK laws and policy. The results and ranking of statements (4 for "very important" to -4 for "not important at all") for each group of participants can be seen in Table 2.

**Table 2: Relative importance for Landscape Recovery characteristics and aims for Esk and South Pennines farmers**

| Discourse viewpoint 1 | Value 1 |
|---|---|
| Landscape recovery should reduce financial risk and uncertainty of income for farmers | 4 |
| Scheme must have a low level/amount of bureaucracy | 3 |
| Scheme should support better visibility (appreciation, recognition) of farmers' work in providing environmental benefits | 2 |
| Scheme must be easy to apply and without complex monitoring implementation | 2 |
| Allow support from skilled authorities and intermediaries in aiding farmers in the implementation of schemes | 1 |
| Mitigation of climate change (e.g. reducing flood risk, sequestering carbon) must be addressed by the scheme | 1 |
| Scheme must take into account unpredictability of nature and the limited possibility for farmers to guarantee results | 1 |
| Farmers' awareness and knowledge of environmental issues increases through participating in scheme | 1 |
| Scheme objectives acknowledge spatial and regional differences of environmental conditions across England | 0 |
| It is important for the scheme to support cooperation with others | 0 |

| Discourse viewpoint 2 | Value 2 |
|---|---|
| Scheme must take into account unpredictability of nature and the limited possibility for farmers to guarantee results | 3 |
| It is important for the scheme to support cooperation with others (stakeholders, neighbours, farmer unions) | 3 |
| The scheme should deliver environmental goods and services by farmers, beyond biodiversity and carbon/climate benefits | 2 |
| Farmers' awareness and knowledge of environmental issues increases through participating in scheme | 2 |
| Financial compensation for participation in the scheme should follow cost incurred/income forgone | 1 |
| Scheme objectives acknowledge spatial and regional differences of environmental conditions across England | 1 |
| Scheme should support better visibility (appreciation, recognition) of farmers' work in providing environmental benefits | 0 |
| Scheme must have a low level/amount of bureaucracy | 0 |
| Scheme must be easy to apply and without complex monitoring implementation | 0 |
| The ELMs and Landscape Recovery in particular, are simple to | 0 |

| | |
|---|---|
| (stakeholders, neighbours, farmer unions) | |
| Financial compensation for participation in the scheme should follow cost incurred/income forgone | 0 |
| There is good agreement between Landscape Recovery priorities and practical, achievable goals in your region | 0 |
| The scheme should deliver environmental goods and services by farmers, beyond biodiversity and carbon/climate benefits | -2 |
| The ELMs and Landscape Recovery in particular, are simple to understand from the material online | -3 |
| The contract of Landscape Recovery scheme should be 20 years or longer as there is a long period from action to result | -4 |
| Number of q-sorts in Viewpoint 1=7 | |

| | |
|---|---|
| understand from the material online | |
| Landscape recovery should reduce financial risk and uncertainty of income for farmers | 0 |
| The contract of Landscape Recovery scheme should be 20 years or longer as there is a long period from action to result | -2 |
| Allow support from skilled authorities and intermediaries in aiding farmers in the implementation of schemes | -3 |
| Mitigation of climate change (e.g. reducing flood risk, sequestering carbon) must be addressed by the scheme | -3 |
| There is good agreement between Landscape Recovery priorities and practical, achievable goals in your region | -4 |
| Number of q-sorts in Viewpoint 2=7 | |

| **Consensus statements** | **Type of agreement** |
|---|---|
| Farmers' training and guidance should be eligible cost in the scheme | Agreement |
| Scheme must require SMART (Specific, Measurable, Attainable and action-oriented, Relevant, and Time-bound) indicators | Slight agreement |
| Adaptation to climate change (e.g. change practice/crops, irrigation systems) must be addressed by the scheme | Slight agreement |
| Farmers have no time or money for implementing measures in other ELMs on offer | Slight agreement |
| The national Landscape Recovery goals are compatible with your farming long term goals | Slight agreement |
| The Landscape Recovery fits all different farmer and farm characteristics: education, age, size of farm, tenancy | Slight disagreement |
| Large scale landscape recovery is compatible with existing laws, programs and UK policy | Strong disagreement |

From the Q methodology these findings and the discussion during the workshops it appears that enrolling in the LR scheme is inhibited by a series of factors for upland Yorkshire farmers. Uncertainty around the level of payments, type of management practices that can be funded by LR practices and the type of changes in existing practices they would entail appear significant. Furthermore, socio-environmental issues also further inhibit potential enrolment, with LR appearing not to fit with local goals and capabilities. Such findings, if corroborated by actual enrolment in LR from upland beef and

dairy farmers in Yorkshire would result that wider, landscape interventions would not be taking place in the area. Instead, such farmers would focus more in less-demanding ELM schemes such as the SFI which seems to be meeting the combination of requested management practices and involvement. Nevertheless, lack of clarity on whether SFI payments would be enough to cover for the loss of BPS payments would mean that upland Yorkshire farmers might be faced with ever-decreasing farm-related income. In the event of this occurring, farmers are expected to turn even more to out-of-farm activities such as tourism and hospitality sectors to supplement farm income or continue the trend of land abandonment. This would have detrimental effects in maintaining the existing quality and quantity of public goods in the general Yorkshire area.

# 4. Recommendations for Landscape Recovery scheme

We summarise the recommendations from the findings of this T&T (stakeholders' interviews, workshops, Q-methodology, academic summaries) organized by the set of policy questions set up for this project.

## 4.1 How to balance the delivery of national and local environmental priorities in selection and design of projects.

- Blanket bog and unimproved grassland (plus hay meadows in the Esk) were highlighted as the top habitats to protect in the region by stakeholders, whilst waterways were also highlighted as features on which upland farmers could have significant impacts. Interestingly, grassland/hay meadow restoration was not mentioned by academics. Nevertheless, such actions align well with some national priorities such as the peatland restoration components of the Nature for Climate Fund, the desire to reduce downstream flood risk using natural flood management strategies (e.g. via surface roughness enhanced by upland grassland management), and the urgent need to enhance UK freshwater quality.
- Stakeholders stressed a need for mechanisms for farmers to impact policy to ensure that ELMs is successful. T&Ts was highlighted as an example of such a mechanism. It was felt that key differences in upland farms compared to lowland farms needs to be represented in policy - an area highlighted by stakeholders as under-researched. Finally, it appeared that stakeholders had limited knowledge of regional priorities and focused either on farm-specific priorities or to national ones.
- Given the outcomes from the workshops which stressed that independent academic input was highly desirable in project design and bridging between local and national environmental priorities, setting up some funded knowledge exchange hubs may be highly beneficial. In particular, such hubs may have not only an awareness of the latest research, but could even have some capability to model or consider outcomes (including potential trade-offs) at different scales, from sub-catchment to national level.

**Key recommendation 1: Set up regional, independent academic-farmer knowledge exchange hubs for ELMs to ensure use of latest science in project designs, connections between national and local environmental priorities, and landscape-scale thinking in the national context.**

- In the Esk system it is already considered that water quality is of good standard and this is suitable at a national level, yet it is not good enough for local freshwater mussel populations. A key issue here is that the work to keep the water quality at its current level needs funding and so LR schemes may need to include a feature to 'maintain' areas of high biodiversity value. The steps to get to the water quality required for mussels would be additional and require further significant investment to ensure we can recover and restore England's threatened native species.

- For farmers in or close to National Parks, where the environmental conditions are good, in part because of the work those farmers have been doing (with BPS support, which will be removed in near future) – there was a perception that enrolling in ELM schemes and LR in particular (which has 'recovery' at the name!) would not be relevant. In retrospect, now that first LR projects have been announced, several of these LR projects are in designated areas. There may be a communication issue here, perhaps with the naming of the scheme, or more focus in documentation to highlight how maintaining good condition is also eligible.

**Key recommendation 2: Include a national selection priority to LR about *maintaining* areas of high biodiversity value, as some areas find the 'recovery' focus too challenging yet they need the funding to keep biodiversity maintained.**

## 4.2 How to align Landscape Recovery projects (as distinct from Local Nature Recovery projects) to wider Defra initiatives such as Biodiversity Net Gain and Nature for Climate projects which may also deliver land use change

- The Nature for Climate focus on woodland and peatland restoration may be a high priority in some areas, yet lower priority in others. Woodland was not deemed to be a priority for either of our case study groups and care is needed when there is a potential conflict between woodland planting and soil carbon stocks if there are shallow peatlands and organo-mineral soils which may be at risk from carbon loss after planting. While peatland restoration was mentioned a lot by stakeholders it was not discussed much by our farmer groups. That may reflect that farm operations were not commonly operating on the deep peat areas which can often be owned by larger estates. Thus, some consideration of the types of landowners and tenants for different types of upland system is required when aligning Defra initiatives. It may be that some initiatives can be more targeted at particular types of upland ownership/tenancies.
- Because of the BNG proximity role, uplands farmers see little demand for credits in the uplands, which are also different habitats to those destroyed by lowlands development.

**Key recommendation 3: Consider strategic targeting of information about different Defra schemes to different types of land holdings/operations to maximise alignment, uptake and environmental benefit.**

## 4.3 How to blend public and private finance in funding projects

- There was clear lack of information how to access private finance through developing payment for ecosystem schemes such as carbon schemes. While this was discussed during the farmers workshops, the workshops pre-and post-survey show knowledge on this did not improve for the South Pennine group.
- Esk valley were different to South Pennines and suggested more knowledgeable about private finance. This is possibly because they had already neem involved with North York Moors National Park Authority led project from the "Natural Environment Investment Readiness Fund" (NEIRF) of the Environment Agency.
- There is a general acceptance amongst stakeholders that private finance will have a role in farming businesses. However, there was no consensus as to whether this could be a substantial role. Stakeholders identified that there is a poor knowledge base around how to

access these opportunities and that farmers may need help in understanding the natural capital assets that their holding contains as well as the carbon balance of their business.

- Intermediaries were looked on as a favourable solution for reducing the complexity of the private finance market. Stakeholders also pointed out that intermediaries could reduce the risk surrounding small land packages for both investor and farmer thus facilitating access to this developing market for the smaller farm businesses.

- Stakeholders identified that the government's role in aiding the growth of the carbon market is through regulation specifically of the carbon calculators.
- Academic research and the work done by Leeds academics as aprt of a different NEIRF project on UK Farm Soil Carbon Code, highlights the urgent need to align ELMs and private funding and avoid ELMS funded activities from undermining private carbon markets, by causing the latter funding being not 'additional' to ELM funded actions. Given the high cost of monitoring in carbon schemes (i.e. soil sampling and testing), a focus of public funding on monitoring soil carbon stocks (considering our soils as an asset for UK economy, hence monitoring soil health, especially soil organic matter/soil carbon makes sense as public subsidy).

**Key recommendation 4: Develop outreach and training opportunities for farmers and farmer groups to learn about private finance opportunities, especially those relevant to uplands farmers**

**Key recommendation 5: Develop standards for carbon calculators and codes, to increase integrity of the carbon market and for stakeholders (farmers and buyers) to gain confidence in those markets**

**Key recommendation 6: Using public funding to support soil health monitoring which would reduce cost of carbon market, rather than finance actions which compete and challenge additionality**

## 4.4 How to construct agreements for different land ownership structures e.g., individual and group agreements, tenants, commons.

- Group agreements: where the funding body contracts with a single legal entity, separate agreements will need to be signed between the single legal entity and the individual participants. If no template is provided for the constitution of new single legal entities or for the sub-contracts, contractual "friction" may cause a degree of apprehension on the part of potential participants, with the amount of paperwork administration involved likely to act as a negative factor in terms of engagement. It may be that commercial organisations/private advisors could step in to assist, but there would then be further cost implications. In addition, as a consequence of the length of LR implementation agreements, ways will need to be found to address changes in the identity of individual participants (through, for example, sale, death or succession to Agricultural Holdings Act 1986 tenancies).

**Key recommendation 7: DEFRA to support the governance structure where LR schemes take effect through contracts between the funding body and a single legal entity and further contracts between the single legal entity and individual participants: e.g, providing templates for the constitution of the single legal entities and for the sub-contracts**

- Tenants: farm business tenancies in England and Wales had an average agreed length in 2021 of just over three years, much shorter than the envisaged length of the LR implementation

agreements. With the aim of accommodating tenants, greater flexibility as to length of term has already been granted under the SFI component, but for the time being it is not immediately evident that tenant farmers with short-term farm business tenancies will be able to engage with confidence with the LR component. Further, if the LR implementation agreement were to extend to, for example, re-wilding, tenants may be in breach of express/implied terms to use the land for 'agriculture'

**Key recommendation 8: improve accessibility of the LR component for tenants, with one option being that landlords could only oppose/dispute participation if, for example, LR actions by the tenant would materially affect the value of the freehold reversion**

- Commons: while many commoners operate by banding together on a voluntary basis into a commons association, such commons associations do not have separate legal identity, with the result that legally binding agreements, including agri-environmental agreements, can only be secured where all members agree. In consequence, there would arguably be advantage if the commoners had formed a "commons council", statutory bodies which have the power to enter into legally binding agreements on use of the land concerned. On the other hand, it must be recognised that the internal governance of commons councils attracts a level of administrative burden for the commoners

**Key recommendation 9: create relevant contractual templates and provide finance and advice to support the development and operation of commons councils in England**

## 4.5 How to construct long-term agreements (30+ years), potentially incorporating conservation covenants, to safeguard investments in land use change and associated environmental outcomes

- Correct communication, specifically around the long-term status of land entered into an LR implementation agreement, would significantly reduce the current fear among farmers of land later being placed subject to an environmental designation and effectively taken out of production.
- Stakeholders stressed that practices which benefit the farm business are practices which are more likely to be maintained at the end of the implementation agreement, this requiring farmer feedback on how the practices benefit their business.
- Contracts for both the LR component and private finance agreements need to have in-built flexibility for them to be attractive to farm businesses of all size. Whilst a long-term agreement was identified to be important for landscape-scale change, stakeholders identified that being tied into non-productive practices for decades was highly unattractive.
- Farmers pointed out that such long-term agreements are in fact inter-generational, with the result that they felt that they were unable to guarantee the required length of participation owing to their planned retirement date and/or that they did not wish to bind their successor.
- Q-method: Having lengthy contracts (more than 20 years) was one of the least preferred statements between farmers in both groups

**Key recommendation 10: A way forward might be achieved if the contract between the funding body and the single legal entity is for 30+ years, while the sub-contracts with individual**

**participants are sufficiently flexible to accommodate changes in both area and participation (although it may require considering in such a way as not to breach the head-contract)**

- The impact of LR implementation agreements and private finance contracts on the capital value of landholdings is an important consideration in terms of landowner engagement
- Disparity in resources between investors and farmers, distribution of risk and flexibility within contracts were considered by stakeholders as primary inhibitors of enrolling in LR. The most common statement regarding contracts focused on the observation that farmers were uncomfortable entering into agreements directly with large organizations due to the disparity in resources to develop and enforce contractual agreements.

**Key recommendation 11: the LR component should operate in such a way that participation does not jeopardise Inheritance Tax Relief or, indeed, other tax reliefs**

## 4.6 How to incentivise farmer participation and collaboration in landscape recovery projects and determine appropriate payment mechanisms

- It is important to note that upland areas provide important flows of downstream ecosystem services (e.g. flood mitigation, water quality). These wider societal benefits need to be acknowledged appropriately in terms of resource available and payment mechanisms. Impacts on business beyond subsidies, is an important theme. Enhancing farmers' understanding of the opportunities associated with the land and improving soil health were actions proposed by stakeholders that could provide environmental public goods as well as ecosystem services. Stakeholders highlighted that obtaining a thorough understanding of the opportunities available to their business would allow farmers to identify those that are the most economically viable and thus the most sustainable. Several stakeholders stressed that it was key to ensure the action was sustainable for it to have the desired effects within ELMs. Stakeholders listed multiple public goods that improvements in soil health could provide, such as retention of water and carbon sequestration, but they also stressed that these improvements could also benefit the farmer's business through reduction of inputs and improvements in yields. These points touch on an important point made by stakeholders that practices incentivized by ELMs need to be communicated correctly through highlighting how they can improve farm efficiencies and improve margins. The actions of regular feedback and encouragement of farmer-led groups highlighted by stakeholders could be important. However, there are some key evidence gaps on soil health where further research is urgently required.
- It is clear from stakeholders that the lack of detail surrounding ELMs, including the LR scheme, prevents the required financial modelling that would allow farmers to identify which of the new revenue streams are most suitable for their business. This lack of information was echoed by farmers during both workshops. The perception of stakeholders and farmers is that potential LR scheme candidates within Yorkshire are limited to the 'usual suspects' such as charities, national parks and estates. There was no knowledge of proposals being led by groups of small farmers. This absence of interest could be due to the small amount of advice freely available to proposals with smaller resource pools. One group of farmers (Viewpoint 2) would welcome training. Related to recommendation 1 above there is a desire for a free, independent farm advisory service. This may be in the form of independent KE hubs as

described above, or in some other form. For more information on potential actions see Annex 3.

**Key recommendation 12: Ensure true value of upland ecosystem service benefits to wider society are recognised in value of upland LR payments.**

**Key recommendation 13: Support generation of scientific evidence about how improvements in soil health impact upland farm businesses**

**Key recommendation 14: Create free, independent farm advisory services, perhaps aligned to academic-farmer KE hubs (recommendation 1)**

**Key recommendation 15: Support framework and development of farmer-led regional groups/clusters (e.g. as with CSFF)**

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# Appendix

## Annex 1 Pre- and Post-Workshop questionnaire

**Pre – Workshop questionnaire**

Please insert an **X** next to each question

| | Not helpful/familiar/likely | Neither | Helpful/familiar/likely |
|---|---|---|---|
| How helpful do you think academic expert knowledge can be during your 1st application or during the Development Phase if you intend to join the Landscape Recovery scheme? | | | |
| How familiar are you with private finance options (such as the Peatland Carbon Code, Biodiversity credits through the Biodiversity Net Gain) to consider when applying for the Landscape Recovery scheme? | | | |
| How likely is it for you to require any natural science evidence base (what X does to Y e.g. birds population) during your application for the Landscape Recovery scheme? | | | |
| How likely is it for you to collaborate with other farmers if you intend to join the Landscape Recovery scheme? | | | |

1. What is the top priority for land use change/protection in your area and why?

   _____

2. What other priorities are there for land use change/protection in your area?

   _____

3. Can these priorities be complimentary to one another? Tick the relevant box

   Yes □ No □ Don't know/Maybe □

   If you ticked "Yes", how do you think this can look like?

   _____

**Post – Workshop questionnaire**

Please insert an **X** next to each question. Your answers do not need to be the same as before, we are interested to see if anything has changed in your views after attending this workshop

| | Not helpful/familiar/likely | Neither | Helpful/familiar/likely |
|---|---|---|---|
| How helpful do you think academic expert knowledge can be during a 1st application or during the Development Phase if you intend to join the Landscape Recovery scheme? | | | |
| How familiar are you with private finance options (such as the Peatland Carbon Code, Biodiversity credits through the Biodiversity Net Gain) to consider when applying for the Landscape Recovery scheme? | | | |
| How likely is it for you to require any natural science evidence base (what X does to Y e.g. birds population) during your application for the Landscape Recovery scheme? | | | |
| How likely is it for you to collaborate with other farmers if you intend to join the Landscape Recovery scheme? | | | |
| How likely do you think that a format with an academic organisation as coordinator such as iCASP would help you in a potential application at the Development Phase for Landscape Recovery? | | | |
| How helpful did you find the use of the Q-method in prioritising actions when considering applying for the Landscape Recovery scheme? | | | |
| How helpful was the presence of academics in the workshop for your future plans about applying for or potential implementation of the Landscape Recovery scheme? | | | |

1. What is the top priority for land use change/protection in your area and why?

   _____

2. What other priorities are there for land use change/protection in your area?

   _____

3. Can these priorities be complimentary to one another? Tick the relevant box

   Yes □ No □ Don't know/Maybe □

If you ticked "Yes", how do you think this can look like?

_____

## Annex 2 Script for stakeholder interviews

Question 1: The Landscape recovery scheme is one of the three new schemes encapsulated within the Governments environmental land management schemes, are you aware of this scheme and its aims?

*YES*:

Question 1B – Are you currently aware of any LR proposals being developed within the Yorkshire Region? If so, are you able to provide specifics? If no, Briefly describe LRS, its aims, who it is aimed at and what it entails

Question 1C – Has your organization allocated resources to support prospective LR applications?

Question 2: In your opinion, what are the three major challenges currently facing Yorkshire farmers?

Question 3: What do you see as the three major opportunities for Yorkshire farmers currently?

Question 4: With one of the principles of ELMs being to use public money for public good, what activities do you think Yorkshire farmers should focus on to deliver environmental public goods?

Question 5: What examples public or private funding options do you think can support Yorkshire farmers to meet local ELMs and public/private priorities? If yes, proceed Q6.

Question 6: To what extent do you think private finance options can supplement Yorkshire Farmers ELMs funding?

The questions below are specific to the national priorities laid out by DEFRA in the LRS information.

*Biodiversity and Habitat Management*

Question 7:- In regards to conserving local biodiversity and providing ecosystem services such as natural flood management or carbon sequestration, what in your opinion is the most valuable contributions Yorkshire farmers could make?

Question 7b: Do the options planned for environmental land management schemes support those actions appropriately? If not, how could they be improved?

Question 8: What do you see as priorities with regard to priority habitats in the region?

*Water Management*

Question 9: Do you have any aims in regards to streams and rivers in the region? I.e. improving water quality, flood mitigation or protecting/enhancing aquatic species?

## Annex 3 Summaries from academics on previous research

**(a) Employing awareness focused approaches to improve environmental outcomes *(transition from awareness to behavioural change)***

By Julia Martin-Ortega, Pippa Chapman, Murat Okumah and Paula Novo

Efforts to reduce environmental impact from agriculture increasingly focus on improving farmers' awareness, expecting that this will contribute to adoption of best land management practices and lead to improved environmental outcomes. This approach relies on the assumption that there is a direct link between increased awareness, behavioural change and environmental outcomes. For long, there has been very little empirical evidence that unequivocally supported this link. Over the past few years, members of the iCASP team have carried out an interdisciplinary research programme combining catchment and behavioural sciences to unpick the awareness – behavioural – environmental link. This work has entailed the compilation and 'making-sense' of the scarce and fragmented pre-existing literature with carrying out empirical work across the four UK countries (see figure x). The empirical work has employed a co-constructed approach working in partnership with multiple stakeholders (e.g. land managers, farmers' representatives, water utilities, regulators and knowledge brokers) and includes the use of a range of methods (large quantitative surveys, in-depth qualitative interviews and participatory workshops).

Key findings:

- An Awareness – Behaviour change – environmental outcome pathway does exist, but is more complex than just 'telling farmers what to do' (figure X).
- This link is mediated and moderated by psychosocial factors (e.g., social norms, attitudes, habits), biophysical factors (e.g. pollutant type, critical source of pollution) and situational factors (institutional support (or lack of), farm size, farm type, farm tenure, income, cost of materials/compliance, 'goodness of fit' of schemes, flexibility of scheme).
- Changes take time – time-lags are variable and depend on the above psychosocial and biophysical factors.
- Experiential learning (learning by doing) plays a critical role in farmers' adoption of best management practices as it deepens farmers' understanding and contributes to behavioural change
- Greater benefits are achieved when farmers 'practise what they are taught' (in their own activity) rather than being provided with advice only (e.g. greater effect of soil management plans if prepared by the farmer rather than by an advisor).
- Stakeholders' active participation in schemes contributes to co-ownership of the process
- Approaches emphasising dialogical learning and co-construction of solutions between environmental regulators and farmers work best
- Important for regulators/stakeholders to build a good relationship with farmers to gain their trust and support
- Farmers highlighted the benefits of one-to-one and shared advice and importance of peer to peer learning
- Sustaining initiatives/programmes is challenging – need to think how to reach out to less engaged farmers

Academic publications from this work include:

- Okumah M, Chapman PJ, Martin-Ortega J, Novo P, Ferré M, Jones S, Pearson P, Froggatt T. 2021. Do awareness-focussed approaches to mitigating diffuse pollution work? A case study using behavioural and water quality evidence. Journal of Environmental Management. 287
- Okumah M, Martin-Ortega J, Chapman PJ, Novo P, Cassidy R, Lyon C, Higgins A, Doody D. 2021. The role of experiential learning in the adoption of best land management practices. Land Use Policy. 105
- Okumah M, Martin-Ortega J, Novo P. 2018. Effects of awareness on farmers' compliance with diffuse pollution mitigation measures: A conditional process modelling. Land Use Policy. 76, pp. 36-45

*Figure. Coverage, focus and methodologies of empirical work carried out by the iCASP team on the awareness-behavioural – environmental outcomes link across the UK.*

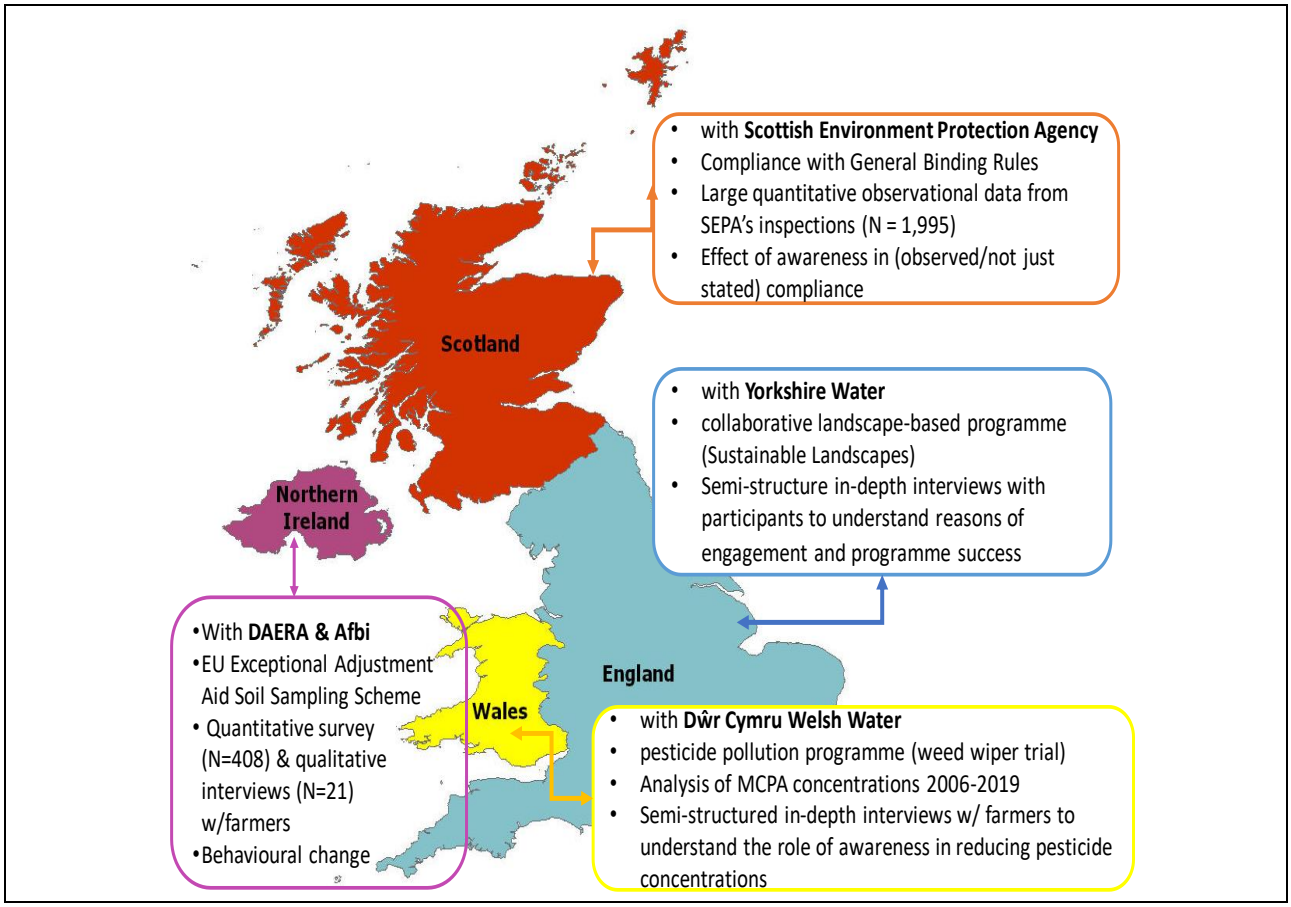
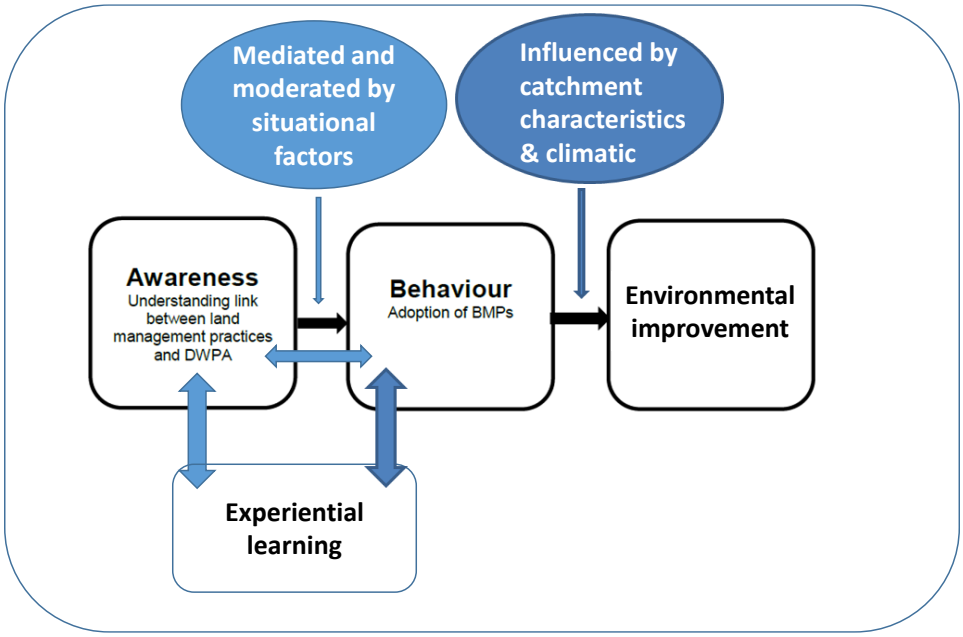



*Figure. The awareness-behaviour-environmental improvement pathway*




**(b) Metab) meta-analysis of attributes affecting agri-environmental schemes adoption based on the evidence from the EU (Tyllianakis/Martin-Ortega)**

By Emmanouil Tyllianakis & Julia Martin-Ortega

Members of the iCASP team have systematically reviewed and quantified the body of evidence that explores the factors that influence land managers' willingness to accept (WTA) compensation for the delivery of biodiversity and environmental features' protection, focusing on literature on agri-environmental schemes (AES) from the EU. The analysis shows a complex and nuanced picture.

Key findings:

- Based on the existing evidence appear generally willing to enrol in AES, with average payment per hectare being around 327 Euros.
- However, existing evidence still provides few clues on how such intent is best matched by contract design.
- Providing support to farmers may incentivise further enrolment in schemes.
- New ways of monitoring compliance can also increase enrolment.
- New mechanisms to incentivise enrolment of smaller (and less wealthy) adjacent holdings are needed.

An important conclusion of the study is that the evidence base is still insufficient and very limited in its ability to inform policy in this area. A significant leap forward would not simply require an increased quantity of primary studies (see new primary study specific to the post-Brexit UK), but a deeper reflexion on how the complexity of farmers' preferences is best captured in the design of policy instruments that have to both share common features while being adaptable to context dependent characteristics at the landscape level.

Academic publication from this work: Tyllianakis E, Martin-Ortega J. 2021. Agri-environmental schemes for biodiversity and environmental protection: How we are not yet "hitting the right keys". Land Use Policy.

**(c) "A window into land managers' preferences for new forms of agri-environmental schemes: evidence from a post-Brexit analysis"(c) CONSOLE discrete choice experiment on land manager's willingness to accept participation in agri-environmental schemes to delivery biodiversity/environmental features, including the effect of advice provision, collaboration requirements and other contract features**

By Emmanouil Tyllianakis, Julia Martin-Ortega, Guy Ziv, Pippa J. Chapman, Joseph Holden, Michael Cardwell and Duncan Fyfe

Existing evidence suggests that farmers are generally willing to enrol in AES for the delivery of environmental features, but robust policy support requires further exploration of land managers' preferences and how these interplay with contract features to achieve higher environmental targets (see item above). Members of the iCASP team undertook a primary study with a 'benchmark' sample of AES-inclined land managers. The study employed a well-known environmental economics method, discreet choice experiment (DCE), which is a survey-based technique used in our case to establish land managers willingness to accept (WTA) compensation to enrol in new (post-Brexit) AES. The DCE was designed in accordance with current discussions about ELMs at the time of the research. WTA for entering an AES for the delivery of soil carbon storage (estimated in £ per hectare enrolled in the scheme) is examined under varying contract features, including collaboration across neighbouring farm for landscape-wide success of AES, payments by actions or outcomes, and availability of advice.

Key findings:

- Generally AES-inclined land managers are likely to be receptive to a transition to result-based, collaborative schemes supporting landscape-wide interventions in alignment with net zero agendas.
- These interventions could be done in exchange for relatively moderate levels of compensation, supported by advice provided by peers.
- While this raises promise, our results also emphasize challenges, particularly to attract those less generally AES-prone land managers.
- Payments levels probably need to remain close to the current ones (not lower), farmers' awareness and support for net-zero agendas need to be reinforced and more interaction between land managers and policy makers will be needed.

Academic publication from this work: "A window into land managers' preferences for new forms of agri-environmental schemes: evidence from a post-Brexit analysis". Tyllianakis E., Martin-Ortega J., Chapman P.J., Ziv G., Holden J., Cardwem W. M., and Fyfe D., (2022). 4th European Ecosystem Services conference, Heraklion Greece.

**(d) Guidance and advice to farmers on blended finance**

By Guy Ziv, Pippa Chapman

As part of the NEIRF UK Farm Soil Carbon Code, iCASP Soil Carbon project and the Resilient Dairy Landscape projects, we have been looking at carbon markets in the UK, their differences, and how

farmers and carbon programmes preferences differ. An online survey was answered by 100 farmers, and a separate survey to carbon programmes was filled by 6 UK carbon scheme operators.

Key findings:

- Farmers' adoption of soil carbon management practices does not necessarily translate into a willingness to adopt additional practices and "buy into" carbon-related PES schemes.
- Farmers have reservations about designing and implementing soil carbon projects due to the terms and conditions associated with participation in the emerging UK agricultural soil carbon market.
- Farmers willingness to maintain carbon after the end of carbon projects (aka 'permanence' ) was limited, with <20% of farmers willing to agree to more than 10 years permanence period
- Although the carbon market may attract new entrants, early adopters of soil carbon management practices are likely to be excluded from carbon-related PES established by public and private sector actors based on additionality criteria.
- The key role that early adopters may play in encouraging new entrants to engage with the carbon market should not be underestimated.
- Enhancing the transparency, robustness and integrity of the carbon market hinges on incentivising early adopters to adopt additional practices and facilitating their participation in the market

Academic publication from this work: "Reconciling farmers' expectations with the demands of the emerging UK agricultural soil carbon market", Lisette Phelan, Pippa Chapman, Guy Ziv, in review

# Annex 4 Legal issues generated by the LR scheme

Michael Cardwell (University of Leeds) and Chris Rodgers (Newcastle University)

The LR component of the ELM Scheme gives rise to novel legal issues by reason of its specific attributes. In particular, these include:

- implementation on a large scale, with projects covering 500 to 5,000 hectares of broadly contiguous land (DEFRA, 2022a)
- extended length, it being envisaged that project implementation agreements may exceed 20 years; and it also being envisaged that 'projects will have long-term safeguards in place to protect them into the future, such as conservation covenants' (DEFRA, 2022b);
- significant co-operation between participants consistent with the scale of the projects, it being necessary to engage a wide range of stakeholders, including private investment after the development phase (DEFRA, 2022b);
- a high level of ambition, extending potentially to "rewilding" and major forestry initiatives (DEFRA, 2020a, 32); and
- payment for results rather than actions (DEFRA, 2020a, 32).

Focus here will be directed to four legal issues which resonate strongly in this context, these being: (i) longevity; (ii) status as agricultural land; (iii) express and implied terms in tenancy agreements; and (iv) identification of the contracting parties.

## A4.1 Longevity

A major policy challenge has been how best to lock in environmental gain, a well-recognised example of failure to do so being the loss of accumulated biodiversity benefits when fallow land was ploughed following the abolition of set-aside (Tarjuelo et al, 2020). To address this concern, a key characteristic of the LR component is its longevity, project implementation agreements potentially exceeding 20 years, with the prospect also of further safeguards to lock in environmental benefits thereafter. This time-frame may be compared with the much shorter commitments of five to seven years as will be applicable to environmental, climate-related and other management measures under the reformed Common Agricultural Policy (Regulation (EU) 2021/2115 of the European Parliament and of the Council of 2 December 2021, [2021] OJ L 435/1, Article 70(6) (although extensions will be possible)). While the environmental benefits of long-term projects may indeed be greater, securing the necessary entitlement to the land for so long may prove problematic, as has already been widely canvassed (see, for example, National Food Strategy, 2021, 156; and Petetin and Dobbs, 2022, 159). Further, there is evidence that farmers enjoying greater security of tenure may have concerns over participating in a collaborative arrangement such as the LR component with farmers who enjoy limited security of tenure, in that this limited security of tenure may prejudice the achievement of mandated environmental outcomes (DEFRA, 2020b, 12-13).

In this context, it has been highlighted that farm business tenancies in England and Wales had an average agreed length in 2021 of just over three years (Central Association of Agricultural Valuers, 2022). However, the envisaged length of the LR component is of a length sufficient to call into question also the participation of some tenants under the Agricultural Holdings Act 1986 (for example, where the tenant is in possession as final successor under that Act) or even freehold owners (for

example, where the farmer is of advancing years and has no member of the family who is interested in taking over the business). Such issues prompted the formation of the Tenancy Working Group under Baroness Rock (DEFRA, 2022c), whose Report recommended for immediate action that "Defra must design all Environmental Land Management schemes and Productivity schemes to be accessible and open to tenant farmers" (*Rock Review,* 2022, 17). With the aim of accommodating tenants, greater flexibility as to length of term has already been granted under the Sustainable Farming Incentive component (DEFRA, 2022d). Nevertheless, for the time being, it is not immediately evident that tenant farmers with short-term farm business tenancies will be able to engage with confidence with the LR component

At the same time, a concern expressed by stakeholders during the T&T has been that participation in longer-term and more ambitious schemes may lead to the effective loss of the land for the purposes of production, with consequential negative impact on capital values. There is an argument that concerns of this kind have already found concrete expression in farming practice: for example, under the Common Agricultural Policy, farmers have been prompted to plough pasture before it qualified as "permanent grassland and permanent pasture" and thereby attracted long-term maintenance obligations. Accordingly, there is a danger that, in seeking to lock in environmental gain via provision in the LR implementation agreement, the outcome may be a very low level of uptake, unless compensation is provided sufficient to make the overall contractual arrangement attractive. Additional research in this regard would assist, but it is not inconceivable that some landowners would be looking for an amount to reflect what they considered to be the "sterilisation" of the land.

Moreover, if no contractual arrangement to safeguard the environmental gain could be reached, there is an argument that the imposition of such obligations after the expiration of the implementation agreement might amount to a "taking", so requiring non-contractual compensation, unless a sufficiently compelling public interest could be demonstrated. As set out in the First Protocol to the European Convention on Human Rights:

*Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.*

*The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.*

Legal insight into the operation of the First Protocol in the agricultural context may be found perhaps most notably in the decision of the European Court of Justice in Case 44/79. *Hauer v Land Rheinland-Pfalz*, [1979] ECR 3727. In that decision, the Court held that "the Protocol accepts in principle the legality of restrictions upon the use of property", but only where deemed "necessary" for the protection of the general interest. And it may be considered at present to be an open question whether the environmental objectives of the LR component would satisfy this criterion of necessity.

### A4.2 Status as Agricultural Land

A key purpose of the LR component is its level of ambition: as stated in 'The Path to Sustainable Farming', the component "will support the delivery of landscape and ecosystem recovery through long-term, land use change projects, including projects to restore wilder landscapes in places where that is appropriate, large-scale tree planting and peatland restoration projects" (DEFRA, 2020a, 32). Accordingly, there is potential for the land to fall outside definitions of "agriculture" within pre-

existing legislation. For example, the non-exhaustive definition under Section 96(1) of the Agricultural Holdings Act 1986 (in the case of agricultural holdings) and under Section 38(1) of the Agricultural Tenancies Act 1995 (in the case of farm business tenancies) is still based upon a "productivist" model, being as follows:

*horticulture, fruit growing, seed growing, dairy farming and livestock breeding and keeping, the use of land as grazing land, meadow land, osier land, market gardens and nursery grounds, and the use of land for woodlands where that use is ancillary to the farming of land for other agricultural purposes*.

Accordingly, this current definition would not seem readily to capture, for example, the restoring of wilder landscapes or the planting of trees to a degree where the woodland ceased to be ancillary to the farming of land for other agricultural purposes. Further, the scale of tree planting may be such as to trigger the need to engage with the environmental impact assessment regime, not least the Environmental Impact Assessment (Forestry) (England and Wales) Regulations 1999, S.I. 1999 No. 2228 (as amended), under which relevant projects include afforestation where this is likely, by virtue of factors such as its nature, size or location, to have significant effects on the environment (with thresholds being applicable). Importantly, it may also be noted that the definition in both the Agricultural Holdings Act 1986 and Agricultural Tenancies Act 1995 was not changed in the recent Agriculture Act 2020, despite wider advocacy that increasing emphasis on the environment should be taken into account (Bodiguel and Cardwell, 2005). Consultation on widening the definition of "agriculture" has also been recommended by the *Rock Review* (*Rock Review*, 2022, 20).

The consequences for tenants will be explored further below, but for the time being it may be observed that matters of definition extend beyond the law of landlord and tenant. By way of illustration, for the purposes of agricultural property relief under Section 115(2) of the Inheritance Tax Act 1984, agricultural property is defined as:

*agricultural land or pasture and includes woodland and any building used in connection with the intensive rearing of livestock or fish if the woodland or building is occupied with agricultural land or pasture and the occupation is ancillary to that of the agricultural land or pasture…*

Again this would not seem capable of extending to restore wilder landscape, while there may further be doubts as to whether the level of business activity required would be sufficient to qualify, in the alternative, for business property relief. The loss of such Inheritance Tax reliefs would arguably operate as a major disincentive for many landowners, prominent among them larger estates which have the scale to play a major role in the LR component, but which are also likely to attach great importance to the protection of capital value.

### A4.3 Express and Implied Terms in Tenancy Agreements

Tenants may not just face challenges in participating in the LR component through the short-term nature of their entitlement to the land, account similarly needing to be taken of the effects of express and implied terms in their tenancy agreements. Most agreements would typically include an express provision restricting the use of the land to "agriculture" and, as noted above, the current definition in both the Agricultural Holdings Act 1986 and the Agricultural Tenancies Act 1995 may prove too narrow for some purposes of the LR component, so opening the possibility that the landlord might seek to terminate the tenancy. And this possibility has been raised in Government consultations (see, for example, DEFRA, 2019, 10).

Over and above any express covenant, there may be breach of the rules of good husbandry as implied by Section 11 of the Agriculture Act 1947, in that these include the maintenance of "a reasonable standard of efficient production", a requirement not evident throughout the objectives of the LR component. Importantly, their breach could grant the landlord the opportunity to serve a Case C notice to quit under the Agricultural Holdings Act 1986. And service of a Case C notice is not purely hypothetical as was well illustrated in the 2017 case of *Cruse v Snook* (ALD/SW/CBH/2015/001 (22 March 2017)), when the First-Tier Tribunal held that, where the tenant without the consent of the landlord had entered the land into an environmental stewardship scheme, the tenant was in breach of the rules of good husbandry. Notably, the decision placed emphasis on the fact that no crop was being produced; and it was expressly stated that "it is stretching the definitions too far to say that growing a mixture of grasses and flowers to attract pollinators" amounted to efficient production.

Two statutory interventions do, nonetheless, provide some assistance for tenants. First, protection is conferred by the Agricultural Holdings Act 1986 where there is an express conservation clause in the tenancy agreement, the Tribunal being directed to disregard practices in accordance with such a clause when determining whether or not to grant a Case C certificate that the tenant is not fulfilling their responsibilities to farm in accordance with the rules of good husbandry: Agricultural Holdings Act 1986, Schedule 3, Part II, paragraph 9(2). Such conservation clauses, however, remain the exception rather than the rule. Second, although the Agriculture Act 2020 made no amendment to the definition of "agriculture" in either the Agricultural Holdings Act 1986 or the Agricultural Tenancies Act 1994, it did grant the Secretary of State power, by regulations, to make provisions for arbitration in the case of Agricultural Holdings Act 1986 tenancies when the landlord did not agree a request for consent or a variation of the terms of the tenancy in circumstances where the tenant was, inter alia, seeking to obtain "relevant financial assistance": Agriculture Act 2020, Schedule 3, paragraph 7 (inserting a new Section 19A into the Agricultural Holdings Act 1986). This power was exercised by enactment of the Agricultural Holdings (Requests for Landlord's Consent or Variation of Terms and the Suitability Test) (England) Regulations 2021, S.I. 2021, No. 619 (in which "relevant financial assistance" is so defined as expressly to include financial assistance under Section 1 of the Agriculture Act 2020, which is the legal basis for payments under the Environmental Land Management Scheme). That said, as noted by the Tenant Farmers Association, the wording in the Agriculture Act 2020 is not apt to capture instances where consent is required under the terms of the support scheme as opposed to under the terms of the tenancy agreement (Tenant Farmers Association, 2020), while the arbitration procedure is not applicable at all to farm business tenancies. Besides, even when it is applicable, some tenants may baulk at the potential length and cost of proceedings (notwithstanding the new Code of Practice: Tenancy Reform Industry Group, 2021), while account would also need to be taken of the potential adverse long-term effect on landlord-tenant relations.

### A4.4 Identification of the Contracting Parties

In light of the landscape scale of the LR component, there is a high probability that more than one farmer/farmer will be involved in realising the environmental outcomes, so raising questions as to identity of the party or parties with whom the funding body should contract (Rodgers, 2022), with potentially complex structures. In this context, two main models would seem to be available. First, the funding body may contract directly with each participant; and, secondly, the funding body may contract with a collective entity which in turn contracts with the individual participants. The latter model is that already operated, for example, in the Netherlands, where since 2016 agri-environmental subsidy has been delivered through agricultural nature collectives. An example is the Agrarisch Natuur

Collectief Utrecht Oost in the Kromme Rijn area, which replaced a system of contracts with individual farmers and which has approximately 300 members, comprising farmers, estate owners and other private land owners, the collective being certified by the national certification institute for agri-environmental management and possessing its own quality assurance controllers (CONSOLE, 2022, Deliverable D2.1, 162-165). While in such instances a collective was the preferred solution, the law of England and Wales offers a range of other options, including, for example, a company, a limited liability partnership and a charitable trust (or other form of charitable structure). Further, in the case of either model, cohesion can be fostered through facilitators (Prager, 2022), who may also provide advice where they have appropriate expertise, as has been the case under the CSFF (Rural Payments Agency, 2022). And it has been expressly made clear that LR Scheme applications are welcome from facilitators working on behalf of a group of farmers (DEFRA, 2022b).

Developing guidance would indicate that the option of contracting with a single entity operating on behalf of all the farmers/farmers is to be the preferred option for the LR component (although it will not be necessary for a single legal entity to make the application): more precisely, it is proposed that both the project development agreements and the implementation agreements will be made between Natural England or the Environment Agency and "a single legal entity" operating on behalf of the project, so as to ensure that the grant funding is managed effectively at the development stage and that the benefits of the project are safeguarded at the implementation stage (DEFRA, 2022a). It is also indicated that recourse may be had to facilitators working on behalf of a group of farmers (DEFRA, 2022b), which would have the advantage of following the established pattern laid down under the CSFF (DEFRA, 2022e).

There has long been acceptance that collective agreements have the capacity to give rise to higher start-up expenditure, particularly if they seek to achieve sophisticated objectives, although it has also been suggested that these costs will reduce as the agreements bed in over subsequent years (Franks, 2019). Moreover, research would indicate that, where members of a group have longstanding experience of working with each other, this may have a beneficial effect on the level of transaction costs (Franks, 2019; Mills et al, 2011). Accordingly, there would seem to be advantage for the purposes of the LR component if the participants were already, for example, members of a group supported by the CSFF or tenants of the same large agricultural estate.

On the other hand, where the funding body contracts with a single legal entity, such an approach requires a collective agreement and then separate agreements with individual participants, so the overall nexus is not simple. If as with the CSFF, no template is provided for the group agreement, contractual "friction" may cause a degree of apprehension on the part of potential participants, there being good reasons to believe that the amount of both paperwork and more general administration involved are likely to act as a negative factor in terms of engagement (Mills et al, 2021). It may be that commercial organisations/private advisors could step in to assist, but there would then be further cost implications - and private advisors have themselves "suggested that the complexity of programme arrangements and processes may function as a barrier for farmers and farmers" (Hejnowicz et al, 2016, 253).

Whichever model is used, a matter of some importance is the ability of those who are not freehold owners to sign up to LR implementation agreements. As already discussed, those with short-term tenancies may face difficulties in securing the required duration, particularly if, as under the CSFF, it is a requirement that group members should be able to confirm that they have management control of the relevant land parcels or have obtained the requisite consents (Rural Payments Agency, 2022), there being the danger that such consent may not be forthcoming. As also discussed, some relief may be available under the dispute resolution procedure introduced by the Agriculture Act 2020, but it

may be reiterated that these provisions do not apply to farm business tenancies; and that tenants may in any event be hesitant to initiate legal action against their landlords for reasons of both expense and a desire to preserve for the future a good working relationship.

In light of these ongoing challenges for tenants, it may also be reiterated that the *Rock Review* recommended for immediate action that "Defra must design all Environmental Land Management schemes and Productivity schemes to be accessible and open to tenant farmers"; and, importantly, it was advocated that "[t]his should be done by starting from the basic principle that tenants should not need landlord consent to enter tenanted land into schemes and landlords should not be allowed to enter tenanted land into schemes unilaterally" (*Rock Review*, 2022, 17). Further, to implement this overarching recommendation, the detailed recommendations included the following:

- Where there is alignment between scheme length and the length and terms of the tenancy agreement, the tenant can unilaterally enter tenanted land into schemes without landlord consent.

- Where schemes require actions to deliver outcomes that are longer than the tenancy agreement, tenants who have had more than one historic renewal or who are on a rolling annual tenancy, and self-assess that they will have sufficient management control to enter schemes, should be able to unilaterally enter tenanted land into schemes (*Rock Review*, 2022, 17).

Such measures would mark a considerable advance beyond the Agriculture Act 2020 and, indeed, would effectively reverse the existing legislation so as to implement a principle in favour of consent not being required. At the same time, they would also go some way towards tackling problems of duration, in that tenants whose agreements are consistently renewed (in some instances, for tax reasons) would also have a chance of participation. A concern, however, would be that landlords might prove more reluctant to let land, so there may be advantage in a landlord being able to oppose/dispute participation if, for example, LR actions by the tenant would materially affect the value of the freehold reversion.

Likewise, specific hurdles arise in the case of commoners, whose property rights again fall short of freehold ownership. Since exercise of those property rights has the capacity to affect the environmental status of common land comprised in a LR implementation agreement, there is logic in ensuring that, in addition to the freehold owner, every commoner is formally bound to observe its obligations. While many commoners operate by banding together on a voluntary basis into a commons association, such commons associations do not have separate legal identity, with the result that legally binding agreements, including agri-environmental agreements, can only be secured where all members agree (Rodgers et al, 2011, 69-83; DEFRA and Natural England, 2015). This can raise material difficulties in that it may not be an easy task to secure the consent of every commoner (including the possibility that some may be inactive and/or not readily identifiable). Indeed, case studies in respect of Eskdale and Cwmdeuddwr Commons undertaken by Rodgers et al found such difficulties in respect of Environmentally Sensitive Area agreements (Rodgers et al, 2011, 69-83). In consequence, there would arguably be advantage if the commoners had formed a commons council, statutory bodies established under the Commons Act 2006, which have the power to enter into legally binding agreements on use of the land concerned (DEFRA and Natural England, 2015). Notably, under Article 31(3)(a), the functions of the commons council may extend to "making rules relating to agricultural activities, the management of vegetation and the exercise of rights of common on the land for which the council is established", which would be apt to cover obligations under LR implementation agreements. In terms of contracting, the funding body could enter into a single LR implementation agreement with the commons council, the council then regulating internally, inter alia, not only the land use obligations, but also the distribution of support payments. On the other

hand, it must be recognised that the internal governance of commons councils attracts a level of administrative burden for the commoners (for example, it is necessary to hold annual general meetings), although this burden is eased by the provision of a standard constitution under the Commons Councils (Standard Constitution) (England) Regulations 2010, S.I. 2010 No. 1204. And the provision of a standard constitution of this sort might assist more generally where farmers and farmers wish to operate via a collective entity for the purposes of the LR component. In this context, it may further be noted that Rodgers et al found that an option adopted by some of the commoners on Ingleborough and Scales Moor was to form a limited company(Rodgers et al, 2011, 111-136), which again has separate legal identity. That said, such a vehicle again brings with it a range of administrative burdens, while it is also possible that some commoners are not shareholders, which would potentially leave them outside the contractual nexus.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