University of Reading

Farmer participation in England's Facilitation Funds

Thesis submitted for the degree of Doctor of Philosophy

School of Agriculture, Policy and Development

Cath Jackson

May 2023

Abstract

Participatory processes are relevant to large-scale environmental projects, which require knowledge sharing, decision making and action from a range of stakeholders including farmers, who are the focus of this research. A review of participatory models is used to build a conceptual framework which disaggregates key components of the process: the organisational driver, facilitators' role and nature of farmers' participation. Two English initiatives are analysed using primary and secondary data: large-scale environmental projects and the Facilitation Fund scheme (government-resourced farmer groups).

Since 2010, non-governmental organisations (NGOs) have dominated the delivery of large-scale environmental projects. Farmers were generally framed as the subjects of the project interventions rather than active participants within it.

Facilitation Funds provide an opportunity for farmer group creation, but are related to England's current AES, over which groups have no control. The affiliation of the facilitator (organisation-employed or independent farm advisor) has an impact on farmers' participation which may be related to group size. There was a spectrum of farmer participation: 17% of members did not attend any events and 57% attended less than a quarter of events. Generally, farmers were not motivated to join the group by environmental aims. Most did not change their farming practice as a result of group membership because of practical barriers, such as the cost of new equipment.

A revised conceptual framework is proposed for future research into farmer participation with a focus on ensuring transparency within project initiation and resourcing, and an emphasis on individuals within the process. Further research is suggested to investigate the proposed link between participation in pro-environmental action and the influence of farmers' agency and socio-economic position. Lastly this research reinforces the importance of collaborative action within large-scale environmental projects, and, related to this, codesign of AES.

Declaration: I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

Cath Jackson

Acknowledgements

I would like to thank:

My supervisors for their patience and encouragement,

The University of Southampton for allowing access to their landscape-scale database and survey data they gathered associated with the database,

Natural England for allowing some access to Facilitation Fund data and for their sponsorship of the research,

Carlos Barahona, of Stats4SD, for supporting and checking the statistical analysis,

Fellow students in the Change in Agriculture group at Reading University for their support and encouragement,

Rebecca Smalley, a fellow University of Reading research student, for her generous support and proof reading.

My husband and children for their understanding during the last five years

Abbreviations

AES	Agri-Environment Scheme
ADAS	Agricultural and Development Advisory Service
AHDB	Agricultural and Horticultural Development Board
AHVLA	Animal Health and Veterinary Laboratories Agency
ALB	Arms-length Bodies
CAP	Common Agricultural Policy
CS	Countryside Stewardship
Defra	Department for Environment, Farming and Rural Affairs
EA	Environment Agency
ELMS	Environmental Land Management Scheme
ELS	Entry Level Stewardship – a level of Environmental Stewardship
EU	European Union
FC	Forestry Commission
FWAG	Farm Wildlife Advisory Group
HLS	Higher Level Stewardship – a level of Environmental Stewardship
NE	Natural England
NFU	National Farmers' Union
NGO	Non-Government Organisation
NT	National Trust
RPA	Rural Payments Agency
RSPB	Royal Society for the Protection of Birds
SSSI	Sites of Special Scientific Interest
VMD	Veterinary Medicines Directorate
WT	Wildlife Trust
UK	United Kingdom

Table of contents

1. Introduction

1.1 Overview

This chapter provides an overview of participation and its importance for the delivery of environmental objectives. It briefly outlines the nature of Facilitation Funds which this research uses to assess farmer participation in England. Facilitation Funds are government funded farmer groups designed to deliver large-scale environmental objectives. The aims and objectives of the research are outlined followed by a summary of chapter content.

1.1 Participation in general and in relation to environmental outcomes

Participatory approaches are used in a variety of fields, including land-use planning, to engage individuals and communities and involve them in decision making. Participatory processes have been subject to critical analyses which point to power imbalances, particularly between organisations who generally conceive and control them and participants, who are frequently the subjects of the process (Cooke and Kothari, 2001, p.217). However, the value of participation is not disputed. Participation is particularly relevant for large-scale environmental objectives which require: the analysis of complex issues with sometimes incomplete information; the involvement of a range of stakeholders who control different aspects of the process, from policy makers to landowners; and agreement on and delivery of required actions. Participation has historically been deployed to achieve environmental aims through stakeholder partnerships. In England, the UK Government's Department for Environment, Farming and Rural Affairs (Defra) stated desire to co-design the post-Brexit agri-environment scheme, the Environmental Land Management Scheme (ELMS) could be interpreted as a recognition of the importance of participatory processes to achieve environmental objectives (Defra, 2021b).

This research reviews existing proposed models of participation, particularly those relevant to environmental objectives, and uses these to build a conceptual framework against which farmer participation in large-scale environmental delivery mechanisms, specifically Facilitation Funds, and the large-scale environmental projects which directly preceded them, can be assessed. Participation is investigated in two principal ways: how the process is constructed and how and why farmers participate. The findings from the research are then used to review and inform the conceptual framework so it can be utilised within future studies.

1.2 Facilitation Funds in England

Facilitation Funds were initiated by the United Kingdom government in 2015 to deliver environmental objectives on farmed land. They are a continuation of the UK's environmental policy direction toward large-scale environmental action recognised in the Biodiversity 2020 strategy (Defra, 2011). They can be considered as a mechanism for large-scale environmental delivery since they are designed to engage multiple landowners in environmentally friendly farming practices within in the landscape. Farmers are the focus of the Facilitation Fund scheme, which was originally funded, before the UK's exit from the European Union (EU), alongside the English agri-environment scheme (AES) through the Rural Development Programme for England (RDPE). RDPE constituted England's delivery of the European Union's Common Agricultural Policy (CAP).

Facilitation Funds are intended to deliver environmental change at a large scale, across farms. They also aim to encourage knowledge sharing about environmental land management practices. They do not offer any funding for environmental action; this is assumed to come from AES. The link between Facilitation Funds and AES, which in England is currently the Countryside Stewardship Scheme (CSS), is explicit in the scheme's literature, which suggests the scheme should improve uptake of AES and improve the effectiveness of its delivery.

Large-scale environmental delivery in England has developed over the decades since the 1970s. Delivery is, and was, mainly through relatively short-term geographically-specific projects. This research aims to put Facilitation Funds in the context of the historical development of large-scale environmental projects by investigating how these projects were conceived, led and delivered with particular reference to farmers and the farming community. The similarities and contrasts between large-scale environmental projects and Facilitation Funds will be investigated.

1.3 Research aim

The overarching aim of this research is to investigate farmers' participation in mechanisms to promote co-ordinated and collaborative environmental action by examining their participation in Facilitation Funds. Specifically, the research will examine how the Facilitation Fund scheme is constructed, the role of the facilitator and the influence these have on participation. It will also evaluate farmer participation within large-scale environmental projects that pre-dated Facilitation Funds; illustrating the background against which Facilitation Funds were created.

The aim will be achieved through the following four objectives:

Objective 1. Investigate the nature of farmer participation in large-scale environmental projects which provide a historical context for Facilitation Funds.

Objective 2 Investigate how farmer participation operates within government organised farmer groups using Facilitation Funds as an example. Specifically, how do Facilitation Funds frame farmer participation; what is the nature and scope of the participation they offer?

Objective 3. Investigate how facilitators' affiliation, skill, experience, and approach relate to farmers' participation.

Objective 4. Analyse farmers' participation in Facilitation Fund events, their motivation for taking part and the impact they feel this has had on their farming practice.

1.3.1 Study structure

This study is structured into ten chapters which can be divided into four groups.

Chapters 2 and 3 provide historical background and context of large-scale environmental projects, AES and Facilitation Funds in England and investigate relevant literature about environmental participatory processes, illustrated with worldwide examples and analysis of facilitation, farm advice and extension (in Chapter 3). Chapter 4 proposes a conceptual framework building on relevant existing models to inform the research. Chapter 5 explains the chosen methodological approach and summarises the data-gathering process.

Chapters 6–9 present the results of the research, answering the objectives. Chapter 6 explores how farmers participated in large-scale environmental projects in England pre-2015 by investigating who led and formed projects through analysis of Eigenbrod *et al.* (2017)'s database of approximately 800 large-scale environmental projects. This is complemented by a qualitative analysis drawn from semi-structured interviews with ten large-scale environmental project managers focusing on how farmers participated within their projects.

Chapter 7 investigates how the Facilitation Fund scheme constructs participation, what elements of the participatory process lie within its scope and the mode of participation adopted by groups in relation to aims, governance and knowledge-sharing. Both secondary data sources (information drawn from within Facilitation Fund reporting and administrative processes for the 49 Facilitation Fund groups launched in 2015 and 2016) and primary sources (interviews with eight facilitators and 17 farmers and observations from two group visits) are employed.

Chapter 8 analyses the experience, knowledge, and skills of Facilitation Fund facilitators, drawn from the information offered in the two applications rounds for the scheme (2015 and 2016). It positions their affiliation, discusses its significance, and assesses their approach to farmer participation particularly through knowledge exchange using the secondary and primary data sources mentioned above.

Chapter 9 presents the results of a detailed quantitative assessment of farmer participation in 385 Facilitation Fund events undertaken by 12 groups during the period 2015–2019. Findings are presented from statistical analysis undertaken on group characteristics to determine if they influence farmer participation. This chapter also uses qualitative data from farmer interviews to explore farmers' motivations for participating in Facilitation Funds and the impact membership of groups has on their farming practice.

Chapter 10 outlines the implications and limitations of this research, including its unique contribution to environmental participation, discusses the strengths and weaknesses of the conceptual framework and makes suggestions for potential areas of future research.

2. Historical context of large-scale environmental delivery, agri-environment and Facilitation Funds in England

This chapter provides a recent history of both large-scale environmental delivery and agri-environment in the UK and England. Historical context has been found to be significant in farming communities because it informs the lived experience of many participants, influencing their present attitude (Hurley *et al.*, 2022).

2.1 Large-scale environmental delivery: context and history in English Government policy

The phrase environmental delivery is used to describe beneficial environmental outcomes such as habitat and species restoration and conservation and the policy measures and actions taken to achieve or deliver these outcomes (Dupraz and Guyomard, 2019). As Clark et al (2014) notes, large-scale environmental delivery has been extensively promoted worldwide but is poorly defined. The 'large-scale' called for could apply to spatial scales, ecological criteria or social and administrational boundaries (Clark *et al.*, 2014). To combat this some have attempted to create typologies for existing large-scale environmental delivery (Hohl *et al.*, 2015a), or to form best practice frameworks (Ockendon *et al.*, 2018) against which initiatives can be considered. In the UK, the emerging definition of large-scale delivery could be argued to have developed in contrast to its historical antecedents, which focused on 'sites' or small-scale areas (Brassley *et al.*, 2012). The following account of the development of UK environmental conservation efforts illustrates this evolution.

In the UK, following the Second World War, governments introduced measures to increase the efficiency of agricultural production (Brassley *et al.*, 2012), which resulted in a significant degradation of ecosystems (Almas *et al.*, 2012). From the late 1950s onwards, as the environmental consequences became apparent, there was a focus on preserving habitats and species by developing protected areas, usually relatively small sites such as Sites of Scientific Interest (SSSIs) which were subsequently afforded legal protection in the 1980s (Oldfield *et al.*, 2004). The designation of protected landscapes from the 1950s, such as National Parks and Areas of Outstanding Natural Beauty, whose criteria include historical and cultural considerations alongside environmental ones, complemented this, but has seemingly provided relatively weak protection for environmental features (Starnes *et al.*, 2021). From the 1990s, as it became clear that protected landscapes and sites were insufficient to prevent continuing ecological decline, there was a move towards a wider approach, albeit one focused exclusively on habitats and species, through the Biodiversity Action Plan (BAP) process (Gaston *et al.*, 2006). The UK's 1994 BAP identified actions to restore and improve

habitats and species outside of protected areas (Joint Nature Conservation Committee, 1994). By the time of Lawton's review (2010) calling for 'bigger, better and more joined up' environmental action, translated into UK Government policy through the Biodiversity 2020 strategy (Defra, 2011), it was clear that protected areas and the largely unfunded BAP commitments had not delivered sufficient environmental change to arrest environmental decline (Joint Nature Conservation Committee, 2019).

The requirement for a strengthened ecological network has recently been translated into a legal commitment in the Environment Act, enshrining the delivery of a Nature Recovery Network across England (UK Parliament, 2021) which could potentially be supported by a planned tier of Environmental Land Management Scheme focused on landscape-scale delivery (Defra, 2021b). Several attempts have been made to identify what the Nature Recovery Network should consist of, and how it should be constructed to ensure it is both effective and deliverable (Natural England, 2020; Wildlife Trusts, 2020). Some advocate an ecosystem services approach, underpinned by natural capital (Wratten *et al.*, 2013); others focus on habitat connectivity (Wildlife Trusts, 2020). These approaches are not mutually exclusive. Although research has identified the scale of management necessary for some ecosystems services, such as pollinators (Dicks *et al.*, 2015), in many cases the understanding of the complexity of ecosystems and their requirements is incomplete. In England, attempts have been made to map ecosystem services on a national basis (Centre for Ecology and Hydrology and Natural England, 2018), and within specific geographical areas (South Downs National Park, 2016). However, ecosystem services operate at different and sometimes conflicting geographical scales. Any parcel of land is likely to be able to provide multiple, competing and sometimes contradictory potential for ecosystem service delivery (Helm, 2019). Added to this, one of the challenges for large-scale environmental approaches is that they are likely to cut across the organisational and administrative boundaries which provide the spatial basis for some key policy processes, such as development planning, which could hamper effective action (Winter *et al.*, 2017). The delivery of environmental outcomes requires consistently aligned action from a wide range of stakeholders, including local and national government, private companies and landowners across a range of processes, from infrastructure development to farming practice (Porter, 2014).

Returning to the definition of large-scale environmental delivery, landscape and large-scale are sometimes used interchangeably. As described above, in England the term 'landscape' is usually used in the context of protected landscapes, which can create confusion. For this research, the term large-scale environmental delivery is used and encompasses projects with contiguous areas of land, usually larger than a single land ownership or a protected site such as SSSIs.

In summary, large-scale environmental delivery in the UK presents several challenges: the complexity, uncertainty and overlapping requirements of ecosystems services; the lack of alignment between ecological and administrative boundaries; the multiplicity of potential land uses and the policies which influence them and the necessity of wide stakeholder involvement. All the above points to the need for wide-ranging participation in large-scale environmental delivery.

2.2 Significance of English agricultural land in large-scale environmental delivery

In England, agricultural land, the land that farmers that own, rent and work, is critical to large-scale environmental delivery. Approximately 70% of the UK is farmed land (Defra, 2017a). Shrubsole (2019)'s analysis of England's land ownership presents a complex and opaque picture whereby public bodies and non-governmental bodies own approximately 13% of England's land cover while the rest lies in private ownership (Shrubsole, 2019). The average farm holding size in England is 87ha but this conceals a high number of smaller farm holdings: 40% of the 106,000 holdings in England are below 20ha (Defra, 2017a). The contemporary nature of farming encompasses complicated land-use relationships, including share and contract farming, grazing agreements and short- and long-term tenancies, making it difficult to draw a direct connection between holdings size and farm businesses or farmers. Farmers may farm more than one holding while renting or grazing other land. On some farms contractors play a significant role, effectively managing the farm while the nominal 'farmer' is, in effect, the landowner rather than the farm business controller. Any attempt to deliver large-scale environmental objectives, even at relatively modest geographical scales in England, will therefore require the involvement of a significant number of private agricultural landholders and farmers.

Farming is important for environmental delivery in England because the post-war push for agricultural production (described earlier) is held partially responsible for historical ecological degradation. The drive for higher production encouraged larger field sizes, creating areas of monoculture and a reduction in the diversity of habitats within farms through, for instance, the removal of hedgerows and greater use of chemical inputs to encourage yields and control crop damage (Joint Nature Conservation Committee, 1994). However, farming also has a positive role to play in the mitigation of environmental harm, for example through the provision of flood mitigation measures (Sheail, 2002; Whaley and Weatherhead, 2015). Farming also provides important forms of land management necessary for the maintenance of many of the UK's priority habitats, such as species-rich grassland (Joint Nature Conservation Committee, 2019).

2.3 Overview of mechanisms for large-scale environmental delivery on farmland

Historically there have been a range of approaches aimed at delivering large-scale environmental action on farmed land in the UK. What follows describes some of the key themes emerging from research on this topic.

2.3.1 Environmental regulation

Environmental regulation offers one means of effecting large-scale environmental delivery by imposing environmental action at a national scale. However, particularly in relation to farmed land, environmental regulation has been found to be problematic; it is difficult to define and enforce adequately in litigation because of the technical and scientific issues involved (Rehbinder and Stewart, 2020). As Rehbinder and Stewart (2020) note in their review of environmental regulation in the United States and EU, litigation is a relatively ineffective tool for bringing about environmental compliance. Monitoring and supervision, through administrative systems and agricultural policy instruments, are likely to be more effective (Rehbinder and Stewart, 2020).

Cross Compliance, an element of the EU's Common Agricultural Policy, could be seen as both regulation and an instrument of agricultural policy. Cross Compliance is a significant set of regulations affecting agricultural land which requires farmers to follow basic environmental standards known as Good Agricultural and Environmental Condition in order to qualify for any element of subsidy (European Commission, 2015). However, in the UK many of the regulations covered by Cross Compliance apply regardless of whether a farmer elects to receive a subsidy, such as requirements under the Wildlife and Countryside Act 1981 to not disturb breeding birds. Research has found that Cross Compliance measures have not delivered significant environmental improvement because of their limited nature (Dupraz and Guyomard, 2019; Langhammer *et al.*, 2017), and that in order to be effective regulation requires appropriately resourced education, monitoring and enforcement (Musacchio *et al.*, 2020). Nevertheless, fear of, and resistance to, the threat of regulation may galvanise farmer participation and engagement in environmental protection. Prager (2015a) found that agri-environmental collaborative groups in the Netherlands were created partly as a response to regulatory challenges. In the UK the Campaign for the Farmed Environment was a voluntary initiative by farmers developed in response to set-aside regulation (Championing the Farmed Environment, 2022). The UK is currently re-examining Cross Compliance regulations in the wake of its departure from the EU, and any regulatory reform will also need to consider the requirements of future trade deals.

2.3.2 Partnerships and projects

In the UK, large-scale environmental approaches have developed since the 1970s, with a significant increase in activity shortly before the UK Government's Biodiversity 2020 strategy (Defra, 2011). In retrospect, some aspects of this development have been found to be problematic. Eigenbrod *et al.* (2017) assessed and reviewed UK large-scale conservation projects (their terminology). They noted that large-scale environmental project delivery operates alongside, and sometimes in isolation from, policies and initiatives controlling other significant forms of land use, such as planning policy, resource and infrastructure planning and agri-environment. Dwyer and Hodge (2016, p.9) found a lack of coherence across UK large-scale environmental delivery, that it was "sporadic, ad hoc and narrowly focussed on subsets of ecosystem services and time limited".

Participation, in the form of partnership working, is a feature of large-scale environmental projects in the UK. Partnerships, such as the catchment partnership (discussed in more detail in section 3.3.1.3), are generally formed around a geographically specific environmental purpose by stakeholder organisations, rather than individuals, and frequently include environmental non-governmental organisations (NGOs), utility companies, arms-length bodies, and public authorities (Wheeler *et al.*, 2021). Wheeler *et al.* (2021)'s rapid evidence review of collaborative mechanisms worldwide, but with a particular focus on the UK, found that large-scale approaches frequently relied on partnerships such as these. They noted it was unclear how key participatory processes such as governance and decision-making were managed in such partnerships. This suggests that although the principle of partnership working is established, and is widely seen as a vehicle for participation, its scope, limits and processes are less well understood or acknowledged.

Large-scale environmental projects are by their nature an attempt to move beyond ownership boundaries, and they demand co-management from a range of stakeholders (Adams *et al.*, 2016; Adams *et al.*, 2014). Adams *et al.* (2016) found that partnerships were frequently led by NGOs – generally environmental charities – and that their leadership does not necessarily reflect the best outcome for all. The analysis by Adams *et al.* (2016) does not fully unpick the position of private landowner in these partnerships, particularly where the question of land management control lies, but they note that landowners may not align with project aims.

Eigenbrod *et al.* (2017) recorded over 800 past and present large-scale conservation projects in England, Wales and Scotland, many of which were organised into programmes, such as The Wildlife Trusts Living Landscape Programme. Of these projects, over 35% had complex land-ownership

arrangements involving over 40 landowners (Eigenbrod *et al.*, 2017). Shwartz *et al.* (2017) used the data gathered by Eigenbrod *et al.* (2017) to characterise projects from the database into those with a few long-term owners and those with many private landowners. The latter category of projects constituted 65% of the total land area, leading the authors to conclude that much of the private land within these types of projects was not managed for environmental objectives (using AES uptake as a proxy). Shwartz *et al.* (2017) acknowledge the necessity for action on privately owned farmland within large-scale projects and suggest locally built partnerships as an appropriate mechanism to deliver this.

Nature Improvement Areas (NIAs) in England, which also feature within the Eigenbrod *et al.* (2017) database, were an attempt to deliver landscape-scale conservation launched by the UK government in 2013 (Defra, 2015c). Analysis of the impact of NIAs suggests that their key benefit of the initiative was more effective partnership working, because funded staff could be provided to coordinate partnerships with local businesses, land managers, research institutions and local authorities as well as conservation organisations (Defra, 2015c). Funding was also flexible so it could be adapted to meet the needs of the geographical areas, but it was relatively short term (three years). Although some practical land management work took place which could not be funded by any other method, much of the work in NIAs, such as the initiation of AES, would have taken place anyway although not in such a coordinated or spatially specific way (Defra, 2015b). Dwyer and Hodge (2016) found that while partnership-building in NIAs was a requirement, partnerships varied widely in membership and farmers were usually only represented collectively through the National Farmers' Union (NFU) and Countryside and Land Business Association (CLA) representatives.

Large-scale environmental projects frequently attempt to use government agri-environment funding to achieve land management change, whereby project resources are used to fund targeted advice to encourage farmers to join AES (Adams et al., 2016). Despite this, as Wheeler *et al.* (2021) notes, large-scale environmental projects generally do not generally articulate how their aims and actions relate to AES. By using AES to enact environmental change, project architects assume that the AES can effectively deliver project aims that may be specific to the geography and the category and culture of local land ownership, which is by no means guaranteed. AES is, after all, a countrywide universal scheme with limited regional targeting (as described later in this chapter).

In summary, since environmental efforts shifted from protected areas to a wider approach involving farmed areas, large-scale environmental delivery in the UK has a history of being undertaken through relatively short-term projects which often have limited environmental aims and are led by environmental NGOs. Although increasingly projects develop partnerships of multiple stakeholders

to create more coherent delivery, it is not clear how farmers and landowners participate within these projects and partnerships or how the control of private farmed land is acknowledged and addressed. Clearer analysis of farmer participation within UK, and England's, large-scale environmental delivery would provide useful historical context for Facilitation Funds for many of the participants, government agencies, NGOs and farmers within the process. This research will address this gap through quantitative analysis of the Eigenbrod *et al.* (2017) database and qualitative analysis of representational projects.

2.4 Participatory mechanisms involving farmers in large-scale environmental delivery

2.4.1 Farmer cooperation and collaboration in the UK and England before Facilitation Funds

This section turns to mechanisms of large-scale environmental delivery that that are more explicitly designed to involve the collaborative participation of farmers. The focus of this research project – Facilitation Funds – are described in more detail, but first this section reviews analysis of other forms of farmer cooperation and collaboration in the UK and England, both in an agri-environment context and outside of the realm of environmental delivery, to provide some historical background.

Over half of farmers in the UK are in some form of cooperative (MacMillan and Cusworth, 2019) although this may be a relatively loose association. Jarrett *et al.* (2015) found that formal farmer cooperation was mostly either economically driven to improve productivity and/or profit, e.g. group seed or chemical purchasing. Other forms of cooperation may be offered on an ad hoc basis of neighbourliness, such as labour and machinery sharing (Wynne-Jones *et al.*, 2020), for the benefit of their farm business (Prager, 2022). There is also a tradition in the UK of various farming groups, such as breed associations, farmer unions, farmer networks grazing associations and trade support groups. Arnott *et al.* (2021) found that farmers not presently engaged in an AES were more likely to take part in such groups.

Emery (2015) suggests that agricultural cooperation in the UK has remained consistently lower than in other European countries because UK farmers have sought to achieve economies of scale by increasing holding size rather than by pooling resources. An alternative view is that the centralised, institutionalised control over farming exerted by successive UK governments has increasingly isolated farmers who have ceded independence for the security of guaranteed prices and subsidies (Whaley

and Weatherhead, 2015) and that structural changes in the industry have reduced opportunities for farmers to meet (Inman *et al.*, 2018). MacMillan and Cusworth (2019) found the main barrier to cooperation was individualism, "not being your own master", timeliness and concerns about the commitment of loyalty of other farmers. Davies *et al.* (2004), investigating environmental-specific cooperation in Scotland, found few examples of farm-led projects, mainly because farmers were focused on the farm business. Wynne-Jones *et al.* (2020) identified a willingness to collaborate among farmers in their study, although this was mainly oriented towards the desire to increase production, and argued that social cohesion could lead to further deeper collaboration if supported.

The Pontbren farmers group in Wales is a notable (and exceptional) example of environmental farmer collaboration in the UK which has been subject to detailed study (Mills *et al.*, 2011). The Pontbren group of ten farmers is kept relatively small to enable accountability and management. The members have long-standing relationships of over 30 years. Although facilitated, the group had autonomy and, importantly, decided together on the issues, solutions and actions (Mills *et al.*, 2011). Mills *et al.* (2011) conclude that for similar groups to be successful, decentralisation and devolution of decision-making about environmental funding for farmers is required by government, which (they argue) the current institutional culture within the Department for Environment, Food and Rural Affairs (Defra) would struggle with.

2.4.2 Agri-environment schemes

AES are now used worldwide to achieve environmental outcomes on agricultural land (Ansell *et al.*, 2016). Ansell *et al.* (2016) reviewed AES research in over 25 countries. They found AES funding was sometimes the most significant government funding for environmental delivery. The schemes vary widely in scale and complexity but, broadly, they shared the common principle to pay farmers in exchange for environmental goods and services including biodiversity, water, soil and air quality (Ansell *et al.*, 2016). There is a rich vein of research on the effectiveness, uptake and impact of AES in terms of delivery of environmental outcomes and farmer attitudes and behaviour, particularly in the UK and EU. This section will concentrate on how English AES have been used to address large-scale environmental delivery to provide historical context to this research.

Prager (2015b)'s EU-wide review of AES identified two modes of large-scale environmental delivery through AES:

- Coordination, where individual landowners take action and objectives can be achieved without farmers necessarily working together. Non-native invasive species management and protected site buffering are cited as examples;

- Collaboration, which requires negotiation between farmers, not least to address conflicting objectives and cross-holding working (Prager, 2015b).

(These modes are discussed further in the Chapter 3 in relation to participation). One way AES can incentivise collaboration is through agglomeration bonuses which pay farmers additional incentives for working with adjacent farms around them (Krämer and Wätzold, 2018).

The UK's AES pays farmers for a range of actions aimed at restoring, creating and preventing damage to environmental features. Each country within the UK has its own iteration of AES which were historically linked to, and partially funded by, the EU's Common Agricultural Policy (CAP) and are now funded post-Brexit by the UK government. Scotland, Wales, England and Northern Ireland have developed separate AES schemes, but all four iterations share some common characteristics in terms of the types of activity funded. They aim to reduce pollution, increase biodiversity and protect existing habitats and species. The underpinning economic basis of the funding within all country schemes is based on 'income foregone' from productive farming. The English scheme is, however, the most complex in terms of the number of options availability and, arguably, has more prescriptive requirements.

In England, AES have been available for 30 years in various iterations summarised in Table 1. Two mechanisms have been used in the English schemes to encourage larger-scale delivery:

- Spatial targeting, where specific actions are encouraged through coordinated advice or geographically targeted incentives. This could be characterised as coordinated action (Prager, 2015b);

- Agglomeration bonuses which financially incentivise farmers working together to achieve cross-holding actions. This could be characterised as collaborative. These have generally been limited to common land, where ownership rights are collectively held, in England.

Table 1 summarises these against each iteration of the English AES scheme.

Table 1 History of AES in England (adapted from Franks, 2019)

Name of scheme	**Timeframe**	**Where available**	**Collaborative elements: Agglomeration bonuses**	**Cooperative elements: Spatial targeting**
Environmentally Sensitive Areas (ESA)	1987–2004	22 'High biodiversity Areas' i.e. protected landscapes and national parks	"Commons" agreements between all rights holders in moorland and common land areas.	Schemes designed to deliver specifically for each of the 22 areas.

Name of scheme	Timeframe	Where available	Collaborative elements: Agglomeration bonuses	Cooperative elements: Spatial targeting
Countryside Stewardship Scheme (CSS)	1994–2004	Universally available	None	Ran concurrently with ESA. Identified landscape types including: arable, chalk grass, countryside around towns, historic features, meadows and uplands.
Wildlife Enhancement Scheme (WES)	1992–2008	High environmental value areas, e.g. SSSIs		Targeted at high-value environmental areas. Agreements written specifically to address concerns in those areas.
Environmental Stewardship Scheme	2005–2015	Entry Level Scheme universally available. Higher Level Scheme (HLS) is competitive.	"Commons" agreements between all rights holders in moorland and common land areas using a specific scheme option HR8 available for group applications (£10/5ha) aimed at boundary-spanning eligible environmental features. This money would be received by the agreement holder. HR8 reached a relatively small area of 26,000ha at its peak (Franks, 2019)	Higher Level Scheme targeted spatial priorities describing requirements for for biodiversity, water, access, landscape character and historic interest on a priority landscape character area geography. Catchment Sensitive Farming offered additional advice and specific options in areas of specific concern for water quality

Name of scheme	Timeframe	Where available	Collaborative elements: Agglomeration bonuses	Cooperative elements: Spatial targeting
Countryside Stewardship	2015 –	Mid Tier universally available. Higher Tier more limited. Both, in principle, competitive	Option SP10, the administration of group managed agreements (£6/ha) aimed at agreements on common land, shared tenure or with two or legal interests. This payment would be received by the agreement holder. Facilitation Fund groups.	Spatial targeting through statements of priorities describing requirements for biodiversity, water, historic interest and landscape character. Catchment Sensitive Farming advice offered additional advice and specific options in areas of specific concern for water quality.
Environmental Land Management Scheme (ELMS) in development	2022 onwards	Details of this scheme are yet to be finalised. The development of the scheme is be undertaken through what Defra describes as 'co-creation'. There have been calls for proposals. Defra has funded some groups and organisations to trial some elements of the proposed scheme. This process is ongoing during 2022.		

The effectiveness of English AES generally, and their contribution to large-scale environmental delivery specifically, has been limited by several factors: the voluntary nature of the scheme, which allows farmers to choose whether to enter a scheme (Ingram *et al.*, 2013), what land is entered and what measures are applied; and the inconsistent adoption and delivery of the scheme (Natural England, 2013).

There has been some success in efforts to increase uptake of AES in England; during the Environmental Stewardship Scheme 2005–2015, the whole farm Entry Level Scheme (ELS) covered up to 70% of England's agricultural land at its peak in 2013 (Joint Nature Conservation Committee, 2020). Being contracted within a scheme, however, does not guarantee farmers will deliver environmental outcomes. Participation in an AES has been used an indicator of meaningful engagement and enduring change in attitude and behaviours among farmers (Lobley *et al.*, 2013). However, Morris and Potter (1995) describe wide variations in commitments of farmers to early AES, where passive and active adopters participate within the scheme at different levels. Analysis of Environmental Stewardship showed strong bias towards options which focused on boundaries, so called 'hedges and edges' measures which would have the least impact on productive land and mainstream farming practice (Natural England, 2014). The tendency for farmers to ensure 'business

as usual' by adopting AES in a way which minimises on-farm change may run counter to the requirements of large-scale environmental delivery (Arnott *et al.*, 2019; Aslam *et al.*, 2017).

Agri environment, by offering financial incentives, assumes farmers' decisions are motivated by financial gain. Multiple studies of over the last 20 years have found that finance is not necessarily a paramount driver of farmer behavior and may be overstated by farmers in order to represent themselves as rational business people (Garforth and Rehman, 2006; Howley *et al.*, 2015; van Dijk *et al.*, 2016). Other factors such as attitudes, values and identify, clearly play an important role (Kuhfuss *et al.*, 2016). Garforth and Rehman (2006) suggest perceptions of risk, issues of succession (the future of the farm beyond the farmer's working lifespan) and the advice community also have an influence.

The UK's departure from the EU, triggered by the referendum in 2017, is likely to have significant impact on farming: through changes in access to EU markets, which have historically been key for many UK farming products; post-Brexit trade deals with countries such as Australia that can provide major farm product imports into the UK; and the departure from the EU's Rural Development Programme, allowing the UK a free hand to restructure agricultural support payments (Defra, 2019). The two key economic influences on farming, market prices and agricultural subsidy, are currently subject to the most significant changes they have undergone since the second world war. Wales, Scotland, English and Northern Ireland are all taking steps to develop country specific post-Brexit AES schemes. Wales have enacted an Agriculture Bill which will restructure agricultural payments putting a Sustainable Farming Scheme in place accompanied by grants aimed at supporting the development of productive farming. In England, the Basic Payment Scheme (BPS), a direct subsidy contingent on Cross Compliance and the delivery of limited 'greening' measures, is being phased out and is planned to be replaced in 2024 with the Environmental Land Management Scheme (ELMS), which will deliver public goods for public services (Defra, 2021b).

The annual income from BPS has been significant for farm businesses' viability, particularly for livestock and upland farms (Downing and Coe, 2018). As described in Table 1, in England , Defra has sought to co-create ELMS in conjunction with farmers, and Facilitation Fund groups have been a significant conduit of communication in this process (Breyer *et al.*, 2021). However, there have been concerns within the farming community that post-Brexit English agricultural policy places too much emphasis on environmental delivery relative to food production (Environment Food and Rural Affairs Committee, 2021), which Defra (2019) acknowledged as the primary purpose of farming. Nye (2017) argues that food production has become disconnected from environmental delivery. An alternative view is that policy instruments such as AES exist in relation to productive farming by basing farmers'

payments for environmental outcomes on income-foregone from productive farming (Baur *et al.*, 2016). The UK's post-Brexit agricultural transition could offer an ideal opportunity to address the food/environment disconnect. However, to date this has not been articulated although England's Government Food Strategy (Defra, 2022) suggested a forthcoming (2023) land use framework for food production, net zero and the environment. The absence of a joined up approach between environmental and food production objectives was summarised by the NFU, who suggested that it is "absolutely crucial that [the new agri environment policy] really does work for food production as well as the environment" (Environment Food and Rural Affairs Committee, 2021, p.9).

2.5 Facilitation Funds

Launched in 2015, Facilitation Funds were originally funded alongside AES, through Rural Development Programme for England (RDPE), and are intended to encourage cooperation and knowledge-sharing among the farming community (Defra, 2021c). The stated aims of Facilitation Funds are to provide funding to a person or organisation to help groups of farmers to:

- "Improve the natural environment at a landscape rather than single farm scale;
- Achieve greater improvements than individual holdings could on their own" (Defra, 2021c).

The assumption within the scheme literature is that this will be done by fostering cooperation between farmers, through farm extension or knowledge exchange, and by improving the uptake and effectiveness of Countryside Stewardship. The mechanisms and actions which should be undertaken to achieve this are not closely defined.

The Facilitation Fund application process is competitive and is led by a facilitator, which can be an individual or organisation. The application needs to show evidence that farmers have signed up to the group. Farmers do not commit themselves to any action by signing up to a Facilitation Fund, are not required to be in an AES and do not benefit directly financially. The Facilitation Fund provides an initial £10,000 per group per annum and an additional £500 per annum for each member up to a maximum of 55 members. The only advantage offered to farmers, over and above their direct benefit from group processes, is that if they choose to apply for Countryside Stewardship the facilitator countersigns their application which, theoretically, makes it more likely to be successful. (In practice, since the launch of Countryside Stewardship in 2015, only ineligible applications are rejected; there is no qualitative threshold for applications.) The funding for the Facilitation Fund group pays for the facilitator's services and other knowledge exchange services the group wishes to

procure, subject to the approval of the Rural Payments Agency, who administrates the scheme. There are presently approximately 150 active groups, comprising 3,000 members, managing 670,000 ha, about 7% of total farmland in England (Breyer *et al.*, 2021).

The focus for the Facilitation Funds is geographical rather than sector specific. Facilitation groups are likely to feature a range of different types of farmers from dairy to arable (the difficulties this presents are discussed in 9.3.1). Additionally farmers within groups may not be representative of the wider farming because they are willing to consider environmental delivery as discussed in section 9.6.

In order to deliver the stated aims (listed above) Facilitation Funds would need to:

- Encourage collaboration and consensus-building between farmers, policymakers, scientists, environmental conservation organisations and the wider public about the issues, aims and potential solutions relevant to farming practice on an agreed geographical scale;
- Facilitate cross-holding cooperation between farmers to achieve coherent environmental delivery across a large geographical area, for instance by creating contiguous habitat or managing cross-holding management for watercourses or invasive species;
- Improve knowledge of the issues and solutions to enable farmers to put environmental practices into action effectively.

The nature of participatory processes is therefore critical to the success of Facilitation Funds specifically, and large-scale environmental projects generally. Farmers' participation in AES, and the nature of that participation, is significant for the environmental delivery. The design of Facilitation Funds suggests that they are an attempt to overcome the issues and difficulties faced when employing AES agreements with individual landowners to address large-scale environmental issues.

3. Farmer participation : a review of relevant research

This chapter discusses the principles of participation and reviews literature which focuses on participation within large-scale environmental projects and collaboration in AES, including Facilitation Funds, both worldwide and in the UK. Significant behaviour-change models, which have been applied to environmental work generally, and farmers specifically, are reviewed. The key elements of participation relevant to Facilitation Funds are discussed in detail: knowledge, advice, extension and facilitation. The existing research on Facilitation Funds is reviewed. Finally the literature is subject to a gap analysis which identifies the unique contribution of this research.

3.1 Defining participation

Participation is a widely used, but poorly defined term (Claridge, 2004). Reed (2008, p.2418) suggests that participation is "a process where individuals, groups and organisations choose to take an active role in making decisions that affect them," a view adopted by other commentators (Bell and Reed, 2021). Participation in environmental action presents challenges because the decision-making required needs to be undertaken at the macro level of policy and organisational delivery, as well as at the micro levels of individual choice and action. Additionally, when the environment is the subject of participation, people are not the main or sole beneficiaries of the process, as they are in interventions in other areas such as health services. Environmental delivery beneficiaries such as ecosystem services are related to, but also separate from, human concerns. In their comparison (and development) of realist and co-production approaches, Chilvers and Kearnes (2020) argue that the link between participation and decision-making may not be linear, advocating that an experimental and iterative process is necessary rather than a process with an assumed outcome.

While there is a wealth of analysis focusing on the participation process (Bell and Reed, 2021; Reed *et al.*, 2018), the engagement of the individual is less well documented. Practitioners report that individuals' participation can range from being present to taking action (Stephens, 2019). There is an underpinning assumption that the nature of the process influences individual participation, for instance, through inclusive and reflective practices (Chilvers and Kearnes, 2020). Taken to its logical conclusion this would imply that, if perfected, participatory processes will involve all individuals equally, which seems to ignore individual motivation and agency. This chapter will explore both participatory processes specific to environmental actions, through models and examples, and

individual motivation, through behaviour change and farmer-specific extension and knowledge exchange research.

Participatory processes are particularly relevant to large-scale environmental action, which requires decision-making, knowledge-sharing and action from a range of stakeholders, from government and institutions to individuals (Reed, 2008). Reed's (2008) detailed review of participation provides a useful analysis illustrating how participation has developed specifically in relation to large-scale environmental processes. They describe a continuum of phases from awareness-raising in the late 1960s to what they term 'post participation' practices, but stresses that these typologies exist contemporaneously (Reed, 2008). Reed suggests that the benefits of participation within environmental projects are that it:

- Leads to higher quality decisions based on more complete local information, mitigating unexpected negative outcomes;
- Creates achievable actions, better suited to socio-cultural conditions;
- Increases the sense of ownership for participants, enhancing support and implementation of actions (Reed, 2008).

Hohl *et al.* (2015b)'s analysis of a series of case studies of large-scale environmental delivery in the United States attempts to define the scope of participation necessary in terms of "adaptive governance". They argue that humans' social and economic needs should be built into solutions and the required actions. This approach requires: the participation of a wide range of stakeholders; a synthesis of scientific, local and practical knowledge; and action delivered on an appropriate scale by individuals, groups and institutions, supported by local, regional and national policies and action (Hohl *et al.*, 2015b). Their analysis highlights an important aspect of participation specific to environmental delivery projects; which is that the ultimate aim is for some participants, particularly landowners, to carry out necessary environmental actions, usually on a voluntary basis (albeit frequently supported by financial incentives). Participation in the process not only identifies the aims and actions required to meet them but also encourages individuals and groups to undertake the actions, often against their self-interest (Hohl *et al.*, 2015b).

Participation in environmental delivery therefore has a dual purpose: first to address and design potential solutions to complex, uncertain, overlapping and sometimes contradictory issues; and second to galvanise the necessary action from a range of actors. The second purpose presents a particular potential danger because there is, inevitably, a temptation for organisations to attempt to

utilise the process for their own, pre-determined aims (Cooke, 2001a). There is often a lack of consensus concerning the requirements for participatory processes in environmental projects (Reed, 2008; Reed *et al.*, 2018). There can also be a lack of transparency and reflexivity surrounding participatory processed which leaves then open to abuse (Chilvers and Kearnes, 2020). Participatory processes therefore need to be forensically examined, in isolation from claims made about or for them, to assess their scope, nature and limits (Arnstein, 1969).

The following section explores concerns about participation that have been discussed in the academic literature, and their potential mitigation.

3.1.1 Organisational power: top down, central or bottom rung

Cornwall and Coelho (2006) define participation by how it is framed. Participation can be offered by organisations which then define the scope of the participation. Alternatively, the same space can be claimed by individuals or "citizens", through protest, lobbying and direct action (Cornwall and Coelho, 2006). Cornwall and Coelho's (2006) definition acknowledges that power relationships run through participatory processes and that power inevitably resides with formal organisations which are afforded authority and control through legal, financial and cultural means.

Arnstein (1969) recognised power relationships within participatory processes by describing different typologies of participation, ranging from non-participation or manipulation, where participants are educated or cured by powerholders, through tokenistic consultation to partnership and delegated power, where power is more shared equitably shared between participants. Arnstein (1969) suggests a ladder (see Figure 1) which makes power relationships within participation explicit. However, Arnstein warns against a simplistic interpretation of this model where power-sharing is seen as good and lower rung processes are bad or worse.

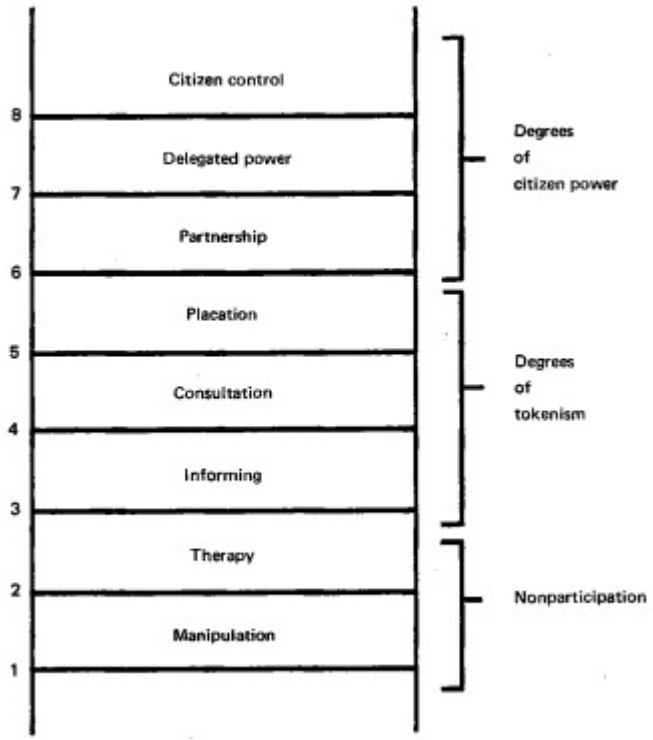


Figure 1. Eight rungs on a ladder of citizenship participation (Arnstein, 1969, p.217)

As Reed (2008) describes, there have been numerous attempts to build on Arnstein's (1969) model. Lawrence (2006) recognises the relative power of organisations within participatory processes and goes on to determine power relationships at all levels of the ladder by characterising actors within the process as central (experts and decision-makers) or local (those closer to the practice or issue but with less specialist knowledge and power). Central actors exert top-down control through processes they initiate (Lawrence, 2006). Lawrence's typology of the participation reiterates Arnstein's (1969) of consultation/collaboration but suggests an additional category, "functional". Functional participation is designed to encourage local actors to deliver centrally determined decisions. While recognising these different types of participation, Lawrence argues, in their research on voluntary biological recording, that within all typologies, transformational change can occur when local agents subvert and reclaim the process.

Reed *et al.* (2018) developed Arnstein's ladder further using two aspects: the driver of the engagement, which can be bottom-up or top-down and the mode of engagement, be it communication, deliberation, consultation or co-production. The possibilities which emerged were represented through an adjustable wheel (see Figure 2) (Reed *et al.*, 2018).

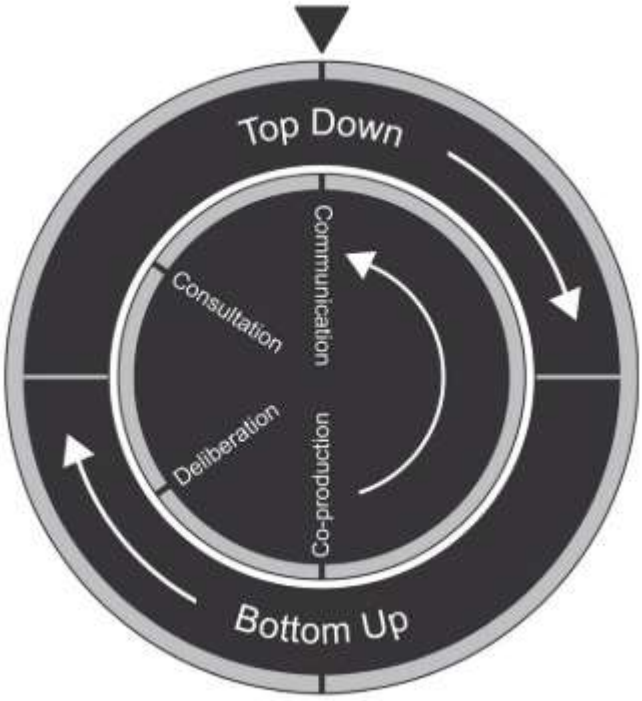


Figure 2. Wheel of participation (Reed *et al.*, 2018, p.10)

Using these two aspects Reed *et al.* (2018) developed identified four types of participation:

- Top-down one-way communication;
- Top-down deliberation or co-production where organisations with decision-making power engage in a discursive approach, resulting in decisions jointly owned by the organisation and stakeholders;
- Bottom-up engagements initiated by stakeholders to open up closed decision-making;
- Bottom-up engagements, initiated and led by stakeholders who have the power to co-produce and, importantly, implement resulting actions (Reed *et al.*, 2018).

They note that few examples of deliberative, co-productive participation have been documented.

Cooke and Kothari's (2001) reflective review of experiences in agricultural and environmental international development recognises that previous participatory practice was inadequate. Through a series of linked essays they identify some key failings offering up an alternative definition of participation through describing what it is not.

They reinforce the assertion that participation needs to recognise that communities are not homogenous, but are subject to intersectional power relationships of age, class, gender and economic and social status (Cooke, 2001b). Without this there is a danger that participation reinforces the interests of the already powerful by failing to acknowledge and address this (Cooke, 2001b). Further that where institutions drive and frame the agenda there is a danger that participation becomes a 'ritualised expression' that is essentially 'a bid for political support for policy requirements and delivery' (Mosse, 2001, pp. 30-31). The construction of projects, by presenting predetermined aims and objectives, can effectively reshape participants' needs rather than reflecting their actual requirements (Mosse, 2001).

There is a potentially a mismatch between participation timeframes where the push to 'get things done' (created by the pressure on projects to be accountable, use funds wisely and demonstrate progress) is at odds with the iterative, non linear and slower-paced requirements of participation (Mosse, 2001). The "assumption that dissent is never insurmountable and consensus can always be achieved" (Cooke, 2001a, p.114), and that discussion forums for stakeholders necessarily result in a consensus that is fair for all (Hildyard, 2001), can also create a tensions in the process. This leads to the conclusion that ultimately the process needs to empower participants to reject projects and organisations and participation itself, however well meaning, when required (Mohan, 2001).

A central theme within their analysis is necessity of creating new knowledge which balances technocratic expert-driven approaches with local knowledge which is culturally and geographically specific (Cooke, 2001b; Kothari, 2001). A requirement which is problematic within institutionally constructed projects where the aims and objectives are fixed before the onset of the participatory process which could be argued to be the case in relation to agri-environment schemes.

There is also a danger that organisation-led participation can 'drown out' existing participatory activities undertaken by the community by failing to recognise and acknowledge them (Cleaver, 2001). Examples of farmer groups which pre-exist Facilitation Funds could include some English farmer-led environmental groups supported by the Game and Wildlife Conservancy Trust (Thompson *et al.*, 2015) and more general discussion groups as identified by Inman *et al.* (2018).

3.1.2 Intersectionality

Power within participatory processes exist both on a political level, as just described, and on a societal level where individuals may be privileged in their access to participatory fora because of their class, gender and social and economic status (Cornwall and Coelho, 2006). Arnstein (1969) reminds us that power holders and citizens are not homogeneous entities. Social, economic and cultural differences of race/gender/class/education/social structures have a cross-cutting impact on participation (Cooke, 2001b). It is possible for participation to reinforce the interests of the already powerful, who can more easily access and be heard in participatory fora (Chilvers and Kearnes, 2020). In the UK, the average farmer is typically portrayed as male, middle-aged or older, and white. To some extent this is supported by the data: of UK's principal farmers 83% are male, 40% are over 65 with a median age is 60 (Defra, 2016). Furthermore, over half of farm workers in the UK are family members, and so were "born into" farming culture. This may lead to the conclusion that UK farmers are a relatively homogeneous group. However, the identity of the principal farm holder masks considerable variation within farming households and the wider farm workforce in age, gender and education levels (Nye, 2017). Arable, dairy, livestock and fruit and vegetable farms are distinct systems. Farm size also plays a significant factor in the construction and day-to-day work of the business. Analysis of intersectionality within participation is not a focus of this research (although it would merit further study). The tensions between farmers' group identity and the heterogeneity of farm business will be considered however.

3.1.3 Personal history

Participatory processes are now so commonly employed that people's lived experience of participation informs both their view and their potential engagement with new initiatives (Cornwall and Coelho, 2006). Negative experiences and consultation fatigue may develop when participation is poorly run and disempowering (Reed, 2008). Individuals' participation history may therefore have an influence on their present and future engagement as evidenced by research about "hard to reach" farmers (Hurley *et al.*, 2022). This research provides some historical context for Facilitation Funds by investigating farmers involvement in the large-scale environmental projects which preceded them, offering some insights into underlying assumptions and interrelationships between key stakeholders and farmers.

3.1.4 Addressing power imbalances

In order to effective and fair, participatory processes need to address power imbalances: by identifying power relationships, systematically representing all stakeholders, integrating different knowledge and ensuring transparency (Reed *et al.*, 2018). In environmental participation, power is

not solely held by formal decision makers, i.e., government, scientific institutions, environmental conservation organisations and private companies have significant presence (Reed *et al.*, 2018).

Reed (2008) suggests a toolkit for participation which takes the form of a service contract underpinned by a philosophy of empowerment, equity and trust whereby stakeholders are considered early and throughout the process with clear objectives agreed from the start. To address inequalities, stakeholders need to be systematically represented and analysed potentially against an interest/influence matrix (Bell and Reed, 2021). Rather than prescribing participatory methods methods should be adapted to the socio-cultural and environmental context, recognising constraints on participants of, for instance, time and literacy. Efforts should be made to ensure that marginalised voices are heard by systematically overcoming barriers to their engagement (Bell and Reed, 2021; Chilvers and Kearnes, 2020). In practice, several commentators have observed that participation is often proposed and determined by institutions and organisations whose construction and processes, frequently termed as bureaucracy, may struggle with the flexibility and iterative nature of inclusive processes (Chilvers and Kearnes, 2020; Reed, 2008; Reed *et al.*, 2018). The potential mismatch between participatory best practice and real-world organisations processes is pertinent to both Facilitation Funds and large-scale environmental projects which are centrally designed and funded.

Looking across the literature, while power imbalances are discussed and potential mitigations proposed, few researchers attempt to first unpick and make explicit the nature of power within participatory processed. As Quimby and Levine (2018) note (in relation to fisheries co-management) power can be implicit and explicit within participation. An important first step in an analysis of participation is therefore to determine where power is based before and during participatory processes and what form that power takes. If participation is frequently initiated and led by relatively powerful organisations such as government (as described above) an analysis of participation needs to dissect what control and power imbalances this creates within the process.

Knowledge and knowledge creation is a key theme within participatory processes, particularly in relation to environmental delivery. Cooke (2001a) asserts the necessity of creating new knowledge which balances technocratic expert-driven approaches with local knowledge which is culturally and geographically specific. This requires what Bell and Reed (2021, p.14) term “epistemological flexibility” to ensure that different types of knowledge are incorporated and valued. Knowledge is not necessarily created through a synthesis of the expert and the practical but also through a mediation of the ideal and the possible. Farming management recommendations, even when based on robust science, have to be applied to the specificity of place and field by land managers with varying levels of skills and ability, who may be constrained by the practicalities of the tools at their

disposal and the resource (both financial and labour) of their farm business (Lobley *et al.*, 2013; Nye, 2017; Smalley, 2021).

To mitigate power imbalances within participation there are calls for the creation of 'safe spaces' (Bell and Reed, 2021; Reed *et al.*, 2018) but how these can be realised is poorly described. Trust is documented as developing over time (Mills *et al.*, 2011) and relates to participants' empowerment through their agency and freedom (Bell and Reed, 2021). Developing trust is likely to relate to broader concepts such as transparency and reflexivity where people engaged within a participatory process acknowledge their relative positions. Trust is also likely to relate to how the mechanics and management of the process, which are discussed in the following section, are enacted and experienced. Reed (2008) highlights that participation fatigue, which damages trust, develops when processes are poorly run, offer participants little reward or do not result in effective action. Historically participation fatigue has been caused, in part, by the failure of central institutions to include adequate time and resources for the process and/or incorporate the findings into decision making (Reed, 2008). In short, lip service is frequently paid to participation and the possibility of transformational results is curtailed by pre-ordained outcomes and rushed processes.

Related to safe space and trust, how dissent and disagreement are addressed within participation is particularly important. If participation is expected to result in consensus which fair for all (Hildyard, 2001) how can immutable dissent be acknowledged or addressed? Truly empowering participation should allow participants to reject the process itself when required (Mohan, 2001) which can only be done where participants are free from fear (Bell and Reed, 2021). As outlined in the previous chapter, UK farming is facing significant financial and market restructuring. The uncertainty and anxiety which this may provoke in many farmers may encourage them towards participation in Facilitation Funds for negative reasons. This research will investigate farmer motivations and compare these the aims of the Facilitation Fund participation process (in Chapter 9).

Transparency is an important principle because it seeks to make power and power imbalances visible so that they can be addressed (Reed *et al.*, 2018). Chilvers and Kearnes (2020p. 367) argue for a deliberative reflexivity which would require those driving the process to reflect on how, who, when and what within the process and iteratively adapt it to achieve the empowerment and participation of all stakeholders. Reflexivity requires reflection while transparency demands an articulation of its findings.

An area which appears to have received little detailed analysis is the resourcing of participation. If, as several commentators suggest, it requires professional facilitation who pays for this? Under what

terms is this payment offered? If some people within the process are paid for their input, who is not? Adams et al. (2016)'s review of large-scale conversation partnerships in the UK found that the establishment and maintenance of partnerships was frequently unfunded, suggesting that this type of participatory process is not valued. Analysis of funding within participation processes is essential for transparency but it is largely unacknowledged in research. Wheeler *et al.* (2021, p. 32)'s rapid evidence review across large-scale environmental projects found that securing funding is a "resource hungry and bureaucratic exercise in itself" and that development time for projects needs to be sufficiently resourced.

Lastly, as previously stated, the literature points to a strong role being played by central actors as the driver of participation which, while usually well intended, may push environmental projects towards predetermined outcomes (Chilvers and Kearnes, 2020; Reed *et al.*, 2018). It is notable that the literature on environmental participation rarely makes transparent key aspects of the process: who drives it, who manages it, what is within and outside the scope of the participation, who controls this scope, who funds it, what is the nature of the funding and what impact this has on the process. The conceptual framework in the following chapter attempts to unpack these elements so that they can be applied within this research.

3.1.5 The participatory process

Participation in environmental delivery is a process which takes place over time (Reed, 2008). The temporal and spatial "scalar fit" contributes to the effectiveness of the participation process and its outcomes (Reed *et al.*, 2018, p.13). Assessment of required scale should therefore be reflected within the participation. Scale can apply to the delivery of the environmental outcome, the behaviour change necessary to achieve it, and/or the practicalities of the participatory process itself. There is potentially a mismatch between participation timeframes where the push to 'get things done' (created by the pressure on projects to be accountable, use funds wisely and demonstrate progress) is at odds with the iterative, non-linear and slower-paced requirements of participation (Mosse, 2001). This is relevant to large-scale environmental projects, discussed later in this chapter, and to Facilitation Funds, which are three—five year schemes.

Few commentators identify component elements of the participatory process. Prager *et al.* (2012) however, suggests a multi-stage process required for environmental delivery which identifies elements or stages (see Figure 3). Their process begins with the discussion and negotiation of objectives which leads to scheme design, trials and pilots, implementation, monitoring and feedback,

with two-way communication throughout between participants and process managers (Prager *et al.*, 2012).

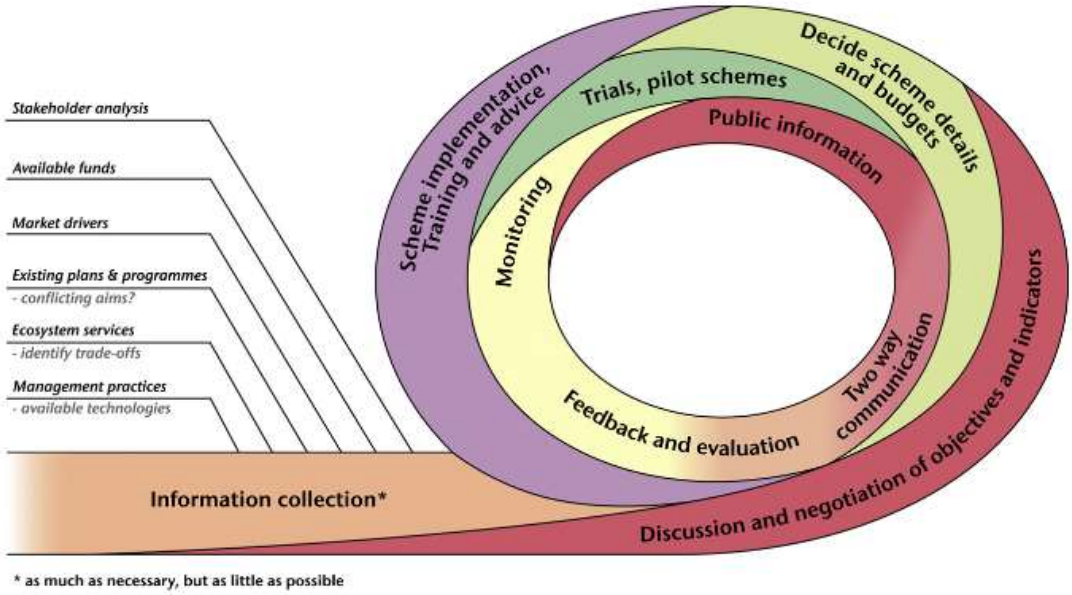


Figure 3. Design and implementation of a scheme for collaborative provision of ecosystem services (Prager *et al.*, 2012, p.246)

Prager (2015a) additionally suggest a further process stage as a prerequisite: the need to solve a common problem or address a threat. This points to the importance of the development of shared aims as one of the key elements in the process, framed as the discussion and negotiation of objectives (Prager, 2015b). Where these elements are excluded from the participatory process it potentially impacts on transparency (as previously discussed).

Participating in large-scale environmental projects does not have to involve all actors in the process at all stages. Prager (2015a) developed a typology of agri-environmental large-scale agri-environmental approaches, which differentiates coordination from collaboration. In the context of AES, collaboration demands dialogue and joint working while cooperation can be indirect and often coordinated by a third party (Prager, 2022). Coordination does not therefore necessarily require farmers to work together while collaboration does. Both approaches deliver environmental outcomes, suggesting one approach is not necessarily better than the other. Both collaboration and coordination can be top-down, imposed by government or another organisation, or bottom up as

illustrated in Figure 4. However as Wheeler *et al.* (2021) notes the boundary between top-down and bottom-up approaches can be fuzzy.

According to Prager (2015b) coordination is more straightforward and less costly, while collaboration has other potential benefits, such as increasing social capital among participants, and may be more sustainable. While Prager (2015b) does not advocate one approach over the other, they suggest that collaboration is complex because it weighs different and sometimes conflicting objectives both in terms of benefit (who or what gains?) and delivery (what is the most effective objective in a given geography?). A collaborative approach could therefore be argued to be necessary for large-scale conservation because it can potentially negotiate the complexity of the undertaking. Collaboration could also be seen as more desirable because it is empowering whereas coordination reserves the power, to a lesser or greater extent, for the coordinator. Prager (2022) suggests that some environmental objectives, such as the creation of wetlands or coordination of timing of hay cutting, require collaboration but this is debatable. They, like the establishment of cross holding habitat networks, hedges, woodlands and other habitats, can be achieved through coordination by a third party who negotiates with individual farmers.

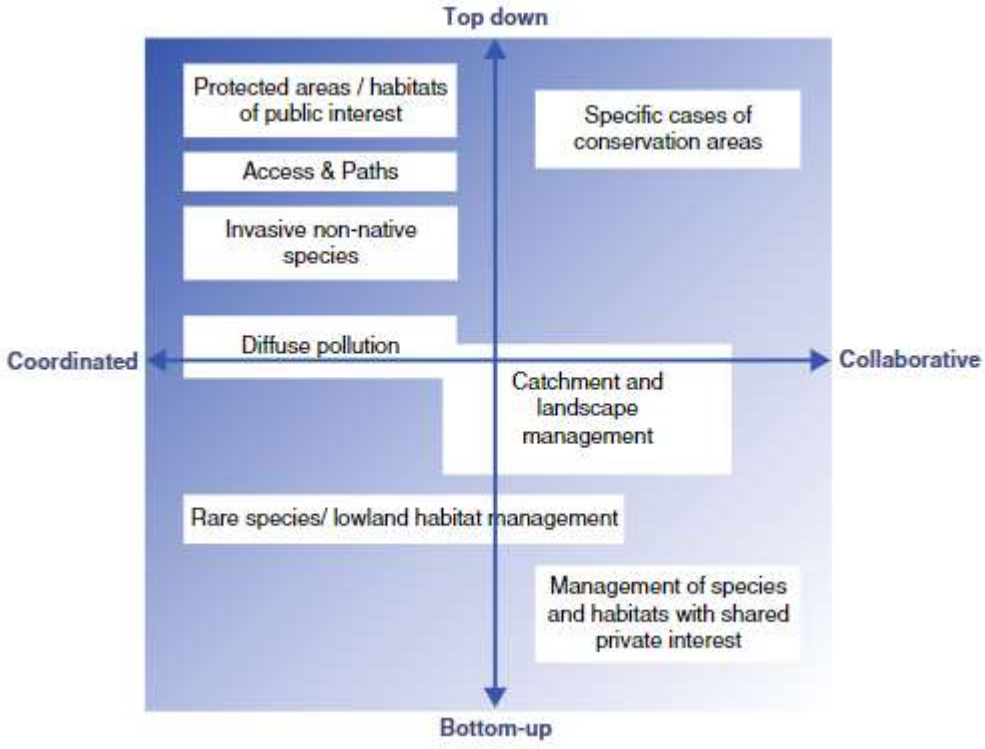


Figure 4.The coordination-collaboration spectrum (Prager, 2015b, p.61)

Central to successful participation is highly skilled facilitation because the manner in which participation is conducted is, according to Reed (2008), more significant than the methods used.

Participation is not a process that can happen spontaneously but requires professional guidance by skilled staff. These staff, whom Chilvers and Kearnes (2020) term mediators, play a key role by challenging underlying assumptions in participants, themselves and the process, by recognising and acting on responsibilities towards participants and by ensuring inclusion.

3.2 Behaviour change models

As some commentators note, claims are made about the effectiveness of collaborative processes are frequently not substantiated (Cornwall and Coelho, 2006; Reed, 2008). The literature on participation within pro-environmental processes reviewed in the previous chapters suggests a significant (but largely unsubstantiated) underlying assumption among researchers, that participation leads to individual action; that lack of understanding and 'buy in' are significant barriers to action which the process overcomes. This argument is made specifically in relation to farmer participation which is assumed to lead to farmer behaviour change (Rose *et al.*, 2018). There does not appear to be significant research demonstrating the links between models of participation and those commonly used for individual behaviour change. This research will not attempt to identify a detailed relationship between the two, but rather utilise behaviour change models to offer potential insight into individuals' motivation and actions. This section references models which have been commonly used in relation to farmers and/or environmental action and is discussed specifically in relation to them.

3.2.1 Influencing the social/subjective norm and limitation of agency– theory of planned behaviour

Ajzen (1991)'s model suggests that a person's behaviour is influenced by two things: their agency, the ability to perform the behaviour and their perception of this ability, and what Azjen calls the subjective or social norm, what the individual feels that they are expected to do, and the commonly held attitudes around them.

The social norm is a complex concept to unpack in relation to farmers because it can include a wide range of influences: the media and farming press (Pike, 2008); advisors, peers and family (Rose *et al.*, 2018); and the cultural and historical narratives which inform farmers' self identity which are constructed over time, sometimes intergenerationally (Dolinska and d'Aquino, 2016; Ingram *et al.*, 2018). Emery (2015), Hall (2008) and Whaley (2014) highlight the cultural importance of the past in forming present attitudes among farmers in the UK, while Cush and Macken-Walsh (2016) do similar for Ireland. Some conclude that a productivist mindset is still the dominant social norm for farmers

(Kuhfuss *et al.*, 2016; Whaley and Weatherhead, 2015). Burton and Paragahawewa (2011, p. 99) characterise these shared values as "tidy farming" which offers a criterion by which farmers can judge each other from the "long established tradition of 'roadside farming'".

There is some debate about how social norms in farming can be influenced. Possible influences identified in the literature include participatory agricultural extension (Bager and Proost, 1997), experimentation and learning while doing (Dwyer *et al.*, 2007), pressure from the social group (Deng *et al.*, 2016) and peer-to-peer learning (Rose *et al.*, 2018). Information alone does not necessarily lead to awareness and action (Pike, 2008) but poor information has a negative impact on pro-environmental behaviour (Falconer, 2000). Schroeder *et al.* (2015) found that farmers' families have most influence on farmers' decisions. van Dijk *et al.* (2016) found that environmental cooperatives stimulated pro-environmental action by farmers by shifting the social norm, but this was not a conclusion shared by Westerink *et al.* (2017).

There are acknowledged barriers to behaviour change that are centred on the individual's agency, such as financial and time poverty and practical issues which could prevent farmers from changing their practices including the land, machinery and the financial support they have access to (Inman *et al.*, 2018). Limitations of agency influence a person's attitudes and actions. For example farmers afford greater importance to environmental threats which can be addressed within the boundary of their holding, where they have direct control (Smith and Sullivan, 2014). Farmers also need to feel that their actions can make a difference (Lobley *et al.*, 2013).

3.2.2 Environmental consciousness – Model of environmental behaviour

Kollmuss and Agyeman (2002)'s model of environmental behaviour suggests that individuals have internal influences (knowledge, feelings, attitudes and beliefs) and external influences (social, political, economic) influences. A crucial internal motivator is 'environmental consciousness' - a complex interaction of emotion, knowledge, values and attitudes. Kollmuss and Agyeman (2002) point out that lack of knowledge about the causes and effects of ecological degradation can lead to emotional non-involvement. This would suggest that involvement of farmers in the initial planning of large-scale environmental projects, when environmental issues and mitigating actions are identified, is essential for mobilising their involvement. Häfner and Piorr (2021) describe this process as one of developing shared cognition or perceived consensus.

Alongside the productivist mindset mentioned above some researchers suggest that agricultural degradation has become normalised in the farming community (Burton, 2014) partly because farmers do not understand their contribution to environmental damage (Boardman *et al.*, 2017; Holstead *et al.*, 2017; Inman *et al.*, 2018). Inman *et al.* (2018)'s study of water issues demonstrates that although farmers acknowledged the link between farming and environmental degradation (of water quality) they had not been presented with persuasive scientific evidence which demonstrated the impact of specific farming practices.

3.2.3 Groups and change agents – diffusion of innovation

Rogers (1995) proposes a model that explains how social groups influence change or innovation. This this model communication works best between homogeneous groups, but this homogeneity can also potentially stifle innovation without the input of change agents, from outside of the group, and early adopters from within the group. Rogers (1995) proposes that people are more likely to adopt practices advocated by their trusted peer group with whom they share cultural values. Farmer-specific research broadly supports the requirement for the peer-to-peer learning this theory suggests (Del Corso *et al.*, 2015; Gatto *et al.*, 2019; Šūmane *et al.*, 2018). However, as mentioned earlier in this chapter, researchers have shown that farmers, despite their strong self-identity, are a not homogeneous group (Rose *et al.*, 2018; Winter *et al.*, 2017). Farmers are differentiated by farm category, for instance dairy, arable, livestock, farm size and ownership as well as age, class, gender, race and economic social status (Cooke, 2001b).

Rogers (1995) has a relatively simplistic view of group dynamics which assumes that trust is equal across the group, which is not always the case (Prager, 2015a). Daxini *et al.* (2019) argues that social pressure is influential when wielded by people that farmers' trust and different farmers trust different people. Group processes that are led by or that hold up 'model farmers' without considering other members' varied social, economic backgrounds and farming types may be unrepresentative and therefore unsuccessful (Cook *et al.*, 2021; Hailemichael and Haug, 2020).

3.2.4 Bonding, bridging and linking capital

The concept of social capital sits within and alongside the social norm. It also partly answers Rose *et al.* (2018, p. 4)'s concern that the some approaches, such as Rogers' diffusion of innovation model (1995), focus on the individual, positing the farmer as a "problem non adopter." Theories of social capital address this by seeing individuals within the context of a network of relationships. This may

be particularly pertinent to farming in two respects: firstly in the construction of the farm business (who, for instance, is the decision maker on the farm or is decision making made collectively), and secondly in the connections between farms and farmers and others which can lead to the development of new knowledge and practices (linking to Rogers' theories).

Nye (2017)'s research demonstrates that the construction of 'the farmer' as one individual who makes all decisions for farm business is a false one. Farms involve workers, owners, family members and contractors, all of whom have an influence, and in some cases undertake, farm practices. Farm businesses are therefore themselves a network which links to a wider rural community network (Nye, 2017). How farmers or farms are defined within the participation process is therefore important.

Westerink *et al.* (2017) argues that social capital is necessary to allow the sharing of ideas which can generate new knowledge. Social capital helps building trust, providing support, access to information, shared values and the capacity to learn and innovate as a group. Most agree that declining social capital impedes innovation, environmental or otherwise (Dwyer *et al.*, 2007). Jilly Hall and Jules Pretty's work highlights the importance of social capital and its role in 'bridging' interactions between farmers and government (cited within Pike, 2008). Innovative and pro-environmental farmers tend to have or create access to bridging and linking social capital with advisors, stakeholders and policy makers (Arnott *et al.*, 2021). However, it has also been observed that in contrast to bridging social capital, strongly bonded social connectedness within groups may also become dark social capital by upholding the status quo (King *et al.*, 2019).

In summary these models point to the potential positive and negative impact of personal and shared values on farmers and the influences of peer group and wider connections. Agency, and particularly the limitations of the farm and farmers' circumstances, has emerged as an important consideration which this research will consider.

3.3 Examples of participation

Research that references participation within the environmental and agricultural fields tends to concern either participation in large-scale environmental delivery projects, with a focus on outcome delivery; or farmer participation in AES, with a focus on adoption, compliance and delivery. This section of the chapter will review examples from the literature of participatory processes in those two contexts:

- Examples of large-scale environmental delivery, namely watershed projects in the United States, Landcare and its successors in Australia, the Water Framework Directive catchment partnership in Europe, and an NGO-led project in the Netherlands;

- Examples of collaborative AES in Europe.

Before proceeding, it is worth noting that the lack of a universally recognised definition of participation presents challenges for a literature review. Perhaps because the participatory process is complex and poorly defined, terminology in relation to participation is used inconsistently within the research literature. The term 'collaboration' is frequently used to interchangeably with participation, as is 'engagement'. Collaboration and cooperation are also frequently conflated despite Prager's (2015b) attempt to differentiate the terms, as discussed above. In the following sections, terms will be used within the context suggested by the research literature, although where relevant the use of the terminology will be commented on. Tighter definitions will be described during the conceptual framework to provide a consistent usage in relation to this research

3.3.1 Participation in large-scale environmental delivery

3.3.1.1 Watershed management in the United States

Watershed management in the United States largely refers to policy-driven initiatives to address degradations of water bodies within catchments (Hardy, 2022). These initiatives have progressed through stages from recognition of the issue and policy creation in the 1970s, identifying causes and potential remedial actions in the 1980s and, from the 1990s onward, the creation of an action plans overseen by approximately 600 watershed partnerships in the country (Hardy, 2022; Roberts *et al.*, 2020).

Hardy's (2022) qualitative study of a single relation to a specific watershed partnership, found that the group successfully represented local knowledge and effectively directed government agency action. However, Hardy's analysis was uncritical of the representative nature of the group, which is described as being strategically aligned with the environmental and social outcomes of the watershed action plan (Hardy, 2022). The aims of the group were predetermined by environmentally focussed government policy so it is unsurprising that the group's membership comprised stakeholders who agreed or had sympathy with the aims. The absence of dissent and alternative views was not necessarily a strength if the aim of the partnership was effective action across a range of different stakeholders.

Roberts *et al.*'s (2020) examination of stakeholders' motivations for participation in watershed partnerships found that participation of farm businesses was motivated by the potential for access to grants, improved economic viability from controlling resource costs and access to technical assistance and advice within the partnership. In contrast, environmental and government organisations had envrionmental motivations for participation. The conclusion from this analysis is that multiple benefits, which do not necessarily align with the underpinning purpose of the partnership, need to be recognised and articulated to meet the motivations of diverse stakeholders (Roberts *et al.*, 2020).

Research on farmers within a watersheds partnership in Ohio found that they were not more likely to adopt pro-environmental practices than farmers in a nearby watershed where no partnership was established, and that adoption of pro-environmental practices appeared to be related to farm size, with smaller farms less likely to adopt because of limited resources (Campbell *et al.*, 2011). This suggests that factors other than participatory processes such as partnerships, were a stronger driver of farmer decision-making.

In their research on the Connecticut River watershed Cherney *et al.* (2014) found that one of the challenges for participation was the mismatch between the river watershed and the administrative boundaries of communities, government and organisation. Further they assessed that the diversity and plurality of environmental organisations and bodies was problematic. Although these agencies and organisations shared similar aims related to the improvement of the watershed, their views on specific outcomes were discrete and sometimes mutually exclusive. Cherney *et al.* (2014) found that competition between the organisations, particularly for funding, negatively affected their ability to work together and this in turn limited their ability to engage with each other to agree a joint participatory process because they were effectively competing for stakeholders' (including landowners') participation (Cherney *et al.*, 2014).

3.3.1.2 Landcare and its policy successors in Australia

With a focus on sustainable land management, the Landcare programme in Australia, initiated in the 1980s, is often cited as an example of farmer participation within environmental delivery (Franks *et al.*, 2011; Prager, 2015a). However, Wilson (2004)'s detailed history questions the nature of farmers' participation within it. Wilson suggests that claims that Landcare is a grassroots initiaive are unfounded because it was conceived and is funded by local government, which acts as a gatekeeper (Wilson, 2004). But, Wilson also argues that a simplistic categorisation of farm-led vs government -

led is not possible because farmer groups are created and develop in different ways, forming relationships with government that change over time (Wilson, 2004). Wilson observed that farmer representation in Landcare groups was dominated by white, male farmers with indigenous peoples and women poorly represented. Landcare groups attracted farmers who either are already pro-environmental or whose farming systems were already more compatible with environmental practices whereas larger, more intensive farmers were less likely to participate (Wilson, 2004).

Wilson (2004) describes the important role that facilitators play in Landcare groups. Landcare's facilitators were frequently appointed by government, were generally from outside agriculture, held conservationist views, and were women. Wilson (2004) suggests that this means that the facilitators may often have held views about the causes of environmental degradation at odds with agricultural productivism. This could lead them to impose their own agenda becoming the 'secret leaders' of the group. The facilitators' organisational affiliation created a conflict of interest because they sat within the bureaucratic culture of government yet worked with the "highly independent and individual identity of Australian farmers" (Wilson, 2004, p. 472). Wilson suggests that an idealised role for the facilitator of Landcare groups should be to rebalance power relationships between government and farmers, but the fact that Landcare and the facilitator are both funded by government can undermine this aspiration.

Head *et al.* (2016) describes how the Landcare programme was effectively overwritten by federal-level natural resource planning when the scale and voluntary nature of Landcare was seen as delivering insufficient results. They delineate the historical development of environmental delivery in Australia as one which moved from individual capacity building through community-based action (featuring Landcare groups), to regional partnerships and, ultimately, a regional business model. Their analysis found that challenges to the participatory process included: the geographical size and complexity of natural resource management, the difficulties of maintaining long-term commitments to participatory processes, and a mismatch of timescales between the process and policy and government funding cycles. Lastly, Head *et al.* (2016) question the efficacy of the business model approach, which requires precise objectives and measurable outcomes despite the sometimes uncertain scientific evidence available, and focuses on applying new economic instruments to shape the behaviour of landowners. These economic instruments, which were designed on the assumption that competition leads to value for money, can create winners and losers in the farming community, which is at odds with the principles of collaboration (Royal, 2021).

3.3.1.3 Water Framework Directive catchment partnership in Europe

Degradation of surface and ground water has an impact on humans, through drinking water, and on the environment. In the European Union, the 2000 Water Framework Directive regulates the requirement for good water quality (Barataud *et al.*, 2014). Mirroring the historical shift from policy to partnership delivery in the United States, the EU's regulatory requirements have led to the creation of multi-actor groups within river catchments across Europe. These partnerships can have a range of roles but are ultimately focused on delivering the necessary remedial action to deliver water quality improvements (Barataud *et al.*, 2014).

In the UK, Collins *et al*. (2020) found that multi-stakeholder partnerships were one of the strengths of the catchment-based approach, but they offer no detailed analysis of representation, specifically that of landowners and farmers, within the process. Although 13000 farmers engage within the catchment process, the nature and limit of their engagement is described as compliance and awareness raising (Collins *et al.*, 2020, p. 120). Collins *et al.* (2020) noted that partnerships varied widely in terms of their funding, capacity, expertise and environmental delivery. Whaley and Weatherhead (2015) identified barriers to farmers' participation within these groups, particularly that the process was dominated by environmental organisations that sometimes had a history of adversarial relationships with farmers. Research focused on farmers' delivery of catchment action plans found that offering regulation and incentives was unlikely to be effective (Inman *et al.*, 2018). Instead, the researchers argue, what was needed was a facilitated deliberative discussion, over time, that addresses the balance between food production and the other functions society requires from the farmed landscape, alongside expert one-to-one on-farm advice to build farmers' confidence in delivering pro-environmental action (Inman *et al.*, 2018).

Research undertaken in Sweden (Dawson *et al.*, 2018) found that the catchment partnership process was dominated by government and environmental organisations, partly due to the top-down and technocratic nature of the Water Framework Directive. These two factors limited collaborative knowledge-sharing and learning, with the public and private individuals largely excluded. Dawson *et al.* (2018) stress the need for building trust through face-to-face meetings, but highlight that where they did occur, such meetings rarely included decision-makers (Dawson *et al.*, 2018). A challenge for catchment partnerships is the fragmentation of knowledge about causes and remediation of water pollution and the diversity of actions by a range of stakeholders required to address them, making it difficult for a coherent plan to be developed and delivered (Dawson *et al.*, 2018).

3.3.1.4 NGO-led farmer partnerships in the Netherlands

A study by Runhaar and Polman (2018) study investigated a partnership led by the conservation NGO Birdlife International to promote meadow bird species. Farmers' membership of the partnership was voluntary and was not limited to a specific regional geography. They found that farmers' motivations to take part were to have a collective voice and to improve their public image particularly within the supply chain, alongside concerns for the environment. The low requirements for membership which ensured inclusion, as that farmers who did not commit themselves to specific actions were permitted to join the group, but resulted in modest gains for conservation (Runhaar and Polman, 2018). The partnership therefore raised awareness but did not necessarily result in pro-environmental action.

3.4 Participation in large-scale environmental delivery by agri-environment schemes (AES)

As previously outlined (in paragraph 3.1.5) approaches to large-scale environmental delivery using AES have been categorised by Prager into coordination or collaboration, both of which can be top-down, led by central institutions, or bottom-up, led by farmers (Prager, 2015b). In her review of these projects across the EU, Prager suggests that the AES has traditionally been a top-down approach because it is required to deliver public benefits, but goes on to argue that this has been superseded by the bottom-up initiatives of Landcare Germany and Agrarische Natuurverenigingen in the Netherlands, which employ a mix of funding including AES (Prager, 2015b). Prager notes that a key difference between coordination and collaboration is that the latter requires group activity, which is often of a mix of actors and stakeholders including farmers, recreational land-users, residents and conservationists. One of the advantages of collaborative groups is that they can harmonise and prioritise the public benefits of AES, making them relevant and visible to the local population while meeting the environmental requirements of the area more effectively. Further, she found that using collaborative groups reduces monitoring and enforcement costs for the initiative and promotes and accelerates behaviour change (Prager, 2015b). Coordination is, however, not necessarily less effective, is comparatively easier and less costly overall, and is particularly effective for the restoration and maintenance of small natural areas (Prager, 2015b).

The Agrarische Natuurverenigingen, Dutch agri-environmental groups, were formed in the 1990s in response to farmers' concerns about the top-down regulatory approach to agri-environmental management from government (van Dijk *et al.*, 2015). The process works by farmers joining

cooperatives – Agrarische Natuurverenigingen – which deliver collective management plans. Farmers cannot access AES payments without being a cooperative member. This approach was taken to improve agri-environmental delivery and to reduce transaction costs (because government now manages AES contracts with around 40 groups instead of 15,000 individual farms) (Franks, 2019). It has reportedly taken several decades to develop the social capital to sustain these cooperatives (Westerink *et al.*, 2017).

Westerink *et al.* (2017)'s analysis of one Dutch group, as well as collaborative AES in four other EU countries, found they were spatially coordinated either by an organisation or by a farmer group which employed a range of governance strategies, including: limiting the management options that farmers can apply for, actively recruiting farmers in key locations, developing joint management plans or imposing compulsory environmental management practices on farmers in specific locations. They argue that the cooperative approach has increased the uptake of AES, but there is doubt that it delivers effective environmental change on the ground (Westerink *et al.*, 2017). In the Netherlands, van Dijk *et al.* (2015) did not find that participating in environmental groups necessarily determined farmers' intentions to take part in specific environmental action, but the facilitation process made them more likely to sign up to an AES; that is, farmers' attitudes towards AES were more significantly changed than their attitudes towards sustainable farming practices. This research would suggest that collaborative groups improve farmers' involvement with AES but do not necessarily improve farmers' delivery of AES actions (as detailed in Chapter 2, section 2.4.2). However, Franks (2019) argues that the requirement to join a group first may have dissuaded some farmers from joining AES in the Netherlands.

It could be argued that the institutional power of government has effectively been recreated in the cooperatives, undermining their original purpose to give farmers some collective power and a voice in government policy and implementation. Westerink *et al.* (2017) suggests that where farmer groups coordinated the approach, this took the form of a 'boundary organisation' operating between the farming world and that of other organisations and actors including government They suggest that larger groups require professional management, a "new class of officials" who are separate from the group members whose "interests, focus and concerns" may be different to the groups' (Westerink *et al.*, 2017, p.184), a view supported by (Franks and Emery, 2013)..

McCarthy *et al.*'s (2021) review of Irish operational groups, funded within Common Agricultural Policy regulations from 2014 onwards, found they were a platform where stakeholders from different backgrounds, knowledges and affiliations can meet. They help farmers' voices be heard, in that the groups facilitated a two-way dialogue between farmers and policy makers (Raymond &

Robinson, 2013; McCarthy *et al.*, 2021). Farmers were motivated to take part in the groups by a desire to influence future regulation and protect farm incomes (McCarthy *et al.*, 2021).

It is difficult to substantiate Prager (2015b)'s claim that AES has been developed from the bottom up through the EU-wide groups studied, partly because the research does not clearly lay out what decision-making lies within and outside of the farmer groups. Although AES can be delivered collaboratively, the nature of the scheme itself needs to be closely examined in its own right. Wheeler *et al.* (2021) cites Leventon *et al.* (2017)'s research suggesting that the structure of AES under the Common Agricultural Policy actively discourages collaboration because it is based on contractual arrangements with individual farmers with no clear coordinating role to provide an overview. The collaborative arrangements between farmers described above can be seen as an attempt to address collaboration by creating farmer groups in relation to AES delivery, but these initiatives do not address the nature and construction of AES. Berthet *et al.* (2016) suggest that collective AES design, as opposed to collaborative action, is necessary to address natural resource management, particularly where there is no acknowledged common good and where there are diverging interests. Encouraging cooperation among farmers to carry out agri-environment measures in a predetermined scheme allows for only limited participation because the issues, actions and payment rates, have already been fixed. Farmers, it is observed, are generally involved after AES creation, limiting their input and therefore disempowering their participation (Toderi *et al.*, 2017).

In summary, existing research suggests that while collaborative AES is desirable because it addresses issues of scale and relevance to geographically-specific issues, the impact groups have on on environmental outcomes and on farmer behaviour is unproven. Further, farmers' motivations for taking part may not necessarily be aligned with the groups' aims or purpose. A weakness of research on collaborative AES is that many studies do not clarify the institutional framework of the AES and the potential impact it has on farmer participation. An AES is a highly codified, contractual arrangement between an institution (usually the state) and farmers or landowners, to supply environmental goods through terms and usually prescriptive actions that are determined by the funding provider. In common with the large-scale environment projects previously discussed, how participatory processes take place within the collaborative AES group, who is involved, what their skills are, who resources the process and what impact this has on the group and farmers individually, must all be included in an assessment of the effectiveness and impacts of an AES. Analysis of participatory processes, such as collaboration within AES, needs to identify where the boundaries of possible collaboration lie.

Like the collaborative AES described above, Facilitation Funds are designed to work within and alongside farmers' individual AES agreements. The framework and scope that Facilitation Funds provide for farmer participation has not yet been investigated according to the available literature, a gap which this research will address.

3.5 Managing knowledge: facilitation, advice and extension

As previously described, the negotiation of knowledge is an important element within environmental participatory processes because it enables the identification of environmental problems, the methods by which these could be mitigated and where and how this action should take place. Knowledge exchange is assumed to be one of the central tasks of Facilitation Funds (Defra, 2021c). This section draws together some key themes in farming-related research on knowledge, facilitation, farm advice, and extension. There is, again, some confusion in terminology in relation to this subject. The following definition attempts to create consistency and clarity:

- Farm advice (or advisors) offers expert, often subject-specific input. In the UK context, advisors usually offer advice directly to the farm or farmer on their holding;

- Extension aims to support knowledge creation and learning and is often delivered in group or workshop formats. Historically, agricultural extension has not been used extensively in the UK in comparison with its more established tradition within international development (Prager and Thomson, 2014). Facilitation is a term often used in relation to extension, because the role of the extension agent is seen as a process of negotiating different forms of knowledge, particularly between science and farm practice;

- Lastly, facilitation is a process used in a range of participatory processes including environmental processes as highlighted earlier in this chapter (here 3.1). Facilitation is a usually done by a neutral mediator who serves the process by identifying stakeholders, building consensus, managing conflicting views and supporting delivery of activities.

These three categories are discrete roles, though they may be delivered by the same individual. Cook *et al.* (2021, p.140) note (in relation to extension agents) that the role is both "powerful and relatively overlooked", powerful because they "are sufficiently empowered to trial alternatives, moderate dictums, and contribute to fundamental change" and overlooked because the skills and knowledge that extension agents need and the impact of their role, affiliation, funding and manner of delivery is poorly researched.

Within Facilitation Funds, the facilitator, who can be an individual operating on their own account or a representative of an organisation, is key to constructing the group and applying for scheme funding. Although the Facilitation Fund scheme does not dictate the skills and knowledge required by the role, the facilitator's experience, particularly their advisory and subject knowledge expertise, forms part of the application process. The aims of the scheme, and guidance offered for applicants, suggests that facilitators are required to: identify the large-scale environmental requirements of the group area and the appropriate actions to meet them, encourage cooperation between farmers to deliver these actions and provide one-to-many extension for the group to support these actions. This suggests that 'facilitators' must fulfil all three of the roles described above: they need to have expert subject knowledge, which in the UK is generally a role held by farm advisers; they need to provide extension services to the group specific to the group's aims; and they need to facilitate consensus about large-scale environmental requirements. The way in which facilitators carry out their role is likely to strongly influence the nature of farmers' participation within the scheme, as (Wilson, 2004) describes in relation to Landcare in Australia (see section 3.3.1.2).

To provide a basis for this research, each of these skills will be discussed in turn.

3.5.1 Facilitation

Facilitation is increasingly recognised as a discrete skill which is now used in a range of contexts from commercial business to education. This said, there is still debate on the form, content, skills and approaches that facilitation should take, as demonstrated by Harvey *et al.'s* (2002) review. Part of the process should be to examine and make visible the existing status quo (Hunter *et al.*, 2020). Facilitation should be a process acknowledged by those undertaking it and requires the active involvement of all parties involved; it needs to be made transparent to participants (Bentley, 1994). It should also address conflict, differences of opinion and existing power structures in the group to work towards consensus-building (Harvey *et al.*, 2002; Landreman, 2013; Wilkinson, 2012). Facilitators need to "break through the constraint of over-connectedness" by challenging social norms (King *et al.*, 2019p. 131). At the same time participants need to develop trust in the facilitator, as well as each other, to innovate (King *et al.*, 2019).

As previously discussed, facilitation is seen by several commentators, notably Reed *et al.* (2018) as crucial to participation large-scale environmental delivery (see section 3.1.1.) Large-scale environmental delivery is characterised by substantial, complex, yet often incomplete data sets and knowledge; uncertainties about the causes of the environmental issues being addressed; and also uncertainties over the most appropriate measures for remediation, which will ultimately be delivered

by a diversity of stakeholders through a range of processes and policies. Reed (2008, p.2425) argues that negotiating these challenges requires that the facilitator:

> "*needs to be perceived as impartial, open to multiple perspectives and approachable. They need to be capable of maintaining positive group dynamics, handling dominating or offensive individuals, encourage participants to question assumptions and re-evaluate entrenched positions, and get the most out of reticent individuals."*.

Reed's argument for impartiality raises the question of facilitator affiliation. The Game & Wildlife Conservation Trust (GWCT) have developed farmer clusters, a form of environmental farm group which preceded the Facilitation Fund in England. The organisers highlight the need for farmers to choose their own 'trusted advisor' who they "know, like, respect and trust" (Thompson *et al.*, 2015, p.13). However, any individual or organisation already known to the group would bring their experience of previous actions in the area, potentially their own organisation's aims and past relationships with farmers and the group. Research within GWCT and Facilitation Groups conducted by Nye (2018) found that farmer participation could be affected when groups were facilitated by organisations because some farmers perceived this as top-down imposition of organisations methods and objectives onto farmers. This research seems to support Westerink *et al.* (2017)'s warning about the potential for professional facilitators to act outside of the group's interest. Clements *et al.* (2021) suggests the use of neutral independent bridging organisations in participatory contexts to support a cultural shift towards stakeholder consensus-building, social learning and resource and conflict management. Similarly, Häfner and Piorr (2021) propose coordination institutions (particularly for collaborative AES) that would offer support, reduce transaction costs and foster collaboration by taking the role of an intermediary between farmers and organisations.

Facilitators seem to occupy a crucial role in participatory groups generally, and farmers' groups in particular, where they have a discrete role within the group. Facilitators are likely to come from outside the group, because they require a specific professional skillset, yet they need to serve the group and the membership. The research summarised above suggests that there could be potential tensions within Facilitation Funds around the role of the facilitator. Their previous history with the farm community, experiences and affiliations are likely to influence the way that facilitators carry out their role and how they are perceived by farmers, and this may impact on farmer participation. To date, this has not been addressed by the available research carried out on Facilitation Funds, which is summarised ins section 3.7) and is a gap this research will address.

3.5.2 Farm extension

Agri-environment Schemes could be seen as a form of Agriculture Knowledge Information System (AKIS) in their own right. In UK countries, the AES contract between farmer and organisation/government specifies what actions will be undertaken, where and when these will apply. Increasingly, AES related advice to farmers in England is offered in digital or written form. The weakness of this advice is that it is generic and therefore may not answer farmers' specific needs. However this written advice is sometimes, as indicated in Figure 5, accompanied by both private and public extension services, as discussed in 3.6. A discussion of agricultural extension is therefore merited.

It was noted above that agricultural extension aims to support knowledge creation and learning. Knowledge hierarchies have traditionally given preference to scientific evidence and excluded or ignored farmers' knowledge (Chambers *et al.*, 1989; Šūmane *et al.*, 2018). The farmer first and beyond farmer first literature charts a historical transition from the transmission of science-based information by extension agents to farmers, to facilitated processes of extension where science is reframed and made relevant by locally interpreted farmer learning (Scoones and Thompson, 2009). Practitioners and researchers have called for the creation of new knowledge which balances technocratic expert-driven approaches with local knowledge that is culturally and geographically specific (Cooke, 2001b; Kothari, 2001). Cook *et al.* (2021) develop this further into four types of extension:

- Technological transfer, where knowledge flows one way, top-down from technocrats to farmers.
- Participatory, where knowledge is created through a two-way dialogue between extension agents and farmers;
- Decentralisation, where services are privatised to reduce bureaucratic inefficiencies, offering farmers a degree of control through choice;
- Systems thinking, promoting co-design and learning between farmers, advisors, extensionists and researchers.

Although Cook *et al.* (2021) suggest a chronology, these categories could coexist. Participation of different sorts could occur within them in different ways, for example, expert-led input could be requested by farmers within systems thinking. The literature on extension, with some notable exceptions, does not generally challenge the assumption that the change and innovation in farming

that is promoted by agricultural extension is valuable and worthwhile. This assumption frames farmers' refusal or reluctance to adopt change as a methodological problem which 'the right kind' of extension will fix (Cook *et al.*, 2021). Little attention is given to existing farming practices and the gap between them and the suggested change; or to the practical barriers and disincentives that may deter farmer innovation. This is an important factor in farmer participation both in large-scale environmental delivery and Facilitation Funds and is explored further in relation to the concept of agency in the next chapter (here 4.2.6).

As with facilitation, extension requires a discrete skillset which includes knowledge broking as well as initiating and managing project logistics (Morgans *et al.*, 2021). Šūmane *et al.* (2018) suggest that extension demands subject knowledge but also a social type of knowledge and skills (networking, team building, openness); what Cooreman *et al.* (2021, p.713) describes as "reflective learning processes". Research undertaken Dooley (2020) within English farmer groups suggests that facilitators are necessary to foster self-reflexivity and thus attitude and behaviour change. Extension agents must also investigate and deliver the right learning method for the group (Jack *et al.*, 2020). The complexity of the process must be, to some extent, invisible to participants, because, as Leventon *et al.* (2017) suggest, farmers are only willing to be managed in "easy, non-bureaucratic ways". Extension agents can also be described as "boundary brokers" who can bridge the space between farming practice and other stakeholder networks such as environmental NGOS (Oreszczyn *et al.*, 2010).

3.5.2.1 Peer-to-peer learning

Peer-to-peer group learning has a particular niche in extension research literature, partly because it is seen as a way of rebalancing technical knowledge with the reality of farming practice. Peer-to-peer learning has been generally found to be popular with farmers, who often prefer to learn from other farmers because of their applied experience and lack of an external agenda (Inman *et al.*, 2018; Rust *et al.*, 2021). In farming communities experience is often valued more highly than formal education (Burton, 2004). Farmers may not believe that non-farmers have sufficient knowledge to make informed decisions on the appropriateness, or otherwise, of farm practices (Inman *et al.*, 2018). However, the danger of the 'farmers only' approach is that it can lead to confirmation of the status quo (Rust *et al.*, 2021). The role of the extension agent within peer-to-peer learning is therefore to manage and negotiate between the status quo and new practices.

Farmers in Europe have been found to rely on informal learning networks (Šūmane *et al.*, 2018), based on topic rather than geography. This was a finding of Skaalsveen *et al*.'s (2020) study of how farmers learned about no-till practices, for example. Proponents of peer-to-peer learning processes have suggested that existing networks could be used as a starting point (Rose *et al.*, 2018). Mills (2012) found that farmers in England's Higher Level Environmental Stewardship AES expanded their existing advice networks to meet the challenges of the scheme. There is a difference between groups and networks created and maintained by farmers' themselves and those initiated and driven by organisations or government who usually have specific purpose, as is the case with Facilitation Funds, and it is unclear how these could be harnessed together.

While the literature suggests that this form of extension can be effective, it should be noted that groups are not universally popular. Some farmers avoid group learning because of the "deeply felt premise that this format is incapable of being tailored to individual farm-specific circumstances' (Inman *et al.*, 2018, p. 23). There is also a danger that extension preaches to the converted. Dwyer *et al.* (2007) found that formal collective events delivering pro-environmental training are liked by those who attend but those attendees tend to be self-selecting interested farmers, so that the events fail to reach the unconvinced. White (2021) studied farmers in the UK who are 'harder to reach' – those who typically do not engage in or are excluded from policy initiatives such as AES. The author found such farmers came from a variety of groups including: those in sectors previously unsupported by the Common Agricultural Policy such as poultry; hobby farmers, who are not necessarily financially motivated; tenant farmers, who may feel the benefit is for the landlord; and those living in poverty, who lack the time and emotional energy to engage. The research highlights the varied reasons why some farmers might not participate in group peer-to-peer learning forms of extension.

A significant strand of peer-to-peer learning research has focused on on-farm demonstrations where farmers can demonstrate the practice and show the results to others (Marchand *et al.*, 2017). Cooreman *et al.* (2021) found that adoption did not necessarily follow such events because of the mismatch between the demonstration and the attending farmers' own situations. Nevertheless, others argue that demonstration, if relevant to the attendees' farms, builds confidence in their skills (Lobley *et al.*, 2013). Demonstration of AES measures is particularly effective because provides visual success criteria, which may be unfamiliar to farmers (McCracken *et al.*, 2015). Demonstration can rebalance the productivist mindset by enabling farmers to display their environmental delivery skills just as they share productivity practices through yields (Tsouvali and Little, 2019).

Extension generally, and peer-to-peer learning specifically, are not a perfect tool for delivery of environmental and/or AES outcomes (Prager and Creaney, 2017). Peer-to-peer learning implies

farmer empowerment but this does not necessarily occur where it is takes place within processes driven by external institutions or organisations. Prager and Creaney's (2017) study of beef cattle discussion groups in Ireland found that facilitator-to-farmer information flows were dominant and that farmers were frequently not allowed to define their own problems. They noted that organisation-led groups were effective in some respects, for instance in that they delivered a project plan and programme, but were more structured and closed than farmer-led groups where farmers could innovate (Prager *et al.*, 2017). The structure, nature, formality and governance of the group, and the role that the extension agent plays within that, has an influence on how the group operates and the impact membership has on individuals.

Although peer-to-peer learning is advocated by the Facilitation Fund Scheme (Defra, 2021d) it cannot be assumed. The Facilitation Fund scheme (Defra, 2021d) offers no prescriptions or guidance about how knowledge exchange should take place. There is no established history of farmer discussion groups associated with environmental action in the UK (Emery and Franks, 2012), so those organising and delivering farmer groups will have had limited opportunities to develop skills and expertise required. Similarly, farmers will have had few opportunities to experience the format. Although the participating farmers may be learning 'in a group' this does not mean that the learning is farmer-to-farmer or self reflexive. The available research on Facilitation Funds (see section section 3.7) presents limited evidence on this subject. This research will begin to identify how knowledge and learning activities are delivered within Facilitation Funds and what impact this has on farmers' participation.

3.6 Farm advice context in the UK

The farm advice landscape in the UK, and England specifically, is highly fragmented and includes a wide range of organisations and influences from the public, private, charitable and voluntary sectors (Prager and Thomson, 2014; Vrain and Lovett, 2016) as illustrated in (Prager and Thomson, 2014; Vrain and Lovett, 2016) as illustrated in Figure 5 below. There is some evidence that advisors create coherence by working together albeit informally (Klerkx and Proctor, 2013).

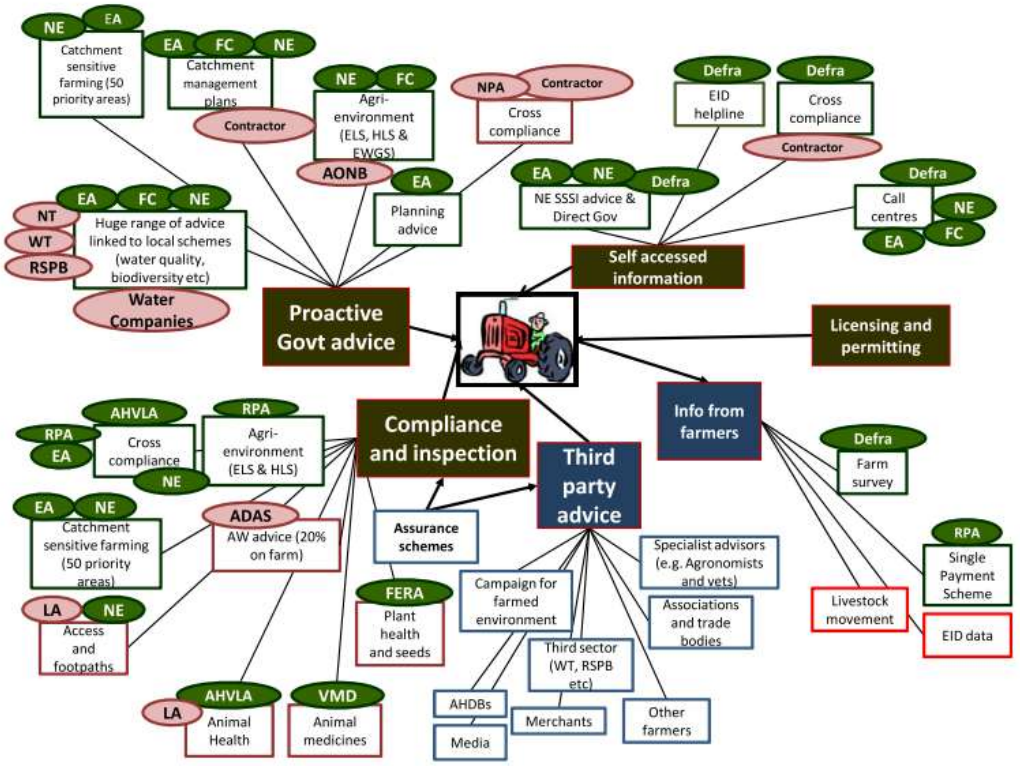


Figure 5. An illustrative representation of the complexity of the farm advice situation in 2013 (Defra, 2013, p. 4)

Within this landscape advisors have a range of specialisms and expertise including AES. However, Sutherland *et al.* (2013, p.102) notes that many advisors have "no established pedigree" or formal training and qualifications. Agronomists, vets and land surveyors have formal training. There are, however, no current professional standards, other than BASIS and FACTs training, for advisors who specialise in environmental delivery by supporting farmers' AES scheme.

Effective advice delivery is influenced by farmers having trust, in the advisor personally and in the institution that they represent (Inman *et al.*, 2018; Sutherland *et al.*, 2013). Trust is built on the farmers' assessment of advisors' veracity and motives over time, suggesting that farmers value longevity in advice relationships (Sutherland *et al.*, 2013). One-to-one delivery is suggested to be an effective method for encouraging of advice to be sought and taken (Vrain and Lovett, 2016), but this may be partly influenced by the lack of alternatives in the UK such as discussion groups.

Some research suggests that, when considering environmental delivery, farmers prefer to employ paid advisors who know farming, are willing to see the farmer's perspective and who, crucially, have the ability to obtain funding while minimising changes in farming practice (Sutherland *et al.*, 2013). If farm advisors employed by the farmer push them to change drastically or to meet national and local goals they will lose trust (as well as employment) (Sutherland *et al.*, 2013). The Agricultural Industries

Federation (2013) claimed that advisors who focused on agricultural production were inside farmers' 'ring of trust' and were influential in farm decision-making, while environmental advisors remained outside. Commercial farm advice (which most production-orientated advice is) also has drawbacks. Firstly it is only affordable for relatively affluent farmers, pricing out smaller farms (Prager *et al.*, 2016). Secondly, competition between commercial advisory services makes it harder for consultancies to support collaboration between farmers and between advisors (Leventon *et al.*, 2017).

As mentioned previously the Facilitation Fund scheme requires applicants (which are defined as the facilitating organisation or individual who applies on behalf of the group) to have specific knowledge and skills to support the group. Facilitators are likely, therefore, to be drawn from the existing farm advisor population.

3.7 Facilitation Fund-specific research

Of the significant research undertaken on Facilitation Funds, the majority is grey literature, with research by Prager (2022) published in *Land Use Policy* providing the exception.

Prager (2022) studied six Facilitation Fund groups in two geographical areas. Her analysis, aimed at influencing policies that promote farmer cooperation, focused on two themes: social capital and collective action. She found that the groups varied in their social connectedness and suggests that this is linked to the existence, or otherwise, of a pre-existing network. Facilitator intervention was necessary to maintain the motivation and momentum of the groups. Prager observes that environmental benefits were not the main motivations for farmers joining the groups. There was some evidence that environmental action was taking place as a result of group membership, but this was usually linked to existing schemes. Based on these findings, Prager suggests that future policy interventions need to better define the purpose of farmer cooperation and to design interventions accordingly, differentiating between:

- Targeted coordination, which is simple and easier to achieve, is driven by a third party, such as an advisor, and is supported by agglomeration bonuses for farmers; and
- The long-term development of social capital to achieve self-sustaining farmer groups, which would require sustained funding and input but may achieve farmer behaviour change, potentially negating the requirement for state funding. No evidence was presented by Prager to support this model although some exists (van Dijk *et al.*, 2015).

Nye (2018) conducted research on nine farmer groups, two of which were privately funded and seven Facilitation Funds. Nye found that farmer groups are heterogeneous with groups operating in a variety of different ways, although six out of nine had a chairperson. As previously noted, Nye found that organisation-led groups were problematic because farmers perceived that the facilitating organisation had vested interests. Organisation groups tended to be larger and this, and the previous point, was reported by farmers as having a negative impact on participation. Most farmer members reported that their motivation to join the group was environmental (Nye, 2018).

A monitoring and evaluation programme for the Facilitation Funds scheme, commissioned by Defra, has produced three reports: phase one (ADAS *et al.*, 2018), phase two (Jones *et al.*, 2020) and phase three (Breyer *et al.*, 2021). For all phases it has been difficult for the assessors to measure Facilitation Funds' environmental outcomes in terms of change on the ground. Farmer participation has been measured through numbers of farmers signed up as group members.

The phase one evaluation found that training provided to farmers had been one of the most important factors in achieving the aims of the groups. Facilitators reported that trust, relationships and knowledge-sharing were developed and that farmers developed increased awareness of environmental matters, expertise and confidence (ADAS *et al.*, 2018).

The phase two evaluation analysed 28 case studies but did not go on to draw generalisations. A survey of 68 facilitators and 10 land managers was undertaken. Facilitators self-reported collaboration as an outcome achieved both among members, and between groups and external organisations. Facilitators described their role as very important to the success of the groups and that their "drive, passion and enthusiasm" was central in establishing the groups and promoting a bottom-up approach (Jones *et al.*, 2020).

The phase three evaluators interviewed 20 facilitators and 23 landowners. Facilitators were asked to identify the key qualities of their role. They were also invited to determine whether their group was advisor-, farmer- or organisation-led and to characterise the nature of member engagement from low to very high. Both members and facilitators repeated the need for a facilitator for the continuation of the group (Breyer *et al.*, 2021).

A potential weakness of the monitoring and evaluation programme is that the Facilitation Fund members and facilitators would have been aware that a purpose of the evaluation was to determine the future direction of the scheme. Facilitators and supportive members may therefore have felt the need to make the case for the continuation of scheme funding, which pays for the facilitator, and this may have resulted in positive reporting bias.

A pilot study for Natural England into farmer collaboration and environmental delivery at landscape scale was undertaken as research separate from the formal monitoring and evaluation programme. The pilot focused on recommendations for scheme development (Hall, 2019). The author found that Facilitation Funds had the potential to catalyse behaviour change, creating extrinsic motivation for pro-environmental action through the development of social capital. The facilitator's role, skills and approach were assessed to be key to this process and thus would require training support. Hall identified that farm advisors and facilitators had discrete roles which could be undertaken by the same person but that the differences between two should be recognised and understood. Like Prager (2022), Hall calls for the development of a framework to assess social capital in AES and the Facilitation Fund scheme .

There is a significant gap in the Facilitation Fund literature concerning farmer participation, the nature of the participation and what influences it. All three evaluation reports assume that membership of the group equates to participation and that the nature of this participation is uniform over time; that all Facilitation Fund farmer members participate equally. This is an assumption which this research will question.

3.8 Gap analysis and research aims summary

The Facilitation Fund initiative can be seen as a continuation of the policy drive towards large-scale environmental delivery (as detailed in Chapter 1). The nature of farmer participation in large-scale environmental projects which pre-date Facilitation Funds, particularly in the period 2010-2017 when there was a significant increase in these initiatives, has not been addressed in literature to date. This research will attempt to address this by assessing farmer participation within a range of recorded projects using primary and secondary sources.

Existing research on Facilitation Funds has not offered detailed analysis of the nature of participation the scheme offers. This research will assess this using the conceptual framework developed from existing participatory theories detailed in Chapter 4. This assessment will be made using primary and secondary sources of Facilitation Fund groups which were initiated in the period 2015 – 2019.

As the name implies, the facilitator, the named individual who facilitates the group, is likely to play a central role in Facilitation Funds. Existing research has not investigated this topic. This research will assess the skills and experience of the facilitator particularly in relation to their knowledge of farming

and organisational affiliation. This research will utilise secondary sources, observation and interviews with facilitators.

Lastly, farmers' participation within schemes although measured quantitatively through broadbrush participation, for instance how many farmers have agreed to take part in groups, has not be subject to more detailed analysis. Using secondary sources drawn from the Facilitation Fund administration this research will assess farmer participation in events and augment this will qualitative information drawn from interviews to analyse how farmers participate, suggest why and draw some conclusions about the potential impact of this participation.

Table 2 below summarises the research gaps identified in the literature. It relates each gap to a research questions and outlines how the present study will address the gaps.

Table 2. Gaps in existing research addressed by this study

Objective	Gap definition	Research question	How the gap will be addressed
Investigate the nature of farmer participation in large-scale environmental projects to provide a historical context for Facilitation Funds.	In the UK generally, and England specifically, farmers' participation in large-scale environmental projects during the period 2010 to 2017 has not been assessed.	How have farmers participated in large-scale environmental delivery pre-dating Facilitation Funds?	Analysis of existing data sources an existing including (Eigenbrod *et al.*, 2017)database and interviews with ten large-scale environmental project managers.
Identify how Facilitation Funds frame farmer participation. What is the nature and scope of the participation they offer?	The nature of participation offered to farmers within Facilitation Funds, its scope and potential, have not been assessed against a model of participation.	What kind of participation do Facilitation Funds offer farmers?	Assessment of the Facilitation Fund from 2015 to 2019 against relevant frameworks using secondary sources, observation of meetings and interviews with facilitators and farmers.

Objective	Gap definition	Research question	How the gap will be addressed
Investigate how facilitators' skill, experience and approach affects farmers' participation, particularly in relation to their position within the farm advice community.	The skills, experience, approach to farming knowledge and learning, and affiliations of Facilitation Fund facilitators have not been assessed, nor the impact of this on farmer participation.	Who are facilitators and what are their skills and experience? How does this influence farmer participation?	Assessment of skills, experience, and mode of learning through secondary sources, observation of meetings and interviews with facilitators.
Analyse farmer participation specifically in relation to Facilitation Fund events, their motivation for taking part and the impact they feel this has had on their farming practice.	Farmers' participation within the Facilitation Fund is relatively poorly understood. It is unlikely that all farmer members participate in the group in the same way. The pattern of farmer participation, and what influences it, has not been investigated.	How do farmers participate in Facilitation Funds and what influences this?	Farmer participation in Facilitation Fund events will be measured through secondary sources. Interviews with farmers, alongside analysis of secondary sources, will provide qualitative insight into this participation.

4. Developing a conceptual framework for participation

4.1 Introduction

As highlighted in the previous two chapters, although in recent history participatory approaches have been widely employed, there is no universal definition or established process. To answer this gap, this research develops a conceptual framework drawn from theoretical models and relevant research described in the previous chapter. The framework attempts to deconstruct and disaggregate the constituent elements of participation to enable detailed analysis of the data gathered during this research. The framework identifies components, factors and variables of the process and the presumed relationships between these (Miles and Huberman, 1994).

4.2 Participation in practice: building a conceptual framework

Looking across these theoretical analyses, a number of themes emerge which are relevant to the research aims of the present study. They concern important aspects of a participatory process and can be grouped into four conceptual elements of participation. Deconstructing participation into constituent, identifiable elements aids meaningful assessment of participatory processes. The key elements, as represented in Figure 6, interrelate and influence each other. These elements include: the organisational framework which initiates and frames the nature of participation, the role of the facilitator, the mode of participation and how the process is implemented, the components within the process. All of these may influence, and be influenced by, participating farmers, whose motivation, agency and connection are important factors. The following section describes these themes and breaks them into further logical elements. Power relationships cut across these elements and are significant (Cooke, 2001b) because they may impact on the nature of individuals' participation within the process. In this conceptual framework, societal issues of gender, class and race and the heterogeneity of the farming community affect the nature of participation.

4.2.1 Principles

Researchers and practitioners have advocated certain principles of effective participation to address commonly perceived weaknesses in participatory processes, such as exclusivity, power imbalances

and opaqueness in the process which conceals them. These principles, which include empowerment, equity and trust (Reed, 2008), inclusion, reflexivity and transparency (Chilvers and Kearnes, 2020), cut across all aspects of participation and provide an underpinning ethos for the participatory processed. These are overarching concepts in which the elements outlined in Figure 6 sit within.

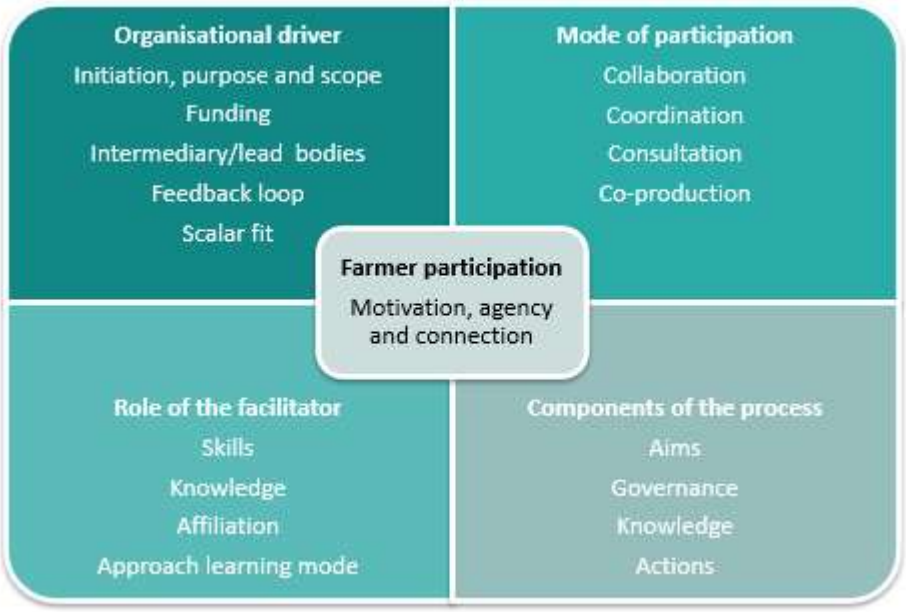


Figure 6 Conceptual framework for participation

4.2.2 Organisational driver

Reed *et al.* (2018)'s differentiation between top-down and bottom- up processes, which Lawrence (2006) terms central and local, focuses on the 'driver' of the participatory process but does not deconstruct the practicalities of what this means. Top-down or centrally driven processes are usually initiated, defined, and funded by organisations (Chilvers and Kearnes, 2020; Reed *et al.*, 2018). Though rarer, the literature also provides examples of participatory processes that are initiated by what Lawrence might call local organisations, such as formally or informally defined farmers' groups. Initiation of the process usually sets the purpose, terms, and the scope; a set of decisions have therefore already arguably been made by the initiating organisation about what the participation is for and its limits. This could be termed the 'organisational driver' of the participation process, which is a useful starting point for the conceptual framework for this research. The organisational driver is more helpful than a top-/bottom-driven characterisation of the process because it encourages analysis of how and where an organisation exerts power by potentially controlling elements of the participatory process. In practice, it may be difficult to determine which organisations take this role

and whether this is done by single entities or overlapping groups as suggested by the analyses of worldwide large-scale environmental projects in Chapter 3.

Important aspects of the organisational driver (see Figure 6) include: who initiates the process; for what purpose; what control they exert on the participatory process by defining its scope, which may include setting the geographical and temporal limits; who delivers the process (the lead body or an intermediary); who funds it; and lastly, what mechanisms there are for participants to feedback and change decision-making within the organisation. This last point relates to Reed (2008)'s assertion that participation needs to be institutionalised; it should be used to transform organisations as well as individuals, going beyond feedback towards equitable power-sharing.

This theme within the conceptual framework was informed by the pilot study of Facilitation Funds (Hall, 2019), which highlighted a mismatch between organisational and lead body claims about participation and the reality. Facilitation Funds were lauded as 'farmer-led' (Defra, 2021d) with little evidence to support this assertion, particularly as the scheme was government-initiated, frequently led by NGOs and linked to the existing AES scheme. As discussed in Chapter 3. Analysis of the elements within this theme aims to address this.

Three elements of the organisational driver merit special mention here.

4.2.2.1 Funding

Several commenters call for well-designed processes and transparency to mitigate and mediate top-down control and the use of a neutral facilitator and reflective project management of the process (Bell and Reed, 2021; Chilvers and Kearnes, 2020; Reed *et al.*, 2018). These usually require resources and/or funding. Funding provision is significant for power relationships within the process, particularly where funding is contingent and is used to ensure that the process is 'answerable' to the funder (Wheeler *et al.*, 2021). Wilson (2004) illustrates the conflicts and difficulties this presents in relation to Landcare in Australia (see Chapter 3.3.1.2).

4.2.2.2 Scalar fit

Scalar fit is a concept explored by Reed *et al.* (2018) within their analysis comparing how the temporal and geographical scales of participation can be matched with environmental outcomes. Scalar fit has been included within the organisational driver theme because the initial pilot studies for this project (described in detail in Chapter 5) suggested this is determined at the initiation of the process. This element of the conceptual framework involves assessing the temporal and geographical

limits of large-scale environmental projects and Facilitation Funds, who determines them and what impact this has on both the participatory process and the delivery of environmental objectives.

4.2.2.3 Intermediary or lead body

As examples from Chapter 2 demonstrate, large-scale environmental delivery is generally framed within government policy and then translated into practical delivery, often through intermediary organisations that initiate participatory processes (this is described in section 3.3.1 in relation to watershed management in the United States). Organisations such as NGOs, government agencies and scientific institutions have an important role as project managers, partnership convenors and delivery bodies. The inclusion of intermediary bodies as a consideration within the framework will draw out these complexities but also seek to make transparent the power relationships within the process.

4.2.3 Mode of participatory process

As demonstrated in the previous chapter, a participatory process can involve one or more modes of delivery: collaboration, coordination (Prager, 2015b), consultation (Arnstein, 1969) and/or co-production (Reed *et al.*, 2018). In the world of large-scale environmental delivery, these modes can co-exist within the same participatory process because different modes may be particularly suitable for specific types of land management delivery, as suggested by Prager (2015b). Each of these modes has the capacity to encourage or limit the power of participants within the process. Collaboration requires a shared understanding about issues and actions, consensus on when, how and by whom actions will be delivered, and trust that all stakeholders will play their agreed part. Coordination generally involves an intermediary who assumes control of the actions, brigading individuals to act within an overall plan which they may or may not have agreed to or have oversight of. Consultation may be used to educate or inform decision-making. Co-production requires agreement not just on how the products, which in the case of Facilitation Funds is environmental land management, are created but also on the necessity and requirement of products themselves.

As demonstrated in the examples offered in Chapter 2.1 there is, generally, lack of transparency about what modes of delivery are employed in participation, and their impact on the overall process, which became apparent during the pilot studies for this research (see Chapter 5). 'Cooperation' between farmers to deliver large-scale environmental objectives is called for within Facilitation Funds. The term is used in a context which suggests that collaboration (as defined above) is the aim. Initial reviews of Facilitation Fund operations in the pilot study suggested that collaborative action was relatively limited, but this requires further investigation.

The modes, as described above, can be employed in relation to environmental objectives but they can also relate specifically to knowledge and learning. Education is a key focus within Facilitation Funds. How learning is delivered, and whether the delivery recognises and balances different forms of knowledge, particularly between experts and farmers, forms part of the participatory process. The modes of participation suggested in this conceptual framework are relevant to learning and knowledge creation within Facilitation Funds and the large-scale environmental projects which preceded them.

4.2.4 Components of the participation process

As Reed (2008) and others stress, participation is a process which happens over time. Prager *et al.* (2012) For large-scale environmental delivery, the participatory process could be argued to stretch from: policy creation; to development of policy instruments to deliver these aims; to specific delivery in a specific location (de Boon *et al.*, 2021; Raymond and Robinson, 2013). For the purpose of this research, while policy will be considered, the focus is on the practical delivery of policy instruments and other projects, such as the Facilitation Fund scheme. How these projects are implemented, and how participation occurs within them, is particularly relevant. Rose *et al.* (2018)'s review of evidence found that when and how farmers are involved in project delivery, and the extent to which they can shape and influence the process, is crucial to achieve effective delivery and behaviour change. Kollmuss and Agyeman (2002) suggest that participants' engagement with and understanding of issues and aims of a project is an essential precursor for environmental action.

The following four key aspects of project implementation were identified by reviewing the literature and theoretical models and drawing on experiences in the pilot study:

Aims. Who determines the aims of the specific project or Facilitation Fund? The aims may have already been limited by the scope set by the driving organisation to an extent. What agreement or consensus is sought for them?

Governance. Who determines the direction of the project or group, its priorities and practical delivery? How is this governance formed? Through what formal or informal process?

Knowledge. How is knowledge created and shared?

Actions. Who identifies the environmental actions necessary to deliver the aims; and how and where they will be delivered? Who will deliver them? How is this delivery organised and what accountability is there for this within the group?

4.2.5 The role of the facilitator

One of the research gaps this research will address is an assessment of the role of the Facilitation Fund facilitator: their relative position to the existing farm advice community and to farmers; their existing skills, affiliation and background; and how these influence or impact on farmer participation. As described in the previous chapter, facilitators are named as such, but their role may not deliver 'facilitation' as the term is generally understood. Facilitation is often regarded as a neutral role, whose purpose is to manage and encourage stakeholder involvement and work towards consensus-building (Reed, 2008). In contrast, as previously argued, Facilitation Fund facilitators are required to be experts and educators as well as facilitating collaboration (Defra, 2021c). Their role sits within an existing landscape of farm advice services, and their positionality and experience within this landscape is likely to inform the skills they bring to the group, as well as the group's perception of them. This may be, as Chilvers and Kearnes (2020) suggest, mitigated by an active reflexivity on the part of the facilitator which recognises and mitigates potential issues and shortcomings.

There are three elements of the facilitator's role within Facilitation Funds which may influence participation:

Skills and knowledge. Technical skill will influence farmer perception as well as ability to deliver the Facilitation Fund aims. The Facilitation Fund requires facilitators to have knowledge and skills related to environmental delivery. Literature suggests that advisors who 'know farming' may be more readily trusted by farmers (Sutherland *et al.*, 2013). In addition, the soft skills of facilitation — managing group dynamics, recognising and addressing power relationships — are fundamentally important (Morgans *et al.*, 2021). What skills and experience facilitators have in these three areas — environment, farming, facilitation — is likely to influence their behaviour, which, in turn, informs how the group operates.

Approach to knowledge. The facilitator's approach to knowledge creation and sharing is likely to be informed by their skills and knowledge but it merits specific attention. Within the group, the facilitator is required to negotiate, bridge and potentially transpose expert knowledge with farmers' practical experience (Oreszczyn *et al.*, 2010). Their approach to this challenge, and the relative value they assign each form of knowledge, may inform group activities and thus affect farmer participation.

Affiliation. The facilitator's background, in terms of who they work for and are associated with, is likely to have an impact both on the mode of participation that they adopt and on how farmers view

them (Häfner and Piorr, 2021). The issue of affiliation is a significant one within environmental delivery, as described in the previous chapter (in section 3.3).

4.2.6 Farmer participation

It has been argued that when it is effective, participation within environmental processes can be transformative (Reed et al., 2018). This assumes that participation is a sequential process in which participation ultimately unlocks action, a claim that has been specifically made in relation to farming participants (Westerink et al., 2017). The theorised shift from participating in a process to taking individual action assumes that the process has achieved adoption and therefore behavioural change. The conceptual framework highlights three areas of participating farmers' behaviour where participation could be theorised to have an impact, which can then be assessed through this research.

Existing skills, knowledge and experience. Skills and knowledge in farming are acquired both formally, through education, and informally, through practice. Advice, of farm advisors or other farmers, can inform and influence knowledge and skills, as can trials and experimentation (Montes de Oca Munguia *et al.*, 2021). Within the Facilitation Fund scheme, knowledge and skill acquisition is a core purpose. Measuring knowledge and learning that farmers have gained from the Facilitation Fund presents practical difficulties which this research cannot address. Knowledge and skills would have to be meaningfully measured before and after taking part in the group, which was not possible within the scope of this study. This research will therefore assess what learning the scheme delivers, how it delivers it and how this relates to farmers' existing knowledge and skills.

Motivation and attitudes. This encompasses a wider scope than the social norm of farming, as framed by Ajzen (1991), including: the shared cognition of the environmental issues being tackled (Hafner and Piorr, 2021); an understanding and agreement on the role of farming in contributing to these issues: and, crucially, the farmers' belief in their ability to make a difference (Lobley, 2013). Again these concepts, particularly attitudes, are difficult to assess, although some conclusions can be drawn. Farmers' motivation for taking part in the process can, however, be interrogated.

Agency. Ajzen's (1991) term is used here to describe the ability of farmers to change as a result of their participation, which is influenced by: the nature of their land, their business model and its economic stability, the available farming equipment and contractors, and the scope of their management control — for example, are they tenants? Is it a family business where joint decisions

have to be made (Inman *et al.*, 2018)? This is a potential barrier to action that is largely unacknowledged within models of participation, which this research will seek to address.

Influences and connection. This relates to social connectedness, and includes existing and previous relationships with farmers, advisors or environmental organisations which could influence or inform farm decisions (King *et al.*, 2019). Although this is not a significant element of this study, where evidence is available conclusions will be drawn.

4.3 Conclusion

The conceptual framework laid out in this chapter aims to allow analysis of the constituent elements of the participatory processes. Although the disaggregated components and themes interrelate and overlap, defying simplistic characterisation, the framework provides a structure for analysis. The following chapters, which lay out the results against this framework, will test the framework's fitness for purpose and adaptations will be proposed in the Discussion chapter.

5. Methodology

5.1 Introduction

This chapter describes how the methodology was developed to investigate the research questions using the conceptual framework as a basis. An overview of methods used is followed by a detailed description of how data gathering and analysis took place organised around the following two discrete but related strands of enquiry within this research:

1. Farmer participation in large-scale environmental projects, particularly in the relatively recent past of 2010–2015 (Facilitation Funds were launched in 2015), which offers historical context for the second strand (relating to research question 1); Eigenbrod *et al.* (2017).

2. Farmer participation within Facilitation Funds: how the scheme frames participation, how facilitators influence it and how farmers take part (relating to research questions 2–4).

To develop these strands, two pilot studies were conducted at an early stage of the project. Silverman argues for a constructivist approach to pilot study, suggesting an initial broad enquiry to assess "what is going on here" (Silverman, 2011, pp. xxii) from which topics can be derived for further investigation. The pilot studies undertaken for this thesis took this approach to some extent and are described in more detail within Table 6 (for large-scale environmental projects) and section 5.4.2 (for Facilitation Funds). As Silverman (2011) suggests, this encouraged an exploratory approach which was used to confirm the research questions, build the conceptual framework, investigate data sources, and identify methods for extracting and analysing information.

The resulting methodology is a mixed methods design, combining quantitative with qualitative methods and data sources. Both primary and secondary sources of data were used. Secondary data for the first strand included information gathered for a study by Eigenbrod *et al.* (2017), which was made available by the University of Southampton. For the second strand, Natural England generously allowed access to Facilitation Fund documentation, providing both qualitative and quantitative secondary data. Qualitative primary data for both strands were gathered to explore the issue of farmer participation and was analysed in combination with the secondary sources.

Table 3 summarises the methods used to address each research question, which are described in further detail later in the chapter.

Table 3 Methods used to answer research questions

Research question	Method
1. How have farmers participated in large-scale environmental delivery that pre-dated Facilitation Funds?	Quantitative analysis of an existing database of large-scale environmental projects. Qualitative analysis of semi-structured interviews of a sample of large-scale environmental project managers and project information where available.
2. What kinds of participation do Facilitation Funds offer farmers?	Quantitative analysis of group event attendance by farmers. Qualitative analysis of scheme requirements and secondary data sources drawn from the Facilitation Fund administration, observation of group meetings and semi-structured interviews with facilitators and farmers.
3. Who are facilitators and what are their skills and experience? How does this influence farmer participation?	Quantitative and qualitative analysis of secondary data sources drawn from Facilitation Fund administration. Qualitative analysis of semi-structured interviews with facilitators and farmers.
4. How do farmers participate in Facilitation Funds and what influences this?	Quantitative analysis of group event attendance by farmers. Qualitative analysis of semi-structured interviews with facilitators and farmers.

5.2 Overview of key methodological issues

This section provides an overview of the key methodological issues which will be discussed in further detail in relation to the strands below.

5.2.1 Mixed methods

The mixed methods approach is becoming more commonly applied in social science (Timans *et al.*, 2019). The approach requires justification of the roles of qualitative and quantitative data gathering and analysis in their own right and in relationship to each other (Ritchie and Ormston, 2014). As Ritchie and Ormston (2014) suggest, quantitative and qualitative methods can provide insights into the same issue by offering distinctive evidence. A mixed methods approach demands that each

method is used appropriately and to best effect (Ritchie and Ormston, 2014) recognising the advantages and limitations of the method (Timans *et al.*, 2019). The paper by Greene *et al.* (1989) is often cited to justify mixed methods. They suggest that mixed methods offer the following advantages: triangulation, complementarity, development, initiation and expansion. In this research, a mixed methods approach provides triangulation and complementarity, which Bryman (2006) found were the justifications most commonly cited by researchers using the technique. Within this study mixed methods also provide development, initiation and expansion (see section 5.7).

5.2.2 Issues presented by secondary data

Secondary sources used in this research came from a variety of sources and have been subject to both qualitative and quantitative analysis. Secondary data sources are reported to be under-utilised in research although they can bring valuable new perspectives (Lewis and McNaughton Nichols, 2014). Documents, as secondary data, present shortcomings because their central objectives may not directly meet the requirements of research questions (Lewis and McNaughton Nichols, 2014). Their advantage is that they offer richness and are 'naturally occurring', because they are contemporaneously created and independent of researchers (Silverman, 2011). Analysis of secondary documentation needs to take into consideration its author, intended reader, purpose, inclusion and potential omissions and, related to this, its potential bias (Grant, 2019; Silverman, 2011). In response to the recommendations of Silverman (2011), noteworthy aspects of secondary data used in this research are provided in this chapter. Consideration also needs to be given to the availability of documents and the impact this could have on sampling strategies (Grant, 2019). This issue is pertinent to this study in relation to Facilitation Funds, where documentation was sometimes difficult to access and inconsistently completed and stored.

5.2.3 Interviews

Young *et al.* (2018)'s analysis of the use of interviews in conservation research suggests that although widely employed, the method used and analysis applied are often poorly described. They suggest a checklist when employing interviews as a data-gathering technique to record the:

- Why and where: location and purpose of the interview;
- Initial design: rationale and how it fits with other methods;

- Data-gathering: sample method, size and justification; ethical considerations; pilot and how it informed the main data-gathering; duration and method;

- Data analysis: transcription (or otherwise); analysis and finally a critical evaluation of data-gathering and analysis.

This checklist is adapted to describe later in this chapter the interviews conducted for this research .

5.2.4 Tables

Coding of much of the data analysed during this research began with relatively open coding with categories suggested by the conceptual framework within NVIVO. This exploratory initial coding suggested a framework which was tabulated. The process of building the tables contributed to the understanding of the data. In this research tables were particularly used for cross-case analysis or co-occurrence (Cloutier and Ravasi, 2021).

The advantage of tabulating analysis is that it illustrates and thematises large amounts of data (Cloutier and Ravasi, 2021). However, tables have previously been associated with realist or positivist approaches (Cloutier and Ravasi, 2021). It is good practice for the decisions made in the creation of a table to be transparent and explained, providing an audit trail of the tabulation process alongside explanatory narrative and references to explain the tables' significance in accompanying text (Cloutier and Ravasi, 2021). This detail will be provided in the results chapters, while this chapter will point to how and where tables were employed.

5.2.5 Triangulation

Triangulation is one approach to ensuring validation in social science research. Triangulation assumes that different information sources will improve the precision of research findings (Lewis *et al.*, 2014). Denzin, who originally made the case for triangulation by data source, analysis and theory (Denzin, 1970), more recently suggested that it is a "strategy that adds rigour, breadth, complexity, richness, and depth to any inquiry" rather than one which renders analysis more trustworthy or credible (Denzin, 2012, p.82). This research used a variety of methods, data sources and points of view. Primary data (interviews) and secondary data (documentation, previously gathered databases) were used, some of which, particularly the secondary data, were gathered over time. Data were gathered

from different points of view or lines of sight to interpret the issue (Berg, 2014): organisational, individuals from within organisations including project managers, facilitators and farmers.

5.3 Strand One: Large-scale environmental projects

5.3.1 Secondary data

The University of Southampton allowed use of data from a research project undertaken for Natural England. One of the outputs of this research was a compiled database of large-scale environmental projects (termed 'large-scale conservation projects'). The research was published in 2017 as a Natural England Research Report and an accessible online database (Eigenbrod *et al.*, 2017). Permission was given to use the data gathered from the 892 projects, which included the name of the initiative, a brief description, objectives, links to project websites where they were available and the timeframe of the project if known.

In addition to the database, responses from an online survey of a sample of the projects, undertaken during the original research, were also provided. All responses were provided to a question 28 which asked: "within the area actively managed, who are the main occupiers of the land involved? Please estimate the percentage of the land in the following categories: private organisation; public organisations, utilities and non-government organisations". The raw data was requested because the analysis of the question did not feature in the 2017 report.

Table 4 assesses these secondary data sources using Silverman (2011)'s criteria as outlined in paragraph 5.2.2.

Table 4 Summary of Eigenbrod *et al.* (2017) secondary data using Silverman (2011) criteria

Analysis category	**Detail**
Author	Researchers from University of Southampton, Cambridge University, Natural England and Atkins (as per citation)
Potential readership	Project commissioned to a contractual brief by Natural England. Published for public access.
Methodology adopted	Pilot study in 2010: initial pilot questionnaire. Existing information

Analysis category	Detail
	gathered from funders, unpublished reports and staff working for conservation organisations. Focused online survey in 2012 sent to 680 contacts with 136 responses; of these, 125 answered question 28. In-depth interviews with 27 project managers conducted face to face. Stakeholder conference with 100 representatives in 2013.
Omissions/bias analysis	Information was gathered from conservation organisations and funders of environmental projects and using web searches. This may have biased the sample towards those organisations and to projects with an online presence.

5.3.1.1 Quantitative analysis

Lead bodies for projects in the main database were re-categorised using the types described in Table 5. The purpose of this categorisation was to determine who led projects (i.e. what was the lead body) and to identify farmer groups. Responses to question 28 were analysed to assess private land within project areas.

Table 5 Category types used for lead body analysis

Type of lead body	Description
Arms-length bodies	Although technically government bodies this group of organisations was differentiated from local and central government because of its significance within the database. It includes Natural England, National Parks, Areas of Outstanding Natural Beauty, Environment Agency and Forestry Commission.
Commercial company	Utilities, e.g. water and infrastructure companies.

Type of lead body	Description
Farmer groups	Where these could be identified using the name of the project or description.
Local or central government	Local government including county councils and central government, including Defra and Welsh Assembly.
Partnerships	Where projects' title or, other information in the original data, suggested partnership they were assigned to this category. These were then examined and those clearly led by one organisation were assigned to another category. Of those remaining, the majority were either projects with little information recorded aside from their title (12 out of 41) which made further analysis problematic or deer control projects (24 of out 41). Deer control partnerships are primarily between stalkers and landowners with the single objective of deer control.
Non-governmental organisations	These included local and national charities such as RSPB, National Trust, Butterfly Conservation and local wildlife trusts.

The analysis of these data sought to identify patterns in project leadership and the relative position of farmers/private landowners within projects. The lack of information within the database about private land and farmers within these projects was of interest in its own right because it suggested a potential 'blind spot' within environmental conservation research which is further discussed in the next chapter. Quantitative analysis was undertaken first, before interviews, to ensure suggest a sampling method for the qualitative data-gathering, providing both development and expansion between the two methods.

5.3.2 Interviews with project managers

The purpose of the qualitative element within this enquiry strand was to examine how farmers were regarded by project managers within large-scale environmental projects. Ten project managers of

large-scale environmental projects were interviewed and asked to reflect on how farmers participated within in their projects. The project managers were chosen so that they were representative of the category types identified in section 5.3.1.1 and described in Table 6. A project manager was not drawn from the 'partnerships' category because of the limitations of the projects as detailed in the 'sampling' section of Table 7. As most projects had ended, project managers could look back on the delivery of the project as a whole. The data gained from these interviews were analysed to identify how farmers were treated and viewed. See Table 6, which applies the Young *et al.* (2018) checklist to this element of the research.

Table 6 Summary of project manager interviews using Young *et al.* (2018) checklist

Checklist category	**Justification/detail**
Purpose	To address the research question: how have farmers participated in large-scale environmental projects in England.
Rationale	The analysis of the secondary data suggested that large-scale environmental projects are usually led by organisations, generally those with an environmental focus. Only a minority of projects were led by farmer groups. Interviews were required to understand the viewpoints and reflections of project managers on the position of farmers within their projects, exploring their experiences and assumptions (Brinkmann and Kvale, 2018; Young *et al.*, 2018). Secondary data also showed that land ownership was rarely discussed through project communications. Semi-structured interviews were chosen because they would allow easier interrogation of this potential 'blind spot'. Furthermore, it was a suitable method for addressing complex issues (Young *et al.* (2018).
Location	Only English projects were selected so they could be more readily compared to the Facilitation Fund, which is only available in England.
Sample method and size	The categorisation of projects described above was used to define a stratified sample of 10 projects. This is described in more detail below.

Checklist category	Justification/detail
Pilot	Two pilot interviews were undertaken in November and December 2018. One interview was undertaken in person and the other by telephone for comparison. The telephone interview seemed to invite more frankness, perhaps partly because it allowed the interviewee some privacy. This perhaps counterbalanced the loss of face-to-face connection and the visual clues it offers (Brinkmann and Kvale, 2018). It also made a more efficient use of project managers' (and the researcher's) time. Bearing these factors in mind, telephone interviews were adopted for the main study. In any case, most of the subsequent interviews were conducted during the Covid pandemic, when in-person meetings were either not allowed or were undesirable. Experience from the pilot interviews suggested that persistence would be required to address the issue of farmers within projects. Project managers were experienced professionals who were accustomed to representing their and their projects' work in well-expressed narratives which generally did not include farmers/private landownership.
Main data-gathering: Duration and method	Telephone interviews, lasting 40 minutes to one hour. The questions used for these interviews can be found in Appendix 1.
Sampling	Sampling for the qualitative interviews reflected the proportions of lead body types present in the project database and is recorded in Table 7 below. Farmer group-led projects, despite representing a low proportion of projects, were sampled to provide a contrast to the other categories and because of their direct relevance to farmer participation (a fuller description of the potential six projects is provided in the subsequent chapter). The lead body category of partnerships was discounted for the purpose of the semi-structured interviews. The majority were either deer initiatives or had little or no further information provided (as described in

Checklist category	Justification/detail
	Table 5). This category did not appear relevant to farmers therefore was discounted from the qualitative analysis.
Transcription	Interviews were recorded and transcribed, by the researcher during the pilot and later by a transcription service.
Analysis	Open coding was initially undertaken in NVIVO, which was related to the conceptual framework, then cross-case tables were created to record and compare key concepts across the ten projects. Themes which occurred outside the table framework were also recorded. Final analysis was related to the conceptual framework and is described in more depth in the relevant results chapter section 6.2.
Critique	The project managers interviewed were highly articulate professionals who, in the course of their work, were clearly accustomed to justifying and representing success in project work. The semi-structured nature of the interview meant that their potential positive reporting bias could be investigated by asking for clarification on key points or assertions and exploring avenues of enquiry opened by the interviewee themselves. Farmers from the projects were not questioned, which would have provided a more complete triangulation of viewpoint. Farmer interviews were not possible within the scope of this strand of the research but they would be a useful further avenue of study because, as demonstrated in the previous chapters, research focusing on farmers' and landowners' points of view within environmental projects is limited. Adequate sample size should ideally be related to saturation, the point where no further themes are found. Guest *et al.* (2020) suggest that this should be between six and twelve interviews in a homogeneous sample. For the purpose of this research, saturation was attained by limiting the scope of the questions to those pertinent to the conceptual framework.

Table 7 Sampling strategy for semi-structured interviews of project managers

Category of project (by lead body)	Semi-structured interviews undertaken	Percentage of interviews	Large-scale environmental project count*	Percentage of projects
Commercial company	0	0%	3	0.3%
Farmer-led groups	1	10%	6	0.7%
Local or central government	1	10%	41	4.6%
Partnerships**	0	0	65	8.7%
Arms-length bodies	3	30%	354	39.7%
Non-governmental organisations	5	50%	410	46.0%
Total	**10**	**100%**	**879**	**1.0%**

* In main Eigenbrod *et al.* (2017) database.

** See Table 6 for an explanation why this category was excluded from sampling.

5.4 Strand two: Facilitation Funds

5.4.1 Sampling

The sampling frame for this strand of the research were the 2015 (19 groups) and 2016 (30 groups) Facilitation Fund cohorts. These number 49 in total and are distributed relatively evenly across England (see Figure 7). Details of the secondary and primary data gathered from the groups is summarised in Appendix 2. Groups varied widely in terms of group size and group size also changed over time. Differentiating groups by, for instance, the type of farmer they featured, such as arable or livestock, was not possible because this information was not recorded within Facilitation Fund information. The categorisation based on lead body described above in 5.4.3 proved useful and was developed iteratively during the data-gathering process.

Figure 7 Map of 2015-2017 Facilitation Fund groups (Defra, 2018)

5.4.2 Pilot study

The pilot study had two aims: to develop a broad understanding of Facilitation Funds; and to investigate what secondary data was available to inform the study, the limitations of this data and how it could be accessed.

The pilot, undertaken during late 2018 and early 2019, involved the observation of two group meetings of two Facilitation Fund groups. Discrete handwritten notes were made during the meetings, which were written up afterward. Follow-up semi-structured one-to-one interviews were conducted with facilitators of both groups and five farmers (two from one group, three from the other). The interviews were undertaken face-to-face in peoples' homes, took between 40 minutes and an hour and were recorded and transcribed. Open coding analysis of the interviews was undertaken using NVIVO.

The rationale for the methods used – observation and interview – was that they allowed in-depth examination of the practical delivery of the scheme and the experiences of facilitators and farmers within it.

The pilot study also gave this researcher the opportunity to practice interview skills and analysis skills. It confirmed that the use of semi-structured interviews was appropriate because, while key themes were covered, new and novel ideas could be explored where they presented (Young *et al.*, 2018). Lastly it informed and developed interview questions for the main study. Questions which resulted in little meaningful information, for instance the questions for farmers about the facilitator, were put aside. During the pilot it was found that farmers responded better to questions focused on specific rather than abstract concepts, which influenced the question design for the main study. Information gathered from the pilot study was used alongside that of the main study during analysis.

5.4.3 Categorisation of groups

During the pilot phase, an attempt was made to categorise the 48 Facilitation Fund groups into organisation-affiliated groups and those led by farmers. (Although data was available for 49 groups, one group lacked key information and therefore had to be discounted, see table Table 35 where group 30 is recorded as void). However, it became apparent through the pilot study observations, investigations into the secondary data and interviews, that the farmer-led category was problematic

because few groups were exclusively farmer-led. Independent facilitators, usually existing farm advisors, featured in significant numbers. Groups were therefore categorised into those facilitated by organisations (20), and those facilitated by independent facilitators (28), of a total count of 48 Facilitation Fund groups (categorisation was not possible for one group because of missing information on the application form). This was done using information from the application form submitted during the Facilitation Fund application process described in Chapter 2 above.

The categorisation process was straightforward where groups were organisation-affiliated. Independent facilitators were sometimes more difficult to identify because, in some cases, individuals used organisations as a 'banker' for the purposes of the application. The organisation would provide administrative support including a bank account and would provide up-front expenses for individuals (because the scheme was paid in arrears). Where this was the case, a category decision was made on the basis of whether the application focused on the individual or the organisation. Independent facilitators were, in many cases, either former or present Farming and Wildlife Advisory Group (FWAG) advisors.

The inclusion of FWAG advisors within the independent facilitator category requires some explanation. FWAG was set up by farmers in 1970s, and has "deep roots in the farming community" (Winter, 1996, p.245). During the 1980s FWAG, which was organised into county groups, was funded by government to give environmental farm advice, but this funding was withdrawn so that by 2011 the organisation was at risk of going bankrupt (Farmers Guardian, 2011). FWAG now has variable presence across the country and most FWAG advisors are funded by farmers who pay them for advice in relation to a range of subjects, including AES, as applies with other independent farm advisors.

This categorisation proved useful during analysis and informed the sampling. Where possible sampling reflected the proportional split of these categories; 40% (19) organisation-affiliated and 60% (28) independent facilitators.

5.4.4 Secondary data

As previously mentioned, Natural England allowed access to the administrative record-keeping system for Facilitation Funds. During the pilot study the type of documents available were assessed and are summarised in Table 8 below. The types of documents available were mainly standardised; for example, they were provided to applicants as a pro-forma template which applicants were required to populate with solicited information. Documentation from 2015 to 2020 was used in this

research. Access to the Facilitation Fund administrative system was not possible from March 2020 onwards, when a new IT system was adopted. The documentation on individual groups covered up to 31 December 2019. That means that for the groups established in 2015, up to four years' worth of documents were available, while three years' worth of documents were available for the groups established in 2016. For each group that could equate to up to 16 quarterly progress reports and multiple event register and evaluation forms from across the years.

The strengths of the documents used for the research are that they were created contemporaneously by the participants and showed a record gathered over time.

Table 8 Summary of Facilitation Fund (FF) information used as secondary data

Type	**Description**	**Author**	**Purpose**	**Readership**
Application forms	Application provided by the facilitator or facilitating organisation before acceptance into the scheme Frequency: one-off	Facilitator: individual or organisation	Provide evidence that a group of farmers were willing to join the group (through signature). Information about aims of the group and activities planned to meet them and the qualifications and experience of the facilitator	FF scheme assessment panel
Event evaluation forms	Evaluation form for group events Frequency: several per year	Facilitator (who describes the activity) and two group members who make comments on the activity	Provide evidence of the quality of group events validated by membership Provide information on where the event was held and sometimes what it consisted of	Administrator of FF scheme
Event register form	Signed register of members attending Frequency: several per year	Facilitator and attending members	Provide evidence for member attendance of events	Administrator of FF scheme

Type	Description	Author	Purpose	Readership
Progress reports	A report provided quarterly about the group's work. (Submitted with claim for payment) Frequency: 4 times a year,	Facilitator	Provide evidence of the group's activities in a given quarter	Administrator of FF scheme
Membership records for all members of Facilitation Fund groups	Membership lists showing details of all farmers officially members of each group	Administrator of scheme	Provide evidence for scheme payment rates for each group (which are based partially of number of members)	Administrator of FF scheme
Scheme documentation	Information about the Facilitation Fund scheme including the manual, maps, forms and news items	Defra	Provide guidance about scheme, promote its uptake and provide scheme members with standard forms for processes such as reporting and claims	FF scheme members, applicants and the public

5.4.4.1 Omission and bias

Aside from the event register, the documents described above were created to provide evidence of groups' activities, progress and effectiveness. They are therefore likely to seek to present the group in a positive light, particularly because some types of documentation, such as progress reports and event evaluations, were provided as evidence to support financial claims for the facilitator.

Similarly, the only documentation which required farmer member input, the event evaluation form, unsurprisingly provided mainly positive comments. Farmers signing it would have had to do so in the presence of the facilitator who organised the event, or provide the comments back to the facilitator, which might inhibit them from providing critical feedback.

Another limitation of the secondary data was inconsistency. The information provided by facilitators in progress reports varied in content, despite being framed within a pro forma; Also, the event registers provided variable records. Some recorded everyone present whether they were members

or not, some recorded only members. Event evaluation forms were also inconsistent in the information they provided about event details. However, the application form provided reasonably consistent information because it required applicants to answer questions and gave relatively detailed guidance about the necessary information.

Lastly, there were issues finding and extracting legible documents from the filing system, since many records were written by hand and filing was inconsistent.

5.4.4.2 Sampling strategy for secondary data

It was not practically possibly to analyse the documentation for all 49 groups. Therefore a selection needed to be made. Appendix 2, Table 32, details which groups featured in each document type sample.

Application forms. Of the 49 groups that commenced the scheme in 2015 and 2016, where possible all were used. One application form was incomplete. Where data could be extracted from this form it was utilised. See appendix 3 to view the 2015 application form.

Progress reports. Progress reports were sampled from 18 groups. These were chosen so that an even number were chosen from each year (nine from 2015, nine from 2016), that they had a geographical spread across the country, and a relatively even proportion of organisation and independently facilitated groups were represented. Eight groups were organisation-affiliated and 10 were led by independent facilitators.

Event registers. 12 groups' event registers were sampled. Although, as with the progress reports above, efforts were made to ensure sampling was proportionally even across years (2015-6), geographical spread and across organisation and independently-led groups this was problematic. Relatively few groups had comprehensive event register data. Although the groups accessed represented a geographical spread across the country the proportion across years and organisation/independent group type were not even. Nine of these were from 2015 groups, three from 2016. Of these, three groups were organisation-affiliated and 12 had independent facilitators.

Event registers for on-farm and off-farm events. Events held by a Facilitation Fund group were categorised into 'on-farm' or 'off-farm'. The on-farm events were held at a farm site, which could be a farm of one of the members or a farm belonging to a separate farmer or land-owner outside the group. The off-farm events were held in other locations such as a hall, pub or private house (see

chapter 7.7.1 for more detail). The 10 groups used to assess on- and off-farm events were drawn from the 12 groups described above. (The nature of the event registers for two groups made it impossible to determine the location of their events so these had to be discounted.) Eight of these were drawn from 2015 and four from 2016. Of these, four groups were organisation-affiliated and eight had independent facilitators.

Event evaluation reports. Evaluation reports of six groups were assessed, of which there were two per event. Four groups were from 2015 and two from 2016. Of these two groups were organisation-affiliated and four had independent facilitators.

5.4.4.3 Qualitative analysis of secondary data

Table 9 summarises the qualitative analysis undertaken on the secondary data.

The decision-making underpinning cross-case tabulation will be provided alongside the tables. Where important coding themes emerged which were either unsuitable or not relevant to the cross-case tabulation which focuses on the main conceptual framework themes, they are included in the narrative of the results. Final analysis was related to the conceptual framework and is described in more depth in the relevant results chapter sections 7.2, 8.2 and Chapter 9.

This analysis provided useful qualitative insight into several key areas:

- The affiliation of the facilitator and their skills, knowledge and experience, which is presented in detail in the application form;
- The day-to-day operations of the group over time in progress reports;
- Input directly from farmers, through the evaluation form.

Table 9 Summary of qualitative analysis methods used for Facilitation Fund secondary data

Type	Sample	Number of documents	Type of analysis undertaken
Application form	All Facilitation Fund groups for 2015 and 2016	49	Open coding followed by cross-case tabulation. Categorisation of the affiliation of the facilitator
Progress reports	18 groups	226	Open coding followed by cross-case tabulation

Event evaluation forms	6 groups	217	Categorisation into comments which used 'discursive' or 'transmission' description of the event
	TOTAL	492	

5.4.4.4 Quantitative analysis of secondary data

Quantitative analysis was undertaken using the event registers and group member registers to determine how members participated (through presence or absence) at group events. Numbers of members and events were recorded for each group as detailed in Table 10.

Table 10. Summary of Facilitation Fund group and event information (drawn from a sample of 12 groups.

Number of groups	Range of membership	Mean number of members per group	Median number of members	Range of events in 2015-2019 period, per group	Average number of events, per group	Median number of events	Total number of events	Total number of members
12	16–72	31	24	9–64	32	27	384	371

By cross-referencing between membership lists and the event registers, members were recorded against each of the 384 events. Groups had varying numbers of members and events. In order to make comparison between the groups possible, the percentage of members attending the percentile of events were calculated. Patterns were identified in this analysis.

Statistical analysis (chi-squared) was undertaken to determine if event attendance by members was associated with particular group categories. For the purposes of the statistical analysis, the number of members attending a percentile of events in each group was used. The percentiles were adjusted to ensure that a minimum of 5 counts occurred within them in order to ensure that chi-squared tests could be undertaken effectively. Where less than 5 counts featured, percentiles were combined, for instance 51–75 was combined with 76–100 for the size analysis. The categories investigated were:

- Group size (number of members) at 2016 and at 2019, grouped into: 0–20, 21–30, 31 –40, 41 upwards;

- Facilitator affiliation: where facilitators are independent or organisation-affiliated.

In both cases the null hypothesis was that the category had no association with pattern of farmer attendance in events. A chi-squared test for association was undertaken using Minitab.

Further analysis was undertaken of attendance at events categorised as on-farm or off-farm (see 7.7.1 for more details about this categorisation). Events were assigned into these categories by cross-referencing with evaluation forms which recorded where the event took place. Ten of the above 12 groups had information available for this analysis, resulting in 210 categorised events. The null hypothesis was that the type of event had no association with farmer attendance. A chi-squared test for association was undertaken using Minitab.

5.4.5 Primary data gathering

Primary data gathering took place in the pilot phase (as described in section 5.4.2) which was adapted and refined for the main data gathering phase. Both phases are summarised in Table 11.

Table 11 Summary of interviews undertaken during qualitative data gathering

Phase	Facilitator	Farmer
Pilot	**2**	**5**
Main study	**6**	**12**
Total	**8**	**17**

D

5.4.6 Sampling for primary data

Survey exhaustion was a factor in limiting the available sample for primary data. Interviews took place in late 2021, by which point the 2015 and 2016 cohorts had been approached by several researchers, including the team commissioned by Defra to conduct monitoring and evaluation of the Facilitation Fund programme. Efforts were made to avoid contacting groups that had already been asked to take part in research, which limited the potential sample. Recruiting facilitators was challenging and involved a number of approaches, usually directly by phone, before facilitators agreed to take part.

As explained above, participants of two groups were observed and interviewed during the pilot study. For the main study a further six Facilitation Fund groups were contacted. Three groups were taken from the 2015 cohort and three from the 2016 cohort. Two groups were organisation-affiliated

and four were independent. The sample was drawn from a variety of geographical areas across England. For the purpose of analysis, these were combined with the pilot study groups.

Farmers could not be chosen for interview randomly from the groups because access to their contact details was not available. Facilitators were asked to contact farmers and ask them to take part in the survey with the proviso that, ideally, these should represent a spectrum of participation within their group. Facilitators offered two or three farmers per group. Table 12 details how data was gathered and analysed using Young *et al.* (2018)'s checklist as a basis.

Table 12 Summary of facilitator and farmer interviews using Young *et al.* (2018)'s checklist

Checklist category	**Justification/detail**
Purpose	To address the research questions: What kind of participation do Facilitation Funds offer farmers? Who are facilitators, what is their affiliation and what are their skills and experience? How do farmers participate in Facilitation Funds?
Rationale	The questions asked during the interviews (see Appendix 1) were designed to investigate elements of the conceptual framework which could not be extracted from secondary data, including: the design of governance structures, facilitators' approaches to knowledge and knowledge-sharing, the spectrum of farmer participation, farmers' motivation and, where possible, the impact of group activities. The method was built on the pilot study as previously described. Interviewing farmers and facilitators from the same group allowed some triangulation between different points of view. The main study for this research was undertaken during the Coronavirus pandemic (2020–2022), which limited the scope of methods that could be used. Ideally, observation of in-person meetings would have complemented the interviews, adding an additional triangulation point (between reports of group activity and direct observation of it).

Checklist category	Justification/detail
Location	Group locations were chosen from across the country, avoiding those in the researchers' local area (see Positionality).
Sample method and size	See section 5.4.6
Pilot	See section 5.4.2
Duration and method	Facilitator interviews took 40 minutes, farmer interviews about 30 minutes and both were conducted on the phone owing to the ongoing Covid pandemic.
Transcription	Interviews were recorded and transcribed by a professional transcription service.
Analysis	Open coding followed by coding against conceptual framework themes was undertaken.
Critique	Allowing facilitators to choose farmers for interview, even with the proviso that these should represent both engaged and less engaged members, potentially skewed the sample towards more enthusiastic members who would be willing to give up their time to take part, The later interviews were relatively short but felt honest and frank in nature, perhaps because the questions were more purposeful and better phrased than in the pilot study. A breadth and depth of information was provided. If undertaken on farm the researcher would have asked the farmer to show the researcher the results where they answered in the affirmative to the question "Has being a member of the group changed your approach to your farm?", which would have added further insight into this theme.

5.4.7 Analysis of pilot and main study data

As detailed in Appendix 1, the semi-structured interview questions were adapted between the pilot and main study qualitative interviews. During analysis, however, both pilot and main study data was used to inform the thematic analysis. Interviewee concerns were used to inform the questions for the main study, allowing the key themes identified in the pilot study to be investigated in further depth. Where analysis was based on specific questions, for instance the main study asked farmers 'has being a member of the group informed your approach to your farm?' the sample size of the main study is stated.

5.5 Positionality

Natural England partially funded this PhD and provided one member of the supervision team. The subject and content of the research was not influenced by Natural England, however, because the purpose of the research was, primarily, for my personal development. They did not suggest Facilitation Funds as a subject or suggest themes for the research. I have worked in environmental conservation for over 20 years. Most of this time has been spent at Natural England and its legacy agency English Nature. The focus of my work has been farm advice, particularly advising on AES. Prior to my current role within Natural England, I worked with a Facilitation Fund group in the geographical area that I covered. I have my own experience and history with large-scale environmental projects, agri-environment and the Facilitation Fund scheme. As a researcher, I felt able to put this aside and approach this study with objectivity. However, it would be disingenuous to claim that my experience did not inform some aspects of the study. My identity as a farm advisor proved useful during primary data-gathering because it was helpful to be able to demonstrate some knowledge of farming which encouraged frankness from participants. The potential for participants to feel that their input would be reported back to Natural England was addressed directly when necessary (see ethical considerations below). Undertaking this research has inevitably informed my views and my practice. As Denzin (2012) argues that social science's purpose is to be transformative and it has significantly influenced my practice as a farm advisor.

5.6 Ethical considerations

Ethical approval was required through University of Reading processes before any primary data could be gathered. Two ethical reviews were undertaken, one for the pilot study and one for the main study. Participants were asked to sign a consent form, which was reviewed and improved with feedback from participants after the pilot. Consent issues were also verbally explained at the outset of interviews and participants were assured of full anonymity and given a date by which they could withdraw their consent. Projects and participants were anonymised using numerical codes. Identifiers, such as names and places, were removed from coding.

I avoided primary data collection in areas where I was most likely to be known to participants, for instance, in the geographical area in which I work. In cases where participants were aware that I worked for Natural England, either because they had heard of me or because they had done some investigation before the interview, through others or online, they were reassured that the research was separate from my employment and reminded that they would be fully anonymous. For the Facilitation Fund interviews, both farmers and facilitators were also reassured that the information that they provided would not be shared with anyone in their group including the facilitator, which for some people, was a concern.

Permission to use secondary data from the Facilitation Fund scheme was sought and given by Natural England via email. The terms required by the permission was that all information would be fully anonymised. In order to keep secondary data secure, because it contained personal information, it was worked on within Natural England's computer systems and not extracted or held elsewhere. This was done to minimise the risk of data being inappropriately shared.

5.7 Conclusion

This research used both primary and secondary data which were subjected to a quantitative and qualitative mixed methods analysis. The methods were iteratively developed during the course of data-gathering from 2018 to early 2022. The limitations of the approach adopted will be described in the results chapters and summarised in the discussion (Chapter 9).

6. How have farmers participated in large-scale environmental projects pre-dating Facilitation Funds?

6.1 Introduction

The results presented in this chapter provide context for the detailed analysis of Facilitation Funds in the chapters that follow. The key objective was to determine how farmers participated in the large-scale environmental projects which were forerunners to Facilitation Funds - how projects were formed, by whom and how they addressed issues of private landownership were investigated, providing the cultural and historical background to Facilitation Funds. Many important stakeholders in large-scale environmental projects, including environmental organisations and, of course, farmers, play a significant role in Facilitation Funds.

This chapter focuses an analysis of the organisational drivers within large-scale environmental projects, who conceives, controls and influences these initiatives, and the impact this has on farmer participation. How farmers are involved in key components of the process: the development of project aims and governance; and the mode of their involvement whether collaboration, coordination or consultation. Lastly, the motivations of farmers for taking part, albeit as reported by project managers, are described. From this analysis, conclusions are drawn about the nature of farmer participation within large-scale environmental projects in England.

6.2 Method

The methodology which generated these results is outlined in section 5.3. To summarise, quantitative data analysis was undertaken using an existing database of large-scale environmental projects and a related online survey. This was followed by semi-structured interviews with project managers.

The focus for analysis of the data is drawn from the conceptual framework (Figure 6), specifically the following elements:

- The organisational driver: who initiated the project, formed its purpose, funded it and, if separate from the initiator, who led the project;
- The components of the project, how farmers were involved in the aims, governance and actions, and the mode of the involvements focusing on collaboration and coordination;

- Farmers' motivations within the project, as interpreted and reported by project managers.

Quantitative analysis was undertaken on the large-scale environmental project database collated by the University of Southampton. All projects were grouped into categories, using the lead body information recorded against the project by the University of Southampton (see section 5.3 for details of the categories developed).

Qualitative data were gathered through ten semi-structured interviews with project managers selected in a stratified sample (detailed in section 5.3) from the existing database. All of these project featured farmed land management change. Themes from the data were analysed and recorded in Table 15 and Table 16. These were drawn from the semi-structured interviews and recorded as a binary 'yes' or 'no' to key themes suggested by the conceptual framework and the data themselves; namely:

- How aims and objectives were formed, around what and by whom;
- Whether farmers were actively involved in setting aims and objectives;
- Whether farmers and landowners were involved in governance or a steering group;
- Who implemented actions: farmers or the organisations.

The timespan of the project was also recorded.

Knowledge and knowledge transfer themes were recorded, identifying where one-to-one advice was offered, where group activities were employed, whether they involved expert input or peer-to-peer learning and, lastly, whether farmers were involved in monitoring the outcomes of the project.

Modes of participation were assessed by integrating information from Table 15 and Table 16. Each project was scored subjectively on a spectrum between 1 and 4 using two criteria:

1. **Project driver:** Scores ranged from 1 for farmer-led to 4 for organisation-led. Projects where farmers were involved in aims, project governance and/or undertook actions within the project would score lower, while projects where these were undertaken by organisations, usually the lead organisation, scored higher (1 = farmer-led, 2 = largely farmer led with organisational influence, 3 = organisational led with farmer influence, 4 = organisation led;
2. **Coordination and collaboration**: Scores ranged from 1 for projects where action was coordinated to 4 where action was collaborative. The definition used for coordination and

collaboration is outlined in section 2.4 and was drawn from Prager (2015b). Scoring was based on the information in both Table 15 and Table 16. Projects where farmers were coordinated separately, usually through one-to-one advice, or by action commissioned directly by the project taking place on their land, were afforded a lower score. Projects where farmers worked together or with other stakeholders to deliver action across holdings were afforded a higher score (1 = coordinated, 2 = largely coordinated with some collaborative elements, 3 = largely collaborative but with some coordinated elements, 4 = collaborative.

The scores given to projects for both categories are recorded in Table 17 and mapped onto Figure 8 adapted from Prager (2015b). The adaptations included: using a numerical grid, enabling scores to be converted into positions on the grid, and using organisation-led and farmer-led instead of Prager (2015b)'s 'top down' and 'bottom up' vertical differentiation. The size of the circle on the grid reflects the number of projects which occupy that position.

6.3 Findings from the database

6.3.1 Intermediary or lead bodies

Initial quantitative analysis showed that 87% of the 892 projects in the database were led by NGOs or ABSs (the definitions which were used to determine inclusion in these categories can be found in Table 5). This confirms the analysis by Adams *et al.* (2016) of the same database. Large-scale environmental projects are dominated by NGOs and arm's-length bodies: organisations with environmental objectives (within their charitable remit), in the case of NGOs, or have an environmental responsibility, in the case of arm's length bodies. 38% of the projects within the database were aspirational and described plans rather than operational projects. For example, Environmental Stewardship targeting statements are included within the database (110 entries). NGOs' sometimes aspirational projects were sometimes 'branded', for instance Wildlife Trusts' *Living Landscapes* (122 entries), RSPB's *Futurescapes (32 entries)* or Butterfly Conservation Trust's landscape target areas (79 entries).

Some clarification is required of the 'partnerships' category. As detailed in Table 5 where projects were not obviously led by a specific body, or where their title or other information in the original data suggested partnership of some sort, they were assigned to this category. On closer inspection the majority of these were either projects with little information recorded aside from their title (12 out of 41) which made further analysis problematic or deer control partnerships (24 of out 41).

Of the six projects identified as potentially having farmer groups as the lead body, two involved single estates with one landowner and therefore could be argued to not constitute a group of farmers. The Pontbren farmers group (described in Chapter 2) featured in this category. Of the remaining three, one was a forestry initiative and one a grazing project, leaving only one multi-farm project, aside from Pontbren. The analysis quantitatively confirmed that there are few examples of large-scale environmental projects led by farmers.

Table 13. Large-scale environmental projects in England, Wales and Scotland, categorised by lead body. Source data: University of Southampton

Type of lead body	Number of projects	Percentage of all projects
Non-governmental organisation	410	46.6%
Arms-length body	354	40.3%
Partnership**	78	7.4%
Local or central government	41	4.7%
Farmer-led*	6	0.7%
Commercial company	3	0.3%
TOTAL	892	

* Category changed from 'Farmer groups' to recognise projects in the database that had a single estate as the lead body.

** See Table 5 for further explanation of this category.

As may be recalled from the Methodology chapter, of the ten projects sampled for qualitative analysis through interview with their project managers, one was categorised as farmer group-led. Five were assessed to have NGOs as the project lead, three were assessed to have been led by an arm's length body and the remaining case was categorised as having local or central government as the project lead.

6.3.2 Land involved

The database did not make the distinction between farmed/ private land and land owned by public bodies or NGOS. As previously discussed (in section 2.2), public/NGO ownership of land comprises 13% of land cover in England, while private farm land occupied 70%. The fact that the differentiation in land ownership within large-scale environmental projects is not recorded is significant because it suggests that control of land is not clearly acknowledged within large-scale environmental projects.

One question within the online survey undertaken by University of Southampton directly investigated private land ownership (as detailed in section 5.3.1.1). Only 125 respondents, representing 14% of total projects, answered this question within the survey. Of the projects that provided this information, 84% featured some private land and 62% had between 51–100% of the

project area in private land ownership (shown inTable 14). This confirms that private land is a significant constituent of large-scale environmental projects, of which farmed land is likely to form a majority constituent (see section 2.2). Yet private or farmed land did not feature as a significant theme within Eigenbrod *et al.* (2017)'s report, based on the database and online survey. This research gap appears to extend across related research, for instance, the examples described in Chapter 3 (section 3.3) did not record or analyse the nature, or number, of landowners in project areas or the control which they exerted on their land. Private farmed land presents a potential power conflict in large-scale environmental projects which does not seem to be acknowledged in most existing literature, with some exceptions (Adams *et al.*, 2014; Wheeler *et al.*, 2021) . This apparent lack of transparency about control over land management in large-scale environmental projects may influence how farmers and land managers are invited to participate (Chilvers and Kearnes, 2020).

Table 14. Percentile categorisation of area of private land within of large-scale environmental projects. Source data: University of Southampton

Estimated percentage of land in project area owned by private landowner(s) (%)	Number of projects	Percentage of projects
0	20	16%
1-10	6	22%
11-20	9	
21-30	6	
31-40	1	
41-50	5	
51-60	5	62%
61-70	10	
71-80	15	
81-90	17	
91-100	31	
Total	125	100%

Percentages were estimated by survey respondents from the projects involved. Respondents answered the question, 'within the area actively managed, who are the main occupiers of the land involved? Please estimate the percentage of the land in the following categories: private organisation; public organisations, utilities and non-government organisations'. Sub-set of 125 of 879 projects. Compiled by University of Southampton.

6.4 Conceptual findings from the ten case studies

As described in the method above, themes within the ten project manager interviews were analysed using the conceptual framework as a reference point. Data gathered from the ten projects are presented below in Table 15, Table 16 and Table 17. The following sections discuss themes featured in the tables in depth. The projects, numbered 1 to 10, were assessed against themes drawn from the conceptual framework (in the first column of table 15) to assess how farmers were involved within aspects of the projects. Once complete the table was colour coded pink, to show where

farmers were positively involved, and blue where they were not. The information assessed in Tables 15 and 16 was then used to assign a farmer/organisation led and a coordination/collaboration score recorded in Table 17.

Table 15 Analysis of key participation themes of ten large-scale environmental projects (drawn from qualitative analysis)

Project/themes	1	2	3	4	5	6	7	8	9	10
Aims and objectives	Formed by funding	Formed by funding	Set by organisation	Formed by funding	Set by organisation	Formed by funding	Set by organisation	Formed by funding	Ongoing partnership	Formed by funding
Farmers actively involved in aims/objective setting	Yes	No	No	No	No	Yes	No	No	No	No
Farmer/landowners involved in governance/steering group	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes
Action implementation: undertaken by farmer	Yes	Yes	No	Yes	Yes	No	No	No	No	No
Action implementation: undertaken by project organisation	No	No	Yes	Yes	No actions	Yes	Yes	Yes	Yes	Yes
Timeframe	Ongoing	10 years	15 years	Ongoing	Ongoing	3 years	15 years	15 years	Ongoing	5 years

.

Green = farmers positively involved. Red = farmers not involved. Where there is no association with the positive/negative involvement of farmers the square is left clear.

Table 16 Thematic analysis of land management knowledge transfer in ten large-scale environmental projects (drawn from qualitative analysis)

Project	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
One to one advice	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Group knowledge transfer/ training; by experts	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes
Group knowledge transfer/training: peer to peer	Yes	No	No	No	No	No	No	No	No	No
Monitoring of outcomes: farmer involvement	Yes	No	Yes	Yes	No	No	Yes	Yes	No	No

Table 17 Scoring (using a numerical scale) of the farmer/organisation and coordination/collaboration spectrum of ten large-scale environmental projects

Project	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Farmer-led/Organisation-led score (1 = farmer-led and 4 = organisation-led)	2	3	4	3	4	4	4	4	4	4
Coordination/collaboration score (1 = coordination and 4 = collaboration)	3	2	1	2	2	2	2	2	2	2

6.4.1 Funding

Although NGOs and arms-length bodies dominate the leadership of projects (including eight of the ten sampled cases), qualitative data suggested that they did not control significant aspects of project development. For the majority of cases, funding was a key issue which played an important role in shaping projects (see Table 15). Six out of the ten projects had aims determined by the requirements of funders, and then related to local environmental requirements, rather than vice versa. The nature of funding, its scope, purpose and timeframe also appeared to impact on farmers' participation.

The projects were funded by a range of grant funders including Nature Improvement Areas (NIA), Heritage Lottery and landfill tax credits. This funding reportedly came with prescribed aims, rules governing what was fundable and relatively short timeframes of three to five years. The nature of funding for large-scale environmental projects may account for the domination of NGOs and arms-length bodies. Firstly, several project managers pointed out that there was no grant funding available for the development of the project, effectively privileging organisations that have the staff, time and resources to devote to proposal development and application processes. The project manager of the sole farmer group-led project in the sample, who was a farm advisor, estimated that they had spent £15,000 of their time (they were self-employed) before the project was funded (which the funding, when successfully won, did not reimburse). Their work during this pre-application period included building farmer participation and developing a consensus about the aims of the project as well as the practical administration of writing the application form. The project manager also pointed out that during this period farmers were not paid for their time. In contrast, staff from NGOs and arm's-length bodies were likely to be undertaking pre-funding project building within the parameters of their paid employment.

Most funding for large-scale environmental projects is provided in retrospect. For the farmer group-led project, "*there was no kitty*" (Project manager, Project 1, interview) from which activity could be funded until retrospective grant funding was received. Additionally, they did not have banking arrangements in place to receive money like an NGO or arm's-length body would. These were some of the issues faced by the group because it had had no formal administration structure:

> *"We had to sort out structures where people could claim, do reporting and deliver on the project at the same time, which was really hard."*
>
> *(Project manager, Project 1, interview).*

Funding is, however, regarded as a bureaucratic difficulty even by organisations that have a successful track record in achieving grant funding, as one project manager from an NGO-led? project reflected:

"Administrative nightmare. . .Both applying for and running, if and when you do get them"

(Project manager, Project 3, interview).

Many of the projects which were formed around funding opportunities outlived the first iteration of their funding and went on to apply for series of grants, one after the other, which allowed continuous delivery of the projects' aims. However, to achieve subsequent funding, after the first iteration, projects had to be re-engineered to meet requirements of new funder (alongside the administrative resources required to undertake unfunded application process). The periods between funding sources were particularly difficult for the farmer group-led project because there were no contingencies for unfunded activities.

"We were keeping going on love and a shoestring"

(Project manager, Project 1, interview)

Organisation-led projects could offer some staff time, as previously described; however, even for them funding gaps were significant. There is, across the projects, a mismatch between what Reed *et al.* (2018) would term the 'scalar fit' of project objectives and funding timescales.

Lack of resources between grants led, in the case of five projects, to loss of staff, particularly farm advisors who had formed relationships with farmers in the project area. Staff employed within the project were employed on fixed-term contracts and generally sought other employment before the end of the project. The impact on farmers, reported by project managers, is that "*they were around for a while but I have never seen them since*" (Project manager, Project 2, interview) or that "*they're constantly have to get to know different people"* (Project manager, Project 8, interview).

Another unintended consequence of funding design is that it becomes a driver of delivery. Project managers reported being under pressure to achieve milestones and goals required by the funding process and that this had an influence on the farmers that they worked with. Time pressures pushed them towards working with farmers they already knew, or those who had sympathy with the project aims, at the expense of those who were less visible, able or immediately willing to take part.

"Having money is great but as soon as you get it you have to spend it by every quarter. So you do, by default, work with the people who are most willing" (Project manager, Project 2, interview).

"We tend to focus on win-win solutions so if you know you have got a landowner who isn't interested then you focus on other parts of the area" (Project manager, Project 4, interview).

This could also impact on the environmental effectiveness of the project because the most willing landowners may not necessarily be located in areas where environmental management is required, or best placed to achieve large-scale environmental objectives. The risk of the approach, described by project managers, is that farmers who are not in a position to come forward because of practical difficulties, or who need more time to consider participation, do not take part.

Some projects employed a specialist technocrat to meet funding scheme requirements; project management, budgeting, reporting. The farmer group-led project was managed by a farm advisor, not a farmer, who undertook the project management role alongside their advice work.

"I would call myself the driver so although it is a farmer-led project, I am obviously very, very involved in the decision-making process. The decision-making process is one thing and actually doing it, putting it into action is another. I am the driver and sometimes the arse-kicker" (Project manager, Project 1, interview).

For this project the manager arguably played the role of a bridging organisation between the funder and farmers, as conceptualised by Clements *et al.* (2021) and Häfner and Piorr (2021). The positionality of the project manager in such cases is complex as the quote above reflects. They must both serve the group and meet the requirements of the funding scheme. It is debatable whether farmers have the skills or time to undertake this role themselves or, indeed, would want to.

Within the context of this research, funding mechanisms appear to have a fundamental influence on participation within large-scale environmental projects but there appears to be little research about this. Further research could investigate what participatory processes contribute to the construction of funding schemes, what potential barriers the schemes present for farmers and what participation they encourage in the conception and delivery of projects. This research suggests that construction of funding acts as a barrier to participation from stakeholders other than organisations, implying it is neither equitable nor inclusive (Chilvers and Kearnes, 2020; Reed *et al.*, 2018).

6.4.2 **Aims**

With the exception of the farmer group-led project, the selected projects' aims and objectives were developed by organisations such as NGOs, arm's-length bodies and local or national government bodies. In eight of the cases (see Table 15) farmers were not actively involved in the project building process. The one project reporting farmer involvement did so through farmer organisations, such as the National Farmers Union (NFU) and Countryside and Land Business Association (CLA) which supports Dwyer and Hodge (2016) research findings.

Project building (pre-application) sometimes had to take place at speed, driven by tight deadlines prescribed by the funding application process. These constraints effectively prevented applicants from ensuring participation in the construction stage, when stakeholders are identified and issues and aims are determined (Chilvers and Kearnes, 2020; Reed *et al.*, 2018). Prager (2015a) suggests that the identification of a common threat or issue is prerequisite for farmer collaborative action and that ownership of the environmental aims is fundamental to ensuring farmer participation (Prager, 2022). Their lack of involvement in the conception of projects could potentially lead farmers to be, and feel, excluded from environmental project delivery. As one project manager reflected, farmers feel:

> *"There is all this money and it is all going to conservation organisations and the reality is that you have to have quite a defined project to get the money and it was conservation organisations that were coming up with the defined projects"*
> *(Project manager, Project 4, interview).*

The manager of the farmer group-led project noted that NGOs had pre-developed projects 'off the shelf' ready for grant funding announcements, whereas they did not. As previously argued, this is probably, in part, due to the driving role funding plays in the process whereby projects effectively begin when they are funded and funding requires aims, objectives and actions to pre-determined. The consequence of farmers' absence from project development means that they "*end up getting less money than they could have done if they had been shaping the project and putting in their ideas and proposals*" (interview respondent, Project 4).

The way in which large-scale environmental project aims and objectives are developed is also specific to the environmental conservation community and so arguably excludes farmers and others. Aims and objectives for most of the selected projects were expressed in relatively technical and scientific

terms, focusing on habitats, species or ecosystems. Mapping and/or modelling, for instance of connectivity or species/habitat suitability, were used as a basis and justification for action. Aims and objectives were devised during the project development stage which, in many cases, took place either within organisations or within partnership forums where nature conservation professionals played a significant role, as noted in previous research (Collins *et al.*, 2020; Whaley and Weatherhead, 2015). This process frequently identified farmed land as a "target" for project action, framing farming practice as the "problem".

Several project managers reported that farmers were suspicious that large-scale environmental projects could result in more designation or regulation which would impact on farm business, resulting in less control of their own land. The farmer group-led project addressed this by ensuring only farmers were involved at the start in shaping the objectives, thereby addressing concerns about loss of control.

When questioned about farmers' involvement in project development, one project manager remarked:

> "I think farmers tend to be involved in the bit that they were interested in rather than the project as a whole" *(Project manager, Project 4, interview).*

This invites the question, why aren't farmers interested in the project as whole? Farmers' reported uninterest may, in part, be due to their exclusion from project development, or informed by an awareness that they are perceived as contributing to the problem, as outlined above. The way that environmental issues and objectives are constructed and expressed may also be difficult for farmers to engage with. The relatively abstract discussions necessary within projects may be at odds with farmers' focus on relevance to them and their holding as suggested by Smith and Sullivan (2014). Again this would require further more detailed investigation. It is notable, however, that project managers did not report that the nature of farmer involvement was investigated within projects in order to mitigate the potential barriers to involvement as recommended by Chilvers and Kearnes (2020).

In contrast, the project manager of the farmer led group (Project 1) described their role as moderating the creation of project aims between farmers and other stakeholders, which they listed as local authorities and NGOs, to ensure that the project met "everyone's wishlist". Their approach

began, to an extent, with participants, rather than the environmental aims determined by the funding, focusing on their interests and enthusiasm

> *"It starts off with people who are interested. From there you build up – you build a prototype ambition, something non-quantitative and a bit non-specific – but looking at what people are really interested in on their farms and what the commonalities are" (Project manager, Project 1, interview).*

The difference between project aims devised by farmers and by organisations seems significant, and merits further research particularly into the terminology, the weight given to various forms of evidence and how aims are expressed: the who, what, where and how. For instance, it is significant that the aims developed by farmers were not quantitative when funding schemes frequently require specific, deliverable, quantifiable aims. The requirement for specific targets from the outset of environmental projects may alienate farmers from taking part because they are immediately tied to delivery. Conversely, projects led by organisations were sometimes in the position of having to determine quantitative actions on land they did not own (the consequences of this are discussed below). Project requirements for specific targets are understandable because they are a means to measure progress and ascertain value for money where funding is involved. The weakness of quantitative target setting within environmental projects is that it does not seem to acknowledge the necessity for negotiation within the process. The project is expected to have farmer/private landowner buy-in from inception which, using evidence from initiatives investigated for this research, is unlikely to be the case.

Most projects were based around administrative or landscape boundaries (again usually driven by funding) which did not necessarily acknowledge the human geography of land ownership. The farmer-led is the only project which showed awareness of this issue by taking land ownership into consideration.

All ten projects had environmental aims that did not reference related farming practice. The separation of productive farming from environmental delivery (as argued in section 2.4.2), reflects the policy environment in the UK but is not necessarily helpful, particularly in encouraging both environmentalists and farmers to recognise and negotiate the interconnected relationship of their worlds (Nye, 2017).

6.4.3 Governance

The involvement of a range of stakeholders in project governance could be described as a form of participation which attempts to ensure that a range of views influence project delivery. Half of the ten projects involved farmers in governance of the project in some way, suggesting that although farmers had a limited involvement in project development they had a more significant presence in project delivery. However, as Wheeler *et al.* (2021) reports, the scope and limits of governance structures within environmental projects are poorly understood.

There is some question of the representativeness of farmers involved in governance. Farmers involved tended to have larger farms and therefore *"have got the time because they have more staff working for them"*, whereas smaller farmers "*are not really mostly interested on a strategic level"* (Project manager, Project 4, interview). Smaller farmers may be more time-constrained by commitments to their primary business (Lobley *et al.*, 2018). If, as the quote implies, farmers involved in governance are self-selected then their views, and their influence on the project, could be unrepresentative of the range of farmers in the project area. In some cases, farmers were represented within project governance by organisations, for instance CLA and NFU. Again, these organisations might struggle to represent the diversity of views and issues reflecting the wide spectrum of farm types (size, category, business). Where farmers or farmers' representatives did not play a role in project governance, some project managers pointed to farmers' involvement in other aspects of the organisation, for instance an Area of Outstanding Natural Beauty and National Parks management board. As Wheeler *et al.* (2021) noted, formal governance of projects is not necessarily attractive to farmers because it involves fixed times for formal meetings which may cut into the working day of the farm.

6.4.4 Action

Practical land management action within projects tended to focus on capital work, involving one-off interventions including fencing, habitat creation and habitat management such as scrub control, rather than long-term land-use change or changes to farming practice over time. Capital works were easier to deliver within the time constraints of funding schemes. Most project managers described these schemes as being created in relation to AES to incentivise certain actions.

Where action was undertaken by farmers, funding for land management activities was deliberately made simple in comparison with AES and was delivered without AES' attendant rules and regulations. The schemes were sometimes designed to "top up" existing AES being received by farmers. However, in seven out of the ten projects, the funding for land management works was not

given directly to farmers so they could undertake the works themselves, but was commissioned and delivered directly by the project-lead organisation. This inevitably caused some resentment from farmers, as reflected by one project manager:

> "*The landowners group were slightly taken aback. They thought more money would go to the farmers to undertake this work and that was a little contentious at the time"* (Project manager, Project 6, interview).

The decision to pay for works directly on private land was generally driven by the requirements of funding schemes for timely delivery and evidence of value for money, which, in some cases, required formal procurement processes, such as ensuring a range of quotes had been obtained. Farmers in these projects had no direct control of the works on their land, although they would have provided their consent to the works taking place.

The control of land management works by the lead organisation was sometimes mitigated by the approach taken to achieving the works. One project required livestock to be removed from watercourses but the manager identified, through consultation with farmers, that an unintended consequence of this was that farmers would have to pay for piped water. The project therefore proposed putting in drinking water pumps, allowing stock to access water pumped from streams and rivers from within the field. The project aim was – defined by the lead organisation – to reduce watercourse pollution. Before determining the potential solution the project manager consulted to understand farmers' needs and issues. Instead of applying fixed solutions, as, for instance, AES does through pre-defined, prescribed options, the project manager worked with farmers to design bespoke solutions using local contractors whom farmers knew and trusted.

> *"The initial approach was never about – here's a map, here's what we want to do and what do you think? It was, there is a problem here, let's have a look at it together, can you come up with some thoughts about how you would like to fix this?" (Project manager, Project 3, interview)*

The project acknowledged and navigated the requirements of productive farming. They also acknowledged that the project owned the aims, which farmers did not necessarily share, and this informed their approach to delivering the solution.

> *"The key thing is that you do 100% funding for the work you are proposing doing. And it mustn't be any skin off their nose, i.e. it won't impact their productivity" (Project manager, Project 3, interview)*

This approach, where the project carried the total cost of delivery, had a medium-term negative impact as reported for several projects. When the capital works, for instance river fencing in one case, subsequently required repair, farmers returned to the project to request funding. The farmers had no investment in the works, which were effectively owned by the project, and farmers therefore were not invested in their upkeep. Providing funding acknowledges farmers' motivation and interests on the one hand, but on the other it does not necessarily seek to ensure farmer buy-in to the environmental issue.

> *"If it didn't affect them at the time, and they didn't pay for it, they have got no investment in it" (Project manager, Project 8, interview)*

Further research is needed into the impact of funding and into the provision of capital works as a mechanism to deliver environmental objectives. Although both may effectively deliver environmental outcomes in the short term, they appear to have a weak impact on farmer behaviour and practice in the long term.

6.4.5 Knowledge and knowledge exchange

6.4.5.1 One -to-one advice

All projects offered one-to-one advice to farmers as a way to meet the goals of the project, either to offer an in-project grant scheme or to encourage farmers to apply AES options that would deliver project objectives. One-to-one advice was the most common mechanism for driving the delivery of project objectives on private or farmed land, a pressure partially created by the requirements of the funding earlier discussed. Advisors were generally responsible for identifying landowners and advising farmers on how the project aims could be delivered on their land. Advisors frequently undertook what Prager (2015b) terms a coordinating role, working with individual farmers to achieve environmental aims in the wider landscape by aligning cross-holding working. Using the definitions laid out in chapter 3 (para 3.5.2), advisors within the projects had a role which straddled farm advice and extension, rather than facilitation. They typically already worked as farm advisors in the local area.

Project managers acknowledged that the skills, personality and attitudes of the advisor were key to project delivery:

> "It is often quite down to the individual, having the right person with the right attitude who doesn't rub people up the wrong way"

(Project manager, Project 3, interview)

This did not necessarily mean that the advisor had experience of farming or knowledge about farm practice which have been suggested to be important for establishing trust with farmers (Sutherland *et al.*, 2013). Project managers reported that effective advisors listened to farmers and incorporated their suggestions into advice, effectively bridging farm practice and project/environmental objectives (Oreszczyn *et al.*, 2010) by undertaking what Cooreman *et al.* (2021) refer to as reflective learning practices.

Several project managers noted that advisors needed time to develop trust with farmers as suggested by Sutherland *et al.* (2013) and that this was at odds with the short-term nature of funding schemes, which create turnover in advisors (as described in section 6.4.1). Farm advisors were generally employed on for a fixed term when grant funding would be available. When this term was near ending, or at its end, the farm advisor would leave or seek other employment. The timeframe was particularly important when advisors were playing a coordinating role, because they had to build contacts in the project area:

> *"Once you are working with one farmer in an area the conversation often turns to their neighbouring farmer. You build your way around an area that way" (Project manager, Project 2, interview)*

There was a recognition of the complexity of the provision of farm advice and the potential danger for project-specific advice to compete with other available forms of advice. Several projects tried to address this by coordinating existing advice, building shared knowledge and understanding within the advice community, or by only providing advice where there was an identified gap. This reflects research undertaken by (Klerkx and Proctor, 2013). The complexity of advice provision was seen as a disadvantage for farmers because:

> *"If you are trying to . . . run a business you want fewer rather than more people giving you coordinated advice rather than everyone turning up on a different day with similar but slightly different projects" (*Project Manager, Project 2, interview)

6.4.5.2 Knowledge transfer events

The delivery of environmental land management was seen by project managers as being outside of farmers' existing technical skill sets.

"There is a lot of farmers who are willing to do the best for wildlife . . . but it is a massively complex area and they get less help with it" (Project manager, Project 2, interview)

Half of the projects undertook group training events for farmers with inputs from experts to further the aims of the project. However, one project manager reported that group events were not necessarily well attended: "*a lot of them [farmers] haven't got the interest or time to attend (events*)" (Project manager, Project 8, interview). Several projects overcame this by running events on topics directly relevant to farming, for instance Cross Compliance, to encourage farmers to attend so that they could be recruited into the project; demonstrating an understanding of farmers' interests and motivations.

The farmer group-led project was the only project to explicitly mention peer-to-peer learning. The assumption for most projects was that expert knowledge from outside the farming group was required, exemplifying what Cook *et al.* (2021) describe as a technological transfer form of extension. This is at odds with arguments of Inman *et al.* (2018) and Rust *et al.* (2021) that farmers value the kind of applied learning relevant to farming practice which peer-to-peer groups offer. Nevertheless, where they took place, events featured expert input from outside the group, in the form of a presentation or speaker, but this did not, reportedly, negate informal peer-to-peer learning and discussion. Project managers suggested that farmers may have a dual purpose for attending: to learn, but also to make social contact with others in the farming community, hinting at the construction of social capital between farmers which Westerink *et al.* (2017) argue is necessary to generate new ideas and knowledge. As one project manager noted:

"All the conversations you have at the end (of the expert-led event) when you're having a flask afterwards, or whatever, are really beneficial alongside the more formal instructions of that event" (Project manager, Project 8, interview)

Several projects supported farmer decision-making when confronted with the multiplicity of environmental outcomes that farmed land could potentially offer, by providing modelling and mapping tools (as described earlier), thus "*giving [farmers] the right tool to make decisions about what should happen on their land" (interview respondent, Project 5).* The intention of this was to empower farmers to make decisions for themselves. The limitations of this approach, as described previously, is that it privileges a particular type of scientific (environmental) knowledge and assumes that the data underpinning the modelling or mapping are sound and suitable for the relatively fine resolution of field scale, which may not be the case. Additionally, modelling and mapping represent

environmental objectives in isolation from other potentially competing land-use priorities, such as productive farming. As described by one project manager:

> *"You very quickly get to the point where all the data you have says that this is the place to create a (a certain habitat). Well if the landowner says 'that is my best field, no' that this is the end of the conversation" (Project manager, Project 5, interview).*

An alternative advocated by the same project manager is the 'how can we?' approach (also illustrated in section 6.4.4) where the issue was framed by the project but potential solutions sought from farmers. For example, where habitat connectivity is the goal, how can land parcels a and b be connected?

Lastly, and perhaps most significantly, most projects did address farming practice, knowledge and skills within the context of advice or knowledge transfer. Environmental land management delivery was dealt with as a separate skill which farmers' lacked. The knowledge and advice was assumed to be relevant and necessary to farmers. One project manager identified a weaknesses in this approach, and argued that it failed:

> *"To actually understand the nature of farming systems and the economics of it as well, in order so then you can relate to why people are doing certain forms of management and why they see that as advantageous to their practice." (Project manager, Project 7, interview)*

Few projects recognised the practical realities of farming and how these interlocked with environmental land management delivery. One aspect is how the tools at farmers' disposal could impact on practice and prevent adoption of alternative, pro-environmental practices. The project manager interviewed from Project 9 observed that:

> *"20 years ago you'd be using a 4m drill, now you are using 18, 24m drills and those are the sorts of things that need considering in what you are trying to achieve."*

However, there is little evidence of such knowledge being incorporated into project design. Most of the projects included in this research did not reflect a systems thinking approach (Cook *et al.*, 2021), involving a co-design of solutions recognising current farming practice as a starting point.

6.4.6 Project manager reflections on farmer motivation

A limitation of this strand of the research is that farmers themselves were not asked directly about their participation in large-scale environmental projects, partly because of time constraints. Instead, the project managers' reflections on farmers' motivations for participating in their projects were recorded.

The manager of the farmer group-led project (Project 1) suggested that "*what people are really motivated by is legacy"*, meaning their impact on the land and what they would hand forward to the next generation. The project manager suggested this was a strong motivation to participate even where the farmer was a tenant.

Taking part in projects was also reported to offer farmers increased profile and importance within the wider community, which confirms Runhaar and Polman (2018)'s findings:

> *"A lot of them liked the profile, and the relatively prestigious nature of it. It gave them a sense of importance or of contributing to that bigger picture, at little or no costs to themselves, really, and might even have increased their community standing in some small way as well" (Project manager, Project 7, interview)*

This contrasts with findings from other research which suggest that farmers are motivated to take part in project through fear of regulation (McCarthy *et al.*, 2021), access to advice and financial incentives (Roberts *et al.*, 2020).

6.4.7 Mode of participation

As illustrated in Figure 8, projects were mostly organisation-driven and coordinated. One exception is the farmer group-led project, which features in the bottom right quarter of the grid. Its position was influenced by the nature of the funding which supported it. Within this project, farmers worked together collaboratively to design the project aims and deliver them, whereas organisation-driven coordinated projects tended to work with farmers individually rather than collectively, through the provision of advice usually specifically related to AES. Farmer participation was more limited in projects recorded in the top left quarter of the grid, as described in detail in the previous sections. Here, farmers were not involved in the aims of the project or, in some cases, the design of the land management strategy. Seven out of ten projects delivered land management interventions directly on farmers' land. As both Prager (2015b) and Wheeler *et al.* (2021) have observed, coordinated

approaches can deliver environmental outcomes effectively, not least because collaborative approaches may not suit all farmers(Wheeler *et al.*, 2021). However, as suggested by some of the findings above, a coordinated approach may have a limited impact on environmental delivery in the medium and long term, particularly where it relies on capital items which require maintenance, because it may not influence farmer behaviour or address practical barriers within farming practice.

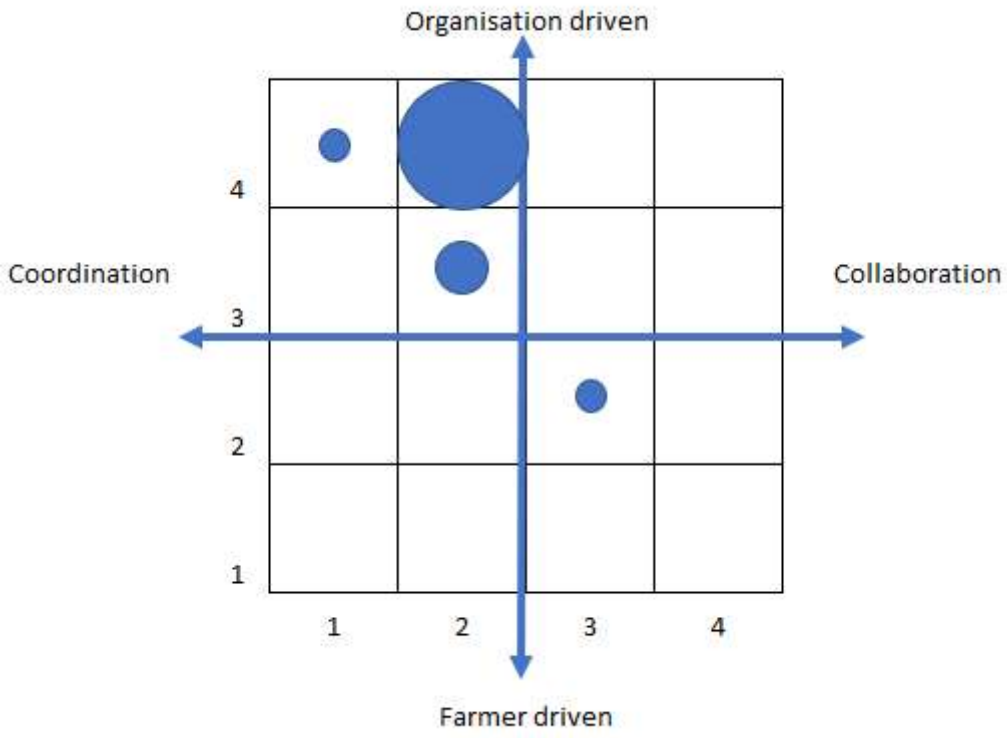


Figure 8. 10 large scale projects represented on an organisation-farmer, coordination-collaboration continuum.

The size of the circle on the grid increases to reflect the number of projects which occupy that position. Project position on the grid is determined by Table 17

***

Lastly, it was sometimes difficult to encourage the project managers to reflect on farms and farmers within their projects, although the majority of projects required environmental land management delivery on farmed land. This was not deliberate obfuscation on the part of interviewees. The project managers interviewed had significant experience and were accustomed to communicating effectively about their organisations and projects. Closer examination and study are needed to determine whether this significant across a wider sample. One potential explanation could be that large-scale projects (and project managers) find it difficult to recognise or admit the limits of control that such

initiatives exert over private land where, without the consent of farmers/landowners, changes cannot be effected. During the interviews, some respondents were aware that there had been no explicit participatory processes undertaken to involve farmers. This reflects the literature, particularly the example projects cited in Chapter 3, section 3.3, with the exception of the Landcare project in Australia.

6.5 Conclusions

The evidence gathered during this research suggests that large-scale environmental projects in the UK are generally driven by organisations, usually NGOs or arm's length bodies, which are, to some extent, an intermediary of funding bodies. The environmental achievements of projects featured in the interviews (reported by project managers and through secondary sources, such as annual reports) was considerable and their success supported by the considerable skills and knowledge of the project managers.

Funding mechanisms for large-scale environmental projects appear to provide the organisational driver, determining the timeframe of the project and how payment will be made and for what. The nature of funding probably also influences the actual aims of environmental projects. To date, funding schemes in England for environmental projects do not appear to have been subject to detailed research. Although the overall aims of projects pre-existed the funding as an aspiration, the projects themselves were built to answer funding scheme requirements. Funding, as reported through these projects, did not require local participation generally, or farmer participation specifically. Funding schemes are arguably constructed in ways that may make farmer leadership of projects difficult. Further research would be required to determine what, if any, participatory processes are involved in the creation and design of funding itself and examine its historical influence on large-scale environmental projects

In most of the ten case studies whose project managers were interviewed for this research, land management action was coordinated across farm holdings to deliver large-scale environmental outcomes. Farmers were positioned as the subject or target of these interventions. The issues and solutions delivered were largely owned by the project, and in seven out of ten projects also directly delivered the land management solutions on private farmed land. Some evidence indicates that farmers had no short- or long-term investment in the outcomes where this approach was taken. Further research is required into the impact of 100% funding of actions required for environmental

delivery and into the use of capital works, for instance physical items such as fencing and scrub clearance to achieve objectives in the short, medium and long term.

From the evidence presented by these projects, farming and environmental delivery remain largely separate and unrelated spheres of knowledge and practice. Further research is necessary to determine whether environmental objectives are expressed in language which farmers comprehend. Facilitation, in its formal sense, did not appear to take place within the projects to mediate this cognitive gap. Advice and extension within the projects was mainly focused on delivering knowledge to farmers rather than creating it with them. Practical barriers to environmental delivery in terms of farmers' skills and knowledge, farm topography or machinery were not generally investigated by projects.

Although the timeframe of the projects is relatively lengthy, they had often been though iterations of shorter-round grant funding. One of the consequences of this was a relatively high turnover of farmer-facing staff in the project, such as farm advisors, potentially undermining the trust built by the advisor between farmers and the project.

The farmer group-led project acted as a useful contrast to the remaining nine projects. However, even in this case, funding provided a strong driver and was an issue which required negotiation by the project manager, a farm advisor, who effectively acted as a bridging organisation between the funding scheme and the group.

Private land generally, and farmed land specifically, is simultaneously fundamental to, yet seldom directly acknowledged within, large-scale environmental projects .

7. How do facilitation Funds frame farmer participation?

7.1 Introduction

The Facilitation Fund Scheme was devised and designed by Defra on behalf of the UK government. It is a process initiated by an organisation, which, as Reed *et al.* (2018) argues, reflects the majority of environmental participatory projects. This chapter investigates how the organisational driver of Facilitation Funds influences potential farmer participation using the themes laid out in the conceptual framework (see Figure 6) including: the scope, purpose and funding. The intention and construction of Facilitation Funds is compared with the practice: how Facilitation Funds have operated in the first four years of the scheme. The relationship between pre-existing farmer groups and Facilitation Funds is discussed. How knowledge and knowledge exchange is addressed within the groups is explored. Lastly the ability of groups to feedback into the structure of the Facilitation Fund scheme and AES is discussed.

7.2 Method

An overview of the methodology used to gather and analyse data for this chapter is given in Chapter 5. The following section provides a summary of data and the analysis that contributed to the results in this chapter.

Data were gathered from a range of sources:

- Primary sources: interviews with facilitators and farmers and observations of meetings that took place in the main study and pilot (Table 11);
- Secondary sources: application forms, progress reports, event registers and evaluation reports (Table 8 and Table 9).

The focus for analysis was drawn from the conceptual framework:

- The organisational driver: the scope, purpose and funding of the project;
- The components of the project: how farmers were involved in the aims, governance and actions, and knowledge and knowledge-sharing.

Themes from secondary data relevant to the themes in the conceptual framework were analysed and represented in tabular form (see Appendix 2, Table 33, about progress reports, and Appendix 2, Table 35, about application forms). The justification for how the themes were identified and incorporated into the tables is listed in notes below each table. Where quotes are shown the primary or secondary source is stated as well as the group or individual code.

A sample of ten groups drawn from a geographical spread across England and across the 2015 and 2016 cohorts (see Table 32 for details of groups) was used to assess farmer participation in on- and off-farm events. Events were categorised according to their location as stated on the event register and the number of group members at each event was recorded (see section 5.4.4.4 of the methodology for more detail). The null hypothesis was that the type of event, whether on-farm or off-farm, has no impact on farmer attendance. A chi-squared test of association was undertaken using Minitab.

7.3 The scope and purpose of Facilitation Funds

As stated in the introduction, Facilitation Funds were initiated by Defra, a government department. This section describes the scope and purpose of Facilitation Funds as laid out in the application guidance and accompanying material. The scheme's title is Countryside Stewardship Facilitation Fund, indicating its link to the current English AES. As with other components of the AES system, the scheme is described in a manual which lays out its purpose, who is eligible and what will be funded (Defra, 2021c).

The minimum requirements for a Facilitation Fund group are that the combined holding area of members is 2000ha or four holdings. Group membership is capped at 80 holdings. No justification is given for how these requirements relate to the delivery of large-scale environmental objectives. The intention appears to be to define the minimum area and size of the group, as well as providing an upper limit for group size. The definition appears to struggle with the largely unknown scale required for large-scale environmental processes (as described in Chapters 2 and 3), and the variability of farm holding size across England (as described in Chapter 2).

Facilitation Fund groups initiated in 2015 and 2016 had a five-year duration. Some have been extended, but this requires a further application process. The issue of timescale is discussed in more detail in section 7.4.

The overarching purpose of the Facilitation Funds is to improve the natural environment at a landscape scale and achieve greater improvements than individual holdings could on their own. The scheme is strongly linked to existing AES in England, Countryside Stewardship (the full title of the scheme is Countryside Stewardship Facilitation Fund Scheme). Guidance accompanying early iterations of the scheme in 2015 and 2016 focused strongly on cooperation and the role of the facilitator.

> *The Countryside Stewardship (CS) facilitation fund supports facilitators (individuals and organisations) who bring farmers, foresters, and other land managers together to improve the local natural environment at a landscape scale*. (Defra, 2021a)

The facilitator's role is to provide group members with the relevant skills and expertise to deliver Countryside Stewardship target statement aims, and develop links between farmers and other (unspecified) partnerships and initiatives (Defra, 2017b). In common with past iterations of AES, specifically Countryside Stewardship, the manual is updated for every application round, ensuring the scheme can be adapted over time. The 2021 iteration of the scheme promotes collaboration, rather than cooperation, which it defines as providing a local support network, learning together and planning shared actions or projects (Defra, 2021a). The change in scheme terminology from cooperation to collaboration suggests that the aims of the scheme have been refined over time. This may have been influenced by the recommendations of the first three phases of the scheme's monitoring programmes, which have attempted to identify potential outcomes (ADAS *et al.*, 2018) and good practice (Breyer *et al.*, 2021; Jones *et al.*, 2020). This research focuses on the first two cohorts of groups during the period 2015–2019, to which the earlier guidance applies.

A significant characteristic of Facilitation Funds which is different from typical large-scale environmental projects is that farmers are the focus of the scheme. In large-scale environmental projects, environmental organisations, or partnerships dominated by them, are the key players (Adams *et al.*, 2016) and while they are not necessarily the focus of funding, they are best able to access it, as discussed in Chapter 6. As described in Chapter 2, farmers join the scheme voluntarily, receive no direct financial benefits for being members and are not paid for their time. Farmers do not have to be current AES agreement holders. The significant advantage Facilitation Funds offers members is that they receive additional points towards their Countryside Stewardship applications, which could potentially ensure a successful application if there was competition for entry into the scheme. Since Countryside Stewardship was launched in 2015 it has not been necessary for applications to compete on a points basis because the available budget has been sufficient for the applications entered.

The relationship between fostering farmer cooperation and knowledge transfer is not prescribed in the scheme manual (Defra, 2021c)These two aims are arguably separate and distinct activities. Cross-holding cooperation is called for, but no suggestion is made about how it could be achieved through group activities. This is discussed in more detail in in section 8.8 of the following chapter.

The emphasis within the Facilitation Fund scheme on educational activity implies that farmers' lack of skills and knowledge is the barrier to environmental delivery. As stated in the 2015 application form "*The transfer of knowledge and expertise on a one-to-many basis to secure better practice is likely to be a core element of these (the facilitator's) activities."* The application form requires a training plan to be provided. Using Arnstein (1969)'s model, this could be described as an attempt to enable powerholders to "educate" or "cure" (Arnstein, 1969, p.217) participants as per the lower rungs (manipulation/therapy) of the participation ladder. The assumption that a lack of knowledge and skills is a barrier to environmental action is supported by research (Winter *et al.*, 2017); however, other factors also contribute, such as financial and time poverty and the constraints of land and equipment (Inman et al., 2018). The scheme's educational objectives could be argued to assume participants' needs rather than reflecting their actual requirements (Mosse, 2001). Barriers to environmental action reported by farmers are discussed in more detail in Chapter 9.

7.3.1 Defining the farmer

Scheme rules also define who can be a member of the group. The Rural Payments Agency (RPA), which administers the scheme on behalf of Defra, defines a Facilitation Fund member as one named individual whose contact details are attached to a Single Business Identifier (SBI). The SBI is used across the RPA's systems to identify the farm, for instance when a farmer applies to an AES or the BPS. The conflation of the farm and the farmer has proven challenging for Facilitation Funds for a variety of reasons:

> *Interviewer: "Your members are defined by a named individual attached to an SBI?"*
>
> *Facilitator: "And that ruins my life really" (Facilitator, Group 34, interview).*

Groups are funded per SBI (see section 7.4 for details of how funding is allocated). Research suggests farming is more complex than one person, a farmer, who controls the farm. Farms involve a variety of individuals, who play differing roles within the decision-making and delivery of farm work (Nye,

2017). The administration of the scheme requires that the facilitator provides quarterly information about, and justification of, the group's activities. A variety of documentation, including claim forms, event evaluations and registers, need to be signed by members to meet the RPA's administrative requirements. Only individuals attached to the SBI can provide valid signatures. (Since autumn 2021 the scheme has allowed individuals other than the named SBI contact to become signatories once a delegation form is completed). This presents the facilitator and group with a difficulty. On one hand, the Facilitation Fund has a narrow definition of official members. On the other, to achieve the group's objectives, the facilitators reported needing to actively encourage the involvement of the wider farm community. The farm community includes family farm members, landowners, farm managers, farm labourers and contractors, all of whom have been found to have an important role in knowledge exchange (Rose *et al.*, 2018).

"It's all very well when landowners turn up, but if they're not the ones that are actually doing the farming, and doing the day-to-day management, then it's not as helpful as it could be. So, whilst they might see the big picture, if that's not translated down into day-to-day management … I've always encouraged everyone from each farm to come along" (Facilitator, Group 11, interview).

"With a lot of farmers it's usually a family business, so you've got the sons and daughters and everyone is kind of involved and part of the business" (Facilitator, Group 27, interview).

"*Farms are multifaceted business and the environment (is) multifaceted as well, you're always going to get different people from the same business according to who it's relevant to*"

(Facilitator, Group 6, interview).

The inflexibility of membership definition was remarked on by several facilitators and was summed up by one facilitator: "*The RPA don't understand farming practices and how farmers work*" (Facilitator, Group 27, interview). The institutional definition imposed by the scheme fails to recognise the complexity of farming communities and further, by designating some members of the farm business as "official" members and others as non-members, actively (although unintentionally) affects farmer participation. As suggested by Chilvers and Kearnes (2020) and Reed *et al.* (2018) the organisational process, sometimes termed bureaucracy, struggles to recognise the nature and requirements of farmers and this has an impact on how they can engage with the scheme.

7.3.2 Pre-existing groups

As discussed in Chapter 2, a variety of farmer groups pre-existed Facilitation Funds (see para 2.4.1). Eight of the 49 Facilitation Fund groups that were awarded funding in 2015 or 2016 existed before the scheme which could imply that farmer groups are more common than existing research literature suggests, but the nature of these groups seems to have been informal, which may explain the relative lack of academic evidence about them. One farmer described the pre-existing group as a discussion group whereas they talked about the Facilitation Fund group in terms of action (interview with farmer C, Group 45). Two of the pre-existing groups had been supported by the Game and Wildlife Conservation Trust, as detailed in Thompson *et al.* (2015). Members and facilitators suggested that the scheme has afforded pre-existing groups formality, funding and an administrative format.

The data gathered for this research provided limited insight into differences in how and when Fund groups were formed, and the impact of this on members' motivation. One facilitator, who worked with a pre-existing group and a group formed specifically for the Facilitation Fund scheme, noted the latter group had an attitude which the facilitator expressed as "what's in it for me?" (Facilitator, group 45, interview.

Farmers in pre-existing groups had developed intrinsic motivations for being in the group before it was 'institutionalised' through the scheme. Prager (2022)'s Facilitation Fund study supports this finding, which they suggest is a result of the stronger social capital developed within pre-existing groups. Alternatively, groups formed for the purpose of the Facilitation Fund have aims and objectives predetermined by the scheme (as described in the two following sections), which farmer members may have little investment in, leading their participation to be driven by extrinsic motivation. Applying Kollmuss and Agyeman (2002)'s theory of environmental consciousness, the suggested emotional non-involvement related to extrinsic motivation could potentially limit meaningful participation. Conversely Cleaver (2001) notes that there is a danger that institutionally sponsored and controlled groups obscure and overwrite existing locally adapted ones.

Both Inman *et al.* (2018) and Rose *et al.* (2018) suggest working within and alongside existing groups rather than recreating them. There is evidence that facilitators play a driving role in forming groups during the application process and it is unclear how this relates to, or impacts on, existing groups (Prager, 2022). Existing groups mentioned by farmers were generally production-centred, for instance Growmore clubs or a buying group for chemicals which also involved discussion. This suggests that existing groups are organised around communities of farming practice, for instance arable or livestock, whereas Facilitation Funds are geographically organised so can feature a variety of farm types. The diversity of farm types can present issues in the group, partly because events

organised are unlikely to be relevant to all (see Chapter 9, section 9.3.1). It can also have an impact on the cohesion of the group, as reported by a facilitator of one group where there was one livestock farmer while the rest of the participants were arable farmers; the livestock farmer eventually left the group (Group 6). Prager (2022) argues that farmers prefer to be in like-minded groups where there is shared experience but this is difficult to achieve in geographical groupings, although Inman *et al.* (2018) argues localised groups are more effective. Where environmental extension or knowledge exchange is the aim there is a case for groups to be organised around farm practice, so farmers share similar farming experiences and demonstrations can be made relevant to all (Skaalsveen *et al.*, 2020), but this is at odds with the Facilitation Fund's requirements for cross-holding collaboration or cooperation. The two aims of the scheme, education/extension and cross-holding cooperation, sit uneasily with each other.

Pre-existing farmer groups seem difficult to identify and locate, perhaps because they are informal in nature so have no web presence. Further research on existing farmer groups in England and the UK, their membership and how they are organised could provide useful insights into farmers' preferences for extension in addition to their relationship with Facilitation Funds.

7.4 Funding

Facilitation Fund groups receive a £10000 annual base payment with an additional £500 for each participating SBI up to a maximum of 80 members, limiting the annual funding that groups can receive to £50000. The money is intended to pay for the facilitator to coordinate the group and for the direct costs of knowledge transfer, such as expert speakers. Detailed proof of expenses is required for reimbursement and costs are paid in arrears. As with funding for large-scale environmental projects described in Chapter 6, the administrative demands, which include having an SBI and a bank account, privileges organisations that have the resources and administrative capacity to carry costs until payment (which is made quarterly) and provide the detailed documentation required. (Chapter 8 analyses the affiliation of facilitators). As with large-scale environmental projects, pre-application development is not funded and, because applications are competitive, groups can, and have, put themselves forward and not been accepted into the scheme. The construction of the funding and competitive nature of the application could be argued to be at odds with the inclusive and iterative principles of participation (Chilvers and Kearnes, 2020). There is some evidence (from Australia) that competitive processes undermine the development of social capital and collaboration (Royal, 2021). It would be useful to further investigate the short- and long-term impacts that unsuccessful applications have on nascent groups and individuals within them.

Although funding and administration were not directly addressed through questioning during this research, it was an issue raised by several facilitators who reported the process as being problematic in three respects: the administrative burden, "*there is so much more paper work*" (Facilitator, Group 27, interview); the relatively short timeframe of the scheme (three to five years), and the inadequacy of the funding offered, one facilitator felt that the funding need to provide for "*a couple of days a week rather than a couple of days a month*" to keep the group engaged (Facilitator, group 34, interview) . Several facilitators reported the RPA making demands for proof of expenses which were difficult to meet and detailed queries about expenses related to activities, suggesting a lack of trust. These queries caused delays in reimbursement.

One facilitator reported that their organisation had not been paid for two years (amounting to approximately £30000) so had paused their work with the groups. In their evaluation of the scheme, Jones *et al.* (2020) discovered similar issues, leading them to recommend simplification of Facilitation Fund administration and timely payments. Some attempts had been made by the RPA to listen to and mitigate concerns raised. However, facilitators described a continuing feeling of powerlessness, not least because the process was impersonal. They had no named contact to talk to because correspondence was conducted through a generic email box. This, again, seems to offer an example of where organisational processes are at odds with principles of trust, equity and empowerment (Reed, 2008) and supports Jones *et al.* (2020)'s calls for improvements. The organisational culture of the scheme, represented through the administration of funding, which exerts power through allowing or withholding funds, needs to be investigated further.

The timeframe of the funding, three or five years depending on the application round, is relatively short compared with the requirements of the environmental objectives as noted by Jones *et al.* (2020) (see section 7.5 below on group aims). It is also a relatively short period in which to form, build and achieve objectives within a farm group (this is discussed further in section 7.7). Interestingly, as of January 2022 it appeared from the scheme's records that 14 out of the original 49 groups were no longer funded. One of the groups interviewed for this research intended to fund itself by farmer contribution although this was still in discussion with the group. The future funding of groups was investigated through the monitoring and evaluation programme, which found that facilitators believed funding would be required for groups to continue to operate (Jones *et al.*, 2020). Further research is required on the funding lifecycle of the scheme, for instance into what happens to groups after funding ceases.

The funding provided by the scheme may not be sufficient to cover facilitator time. One facilitator of a group with ten members, which would have an estimated income of £15000 per annum, reported that the funding did not allow them to spend enough time on the group. They advocated "a *good couple of days a week, rather than a couple of days a month. And you would be able to keep engaged with them a bit more*" (Facilitator, Group 34, interview). The potential consequences of allocating the funding based on the number of members are discussed in more detail in Chapter 8.

Lastly, farmers are not paid for their time and do not have to offer any contribution towards the costs of the group (although reportedly some groups are devising member funding schemes). The scheme appears to have been designed based on the assumption that farmers gain non-financial benefits which justifies their time (see section 9.4 about farmer motivations for taking part in the group). This, again, requires further investigation. For instance, if there was a financial incentive to attend the group would this influence farmer participation? What impact, if any, is there from some group attendees, such as the facilitator, expert speaker and organisational representatives, being paid to be present while farmers are not?

7.5 Aims

Facilitation Fund groups are required to draw their aims from Countryside Stewardship statements of priorities (Defra, 2015a; Defra, 2015d). These priorities are defined on a Natural Character Area basis, a geography which is based on landscape and soil type as detailed in section 2.1. Each Natural Character Area features a list of priorities for conservation including habitats and species, water availability and quality, historic features and landscape qualities. [If there is time, it would be great to describe here the kinds of environmental aims/objectives of FF groups and give a couple of (anonymised) examples.]

For some Natural Character Area priorities, the official statements specify land management practices which could be beneficial; for instance sowing nectar flower mixes and increasing flowers in grassland. However, both the geography and terminology used in the statements could be challenging for those outside of the environmental conservation community to understand and, perhaps more importantly, translate into environmental objectives within a given area or farm. The underlying assumption (within the statements, which are intended as a guide for Countryside Stewardship applicants) is that Countryside Stewardship options will provide the necessary actions.

Facilitation Funds effectively limit the scope of participation by using predetermined aims drawn from Countryside Stewardship statements of priorities. This denies members and groups the

opportunity to identify environmental problems and potential solutions themselves (Prager, 2022). The knowledge used to generate the statement aims cannot be challenged, renegotiated or made locally relevant by farmer members. Prager (2022) suggests that if aims were proposed and agreed within a farmer group, although this would probably provide stronger farmer motivation, there is a risk that the aims chosen would not meet large-scale environmental requirements. This assumes that the requirements of large-scale environmental projects are objective, fixed and known, which is seldom true (Helm, 2019). Hohl *et al.* (2015b)'s adaptive governance model for large-scale environmental restoration argues that, to address this complexity and uncertainty, explorations of scientific and local, practical knowledge and ecological and human social-economic requirements need to be conducted with a view to building consensus about what the issues are and how they can be addressed. By predetermining the aims, the Facilitation Fund scheme limits groups' scope to developing a consensus between farmers and other stakeholders (which could range from the local community to national agencies) about pre-defined environmental issues, their causes and potential mitigations. In practice, some groups investigated issues for themselves and, by necessity, created locally relevant approaches because it was necessary to adapt the high-level aims of priority statements to specific places and practices to achieve results. For example, an event held by Group 10 featured a walk along a watercourse to investigate the water quality issues stated in the groups' aims:

> *"We walked along [watercourse place name] and discussed flood alleviation, group members [who] had long-term local knowledge … suggested a solution via balancing ponds" (Progress report, Group 10).*

This quote demonstrates one of the strengths of local knowledge: that it has been developed over time in a specific location, whereas scientifically generated knowledge, particularly through mapping and modelling, often struggles to represent change over time and is presented at scales of resolution that are difficult to translate into farm- or field-level actions (as noted above regarding the Countryside Stewardship statements of priorities). Rather than applying 'off the shelf' solutions presented by an AES, the group suggested a bespoke, innovative solution based on their experience of land management practice. Land management innovation, and its importance, is explored in later in this chapter in relation to trials and monitoring (see section 7.7.3).

Facilitation Fund applicants state their chosen aims on the application form before the group is funded and facilitators are required to discuss and agree aims with the group. As reported with large-scale environmental projects, application windows are relatively short and, in the case of Facilitation Funds, are not predictable, so they do not happen at fixed times of the year. In practice, groups

would have relatively short time periods of about three months to devise and submit applications. Despite this, 34 out of 48 applications (see Table 35 in Appendix 2), approximately 70%, mention the discussion of the aims with the group during the development of the application. In their study of Facilitation Funds, Prager (2022) found members' recall of group aims was poor, which calls into question the depth and comprehensiveness of aim-setting processes.

Looking across the aims proposed by groups in their application forms, those led by organisations tended to focus on aims that aligned with their organisational remit. For instance, groups facilitated by the Rivers Trust concentrated on water-related aims, while groups led by Wildlife Trusts concentrated on biodiversity aims. This suggests that the facilitating organisation has a strong influence and control over group aims.

A progress report from one of the groups describes negotiation between the organisation and participating farmers over the aims of the project (in this case after a successful application process):

> *"A meeting to launch the group was held … which included a presentation by the facilitator and [NGO] on the aims of the group ... an open session was held to find out what topics the group was interested in and would like training in"* (Progress report, Group 10).

It is not clear from this account whether group members had the power to accept or reject the aims. Jones *et al.* (2020) reported that 14 out of 67 (21%) of groups had altered their aims after the group was formed but only three of these were relatively large changes. Group members have some influence over aims once the group has been funded, but as previously argued this is limited to Countryside Stewardship statements of priority.

Building consensus around environmental issues and actions has been described as an important foundation for participation within the process (Chilvers and Kearnes, 2020; Hohl *et al.*, 2015a; Reed, 2008). The large-scale environmental project described in the previous chapter that was, unusually, led by a farmer group, formed its aims around farmers' interests and enthusiasms. A similar approach was suggested by a Facilitation Fund facilitator, who proposed that ideally groups would have *"some kind of focus on something that either already matters to the farmers or comes to matter"* (Facilitator, Group 6, interview). This supports the assertion that farmers are more likely to be motivated by aims they have identified and agreed on (Thompson *et al.*, 2015).

7.6 Governance

A formal governance structure is not suggested or required in guidance for the Facilitation Fund scheme. Nine out of 18 groups for which progress reports were analysed had some kind of steering group. The steering groups generally featured a chair and members who are "*reasonably prominent in the farming community*" (Facilitator, Group 28, interview). Where there was not a formal steering group there were sometimes influential members who played a key role, recognised by the facilitator. These influential people or members of the steering group tended to be farmers who were environmentally aware before the group was formed and had often played a key role in setting up the group. They were reported to play an important part in galvanising the group, ensuring attendance and setting direction. The power that influential members exerted on the group could also have adverse impacts: one facilitator reported a group where the chair chosen was *"not particularly environmentally aware ... and that facilitation group struggled as a consequence*" (Facilitator, Group 28, interview). This seems to support Rogers (1995)' diffusion of innovation theory, wherein innovators or early adopters from within a group lead change. However, the influential members and steering group members' roles were described by facilitators as social,, rather than influential on environmental practice, involving gathering and encouraging the group, rather than leading the group towards adoption of new practices as suggested by Rogers (1995). When the same facilitator was asked why an effective chair made a difference they replied:

> *"An example would be, we put an event on … a couple of days before the event I …. phone the chair up and say this is a disaster, there's nobody coming to it …. He said, you worry too much, everybody's got back to me, you'll have a good turnout, don't worry" (Facilitator, Group 28, interview).*

Other facilitators commented that influential group members, whether or not they were in a formal position such as a chair, helped to set the tone of the group and encourage attendance (as suggested in the above quote). According to observation and interviews, steering group members and influential members tended to have substantial landholdings in the area and, perhaps related to this, were less involved in the day-to-day running of the farm, which afforded them more time to take an active part in the group. They also appeared to have social standing and the confidence to speak in group situations, perhaps because of their education or socio-economic class. Both of these observations require more research. If true it would suggest that steering groups and informal leadership circles may not necessarily be representative of the broad range of farmers participating in Facilitation Fund groups, their farm size or socio-economic background. The facilitators who were interviewed and observed did not appear reflect on, or challenge, the power hierarchies within the

group, although they were not directly questioned about this subject. Facilitators did, however, often seek to ensure that the group is inclusive through other means (which is discussed in the next chapter).

The members of steering groups and other influential members were not necessarily chosen through a transparent or democratic process. Some facilitators stressed that all members were welcome to join the steering group, while others described a process where members were invited, usually by the facilitator and/or influential members. In one group formal roles, such as chair, were determined by the group in open forum and were subject to a democratic process through a show of hands.

Steering groups were reported to have a variety of purposes: suggesting ideas for group activities, providing a sounding board for the facilitator, and taking an active role in planning the events of the group. But in many cases, the direction of the group was also discussed with the whole membership. Of all 18 groups whose progress reports were analysed, a group discussion was mentioned. The following quote demonstrates the relationship between the steering group and the group as a whole:

> *"The steering group, we have one or maybe two meetings a year and I frequently consult them by text and email and they suggest topics that might be good for meeting, they help me find speakers, they discuss what the issues are and what we should focus on in the year ahead. We will talk about that at a whole group meeting and then refine with the steering group" (Facilitator, Group 6, interview).*

This reflects the findings of Jones *et al.* (2020) from their evaluation of how facilitators identified group training needs, where 96% took the views of the whole group into account.

One facilitator (Group 27) put a steering group in place to combat declining farmer attendance and found that this successfully reversed the trend in attendance. They point out that steering groups are a smaller group, which allow easier discussion than the main forum, in which they found "*nobody wants to say anything or suggest anything*" (Facilitator, Group 27, interview). The need for more formal governance arrangements such as steering groups may become less necessary as trust builds between members, allowing them to take part more actively within the group. This was documented to have happened with Group 33:

> *"Group members know each other better and are more confident to share ideas, ask questions and contribute their knowledge. Members are proactively contacting the facilitator, making suggestions about future events, requesting*

discussion group topics and asking for visits to see best practice outside of the groups' experience" (Progress report, Group 33).

Where more formal arrangements were not in place, facilitators used other methods for shared governance. Group 34's facilitator (whose lead farmer had retired and had no volunteer to take their place) used an informal process of ringing around to take feedback and gauge interest. This approach has the advantage of involving a wider and potentially more representative sample of members, depending on how they are chosen.

Although active participation within the governance of groups may be desirable and arguably essential, farmers may not necessarily find it attractive. Group 27 facilitator suggested that "*they* [farmers] *like a training event*" in contrast to opposed to meetings, for instance about the running of the group, confirming that farmers often prefer to be managed in informal, non-bureaucratic ways (Leventon *et al.*, 2017). This preference was confirmed by one Facilitation Fund farmer who disliked meetings because "*they go on far too long and are too waffly ... If you are going around [a farm] ... you feel like you are doing something, but just sitting in a meeting ... loses its appeal to me*" (farmer B, Group 45, interview).

7.7 Knowledge and knowledge exchange

As outlined in Chapter 3, knowledge can be assumed to be within or outside of the farmer group: held and transferred from 'experts', negotiated between experts and farmers (Cook *et al.*, 2021) or shared between farmers through peer-to-peer learning (Rust *et al.*, 2021). Knowledge transfer is assumed to be a core activity of the Facilitation Fund (as described in 7.3).Analysis of themes within the application forms found that while the majority (39 out of 48) valued farmer knowledge, only 15 out of 48 acknowledged current farming practice (see Figure 9). The disparity between these two themes is interesting; while farmer knowledge is valued, their core work, productive farming and its relationship with environmental delivery, is less well recognised.

As previously argued, the separation of environmental land management and agriculturally productive land management into two distinct spheres seems to create a difficulty within environmental projects: how can farmers' core knowledge of farm production be valued, when farm production is seen as part of the problem? One area of farmer expertise is that they have experience of observing land and practical land management over time. Suggested environmental land management techniques sometimes lack a robust scientific basis or extensive practical trialling in a variety of geographies (CEBC, 2022). Environmental projects involving farmers have the potential to use the former to address the latter. Farming practice which is partially responsible for

environmental degradation by necessity needs to be central to discussions about potential restoration and mitigation (Nye, 2017). One farmer, when asked what collaboration Facilitation Funds offer, suggested that a potential "*collaboration of ideas*" between environmentalists and farmers could be an aspiration (Farmer A, Group 34, interview).

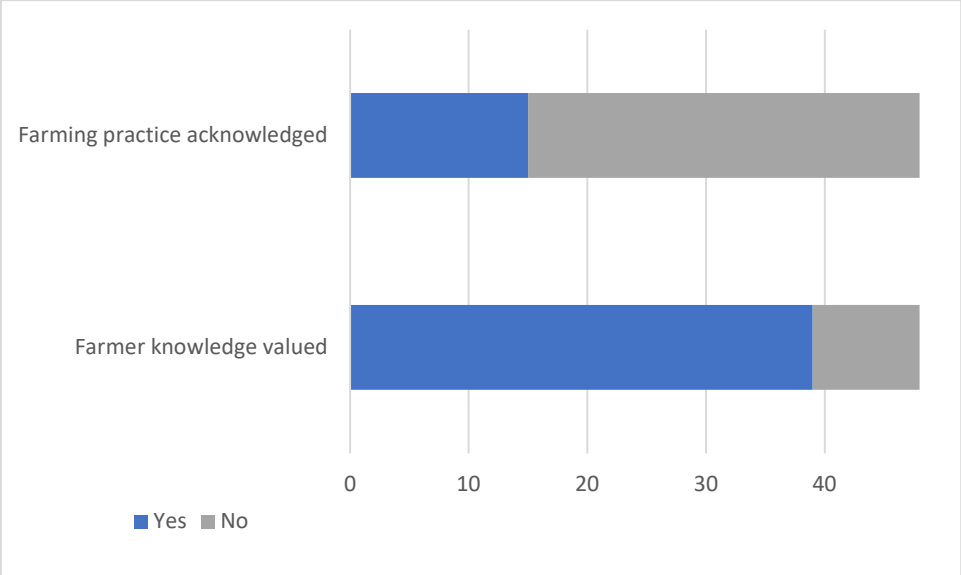


Figure 9 Analysis of Facilitation Fund application forms from 2015 and 2016 showing presence or absence of key knowledge concepts. *N* = 48

See Table 35 for a group-by-group analysis of these concepts. The notes which accompany the table detail how the themes were identified in the data.

7.7.1 Events

A reviewing of the events undertaken by 12 Facilitation Fund groups found that the number of events held by each group varied widely (see Table 18).

Table 18 Detailed analysis of events for 12 groups

Number of groups	Range of number of events in 2015–2019 period	Average number of events	Median number of events	Total number of events
12	9–64	32	27	384

The range of number of events is wide while the median and mean are 27 and 32 respectively. Further quantitative and qualitative analysis would be required to determine why this was the case. Groups sometimes repeated events yearly, for instance providing species or habitat information. Others had events which were potentially intended for farmers and the wider community so had higher numbers of total events. In short, the number of events appeared to be determined by the

group and/or the facilitator and facilitating organisation. The organisation, delivery and administration of events were chargeable by facilitators. They were also required to report quarterly, alongside their invoicing, on events. The pressure of reporting 'activity' may have also encouraged facilitators or facilitating organisations to increase the number of events. These suggestions, however, would need further investigation.

Activities undertaken by groups take several forms:

- Off-farm events. Where input is given by an expert on a given topic in a session at a venue such as a hall or pub. These are usually held in the evening during the winter months;
- On-farm events. These feature a farm walk led by the farmer and/or facilitator, and sometimes also have expert input or have experts/non-farmers present to offer information. An indoor session may take place alongside this on the farm;
- Walks on non-farmland to demonstrate specific habitats, such as nature reserves;
- Annual or bi-annual gatherings such as "harvest suppers". Largely social events featuring a dinner or barbeque which might feature an update from the facilitator or an expert speaker;
- Attendance at conferences or country fairs. These were the least common type across the groups.

Of these the first two are the most common (306 out of the 384 events recorded), which supports and adds further detail to the sample collated by Jones *et al.* (2020). The balance between the number of on-farm and off-farm events (in a sample analysed) was roughly equal (see Table 19).

Table 19 Sample of events showing comparison of off-farm and on-farm events

Type of event	Number of events	Percentage
Off-farm	165	54%
On-farm	141	46%
Total	306	

Qualitative analysis suggested that farmers were interested in visiting other farms for a variety of reasons. Although the Facilitation Fund evaluation conducted by Breyer *et al.* (2021) found that between 50% and 80% of group members already knew each other (as reported by facilitators), this research found that farmer members would not necessarily have visited each others' holdings:

"A lot of them knew each other, they knew them by sight and by name, but they really didn't know each other's farms" (Facilitator, Group 10, interview).

Farming can be relatively isolated because the business, and work, is usually largely confined to the holding. Visits offered farmers a chance to see other farms, as one farmer expressed:

"I like visiting other people's farms …. otherwise you get caught up in your own little world" (Farmer B, Group 11, interview).

Farm visits also offer an opportunity to "*see with your eyes what you don't necessarily hear*" (Farmer A, Group 19, interview) because farmers "*can be very close".* This comment suggests that farmers do not necessarily share information verbally, which may be deliberate or, more likely, that some farmers find it difficult to express or explain their practice in abstract. The following quote illustrates this alongside another point about the gap between theory, as expressed in digital or print content, and practice:

"You can watch the webinar, you can read the books and you can watch the Youtube videos and listen to the podcasts. But … all of those mediums, they're a little bit inclined to have a gloss image ... And nothing beats actually going on to a farm and being able to ask directly what problems people have had ... And actually most people are pretty honest about where it's all gone horribly wrong" (Farmer B, Group 34, interview).

This supports Inman *et al.* (2018) assertion that farmers value applied experience. On-farm events seem to provide an important underpinning of peer-to-peer farmer learning because they allow host farmers to demonstrate specific practices to their peers (Marchand *et al.*, 2017). Note, however, that Cooreman *et al.* (2021) found that on-farm demonstrations did not necessarily lead to adoption. (Adoption of practices will be discussed further in Chapter 9.)

On-farm events may encourage group discussion and help build social capital because they provide an informal meeting environment which does not require participants to speak into a large group, so may better suit some farmers. This was expressed by a farmer as follows:

"As you walk between each stop people talk and things ... I'd say it's a more natural environment ... it's much more free-flowing and open when you are outdoors" (Farmer A, Group 34, interview).

From this evidence it would be easy to assume that farmers prefer on-farm events to off-farm events. However, when a statistical test for association was applied to this hypothesis using a chi-squared test and attendance as a proxy for preference, no association was found (Chi-square = 1.0551335, *P* = 0.458). This result is evident from Table 20, where the proportion of members attending on- and off-farm events, respectively, reflects the proportion of those events.

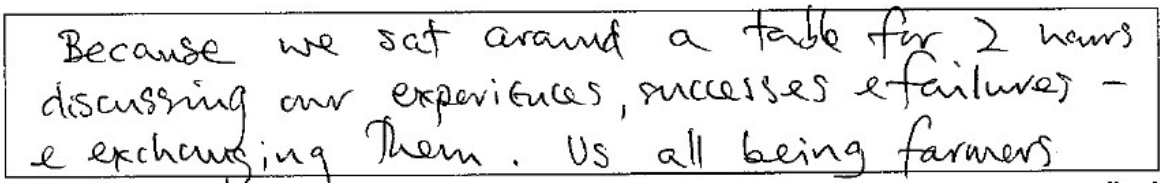
Table 20 Group member attendance at on- and off-farm events from a sample of eight groups

Type of event	Number of events	Percentage of events	Count of group member attendance	Percentage of member attendance
Off-farm	165	54%	697	49%
On-farm	141	46%	725	51%
Total	306		1422	

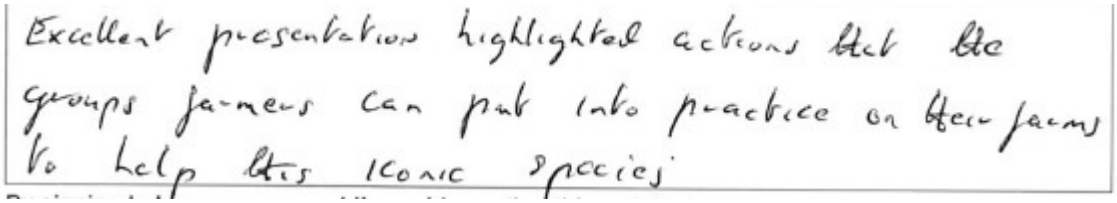
7.7.2 Transmission and discussion

As suggested in Chapters 2 and 3, there are few examples of farmer discussion or extension groups focussing specifically on the delivery of environmental objectives pre-dating Facilitation Funds in England. Facilitation Funds therefore have no pre-existing format or well-established practice to draw on. The Facilitation Fund guidance (as quoted above) implies that knowledge will be transferred to members from outside of the group, suggesting a transmissive rather than discursive style of learning. This does not seem to be reflected in group practice: ten out of 18 groups' progress reports mention discussion within group events (see Table 33 in Appendix 2). An attempt was made to investigate this further by analysing members' comments in event evaluation forms to categorise the events as either transmission or discussion (see Table 36 and

Figure 18 in Appendix 2). On reflection this analysis is flawed because it assumes that transmission and discussion cannot take place simultaneously. Farmers appear to value both activities:



(Event evaluation, Group 10)



(Event evaluation, group 10)

Observation of two Facilitation Fund group meetings (see section 5.4.2 for details of observational method involved) found that they were not conventional discussion groups. In both cases expert input acted as a focus point for formal discussion, which tended to take the form of questions and answers asked by group members and answered by experts, rather than discussion between members. However, informal discussion occurs outside this more formal arena. Discussions took place between smaller groups of farmers, in twos and threes, in the vans between stops (both meetings involved farm tours), where farmers debated the experts' input between themselves. They also discussed other subjects, notably farm productivity, for instance "that is a good crop". This suggests that discussion can occur in different ways within the group, and that the learning intention of the event may not necessarily dictate farmers' motivations for taking part or the knowledge they gain from it.

Qualitative analysis of both the secondary and primary data indicates that binary constructions of expert input versus peer-to-peer, transmission versus discussion, on-farm versus off-farm, are a false dichotomy. The reality is more complex and nuanced. Facilitators suggest that farmers learn from experts who deliver the theory, while farm walks and discussion allow demonstration and debate about the practice.

Farmers are clearly not passive adopters of expert knowledge; they take a critical and analytical view. Question and answer sessions are sometimes used by farmers to challenge received wisdom of the expert. As one facilitator noted:

"*There is quite a lot of polite listening, then probing questions and debate*" (Facilitator, Group 34, interview).

The same facilitator noted that this critical challenging tends to be undertaken by more extrovert personality types.

One farmer expressed ambivalence towards scientific knowledge, pointing out that external experts had previously advocated increasing agricultural production, as described by Whaley and Weatherhead (2015), which environmental action was now required to ameliorate:

"I think science is a double-edged sword, but if you don't believe in it then we probably won't get out of our problems. It might be [that] some of what scientists do gets us into the problems" (Farmer B, Group 45, interview).

Other farmers were clear on why they preferred some experts over others, A fellow member of the same group praised those who "*don't preach, they encourage and educate … showing what can be achieved and done and demonstrating*" in contrast to times when the farmer felt they would "*just be criticised and people want to come in and tell us how to do things and what we should be doing and preaching at us*" (Farmer A, Group 45, interview). Blame for environmental degradation was plainly felt keenly by this respondent, a sentiment which Whaley and Weatherhead (2015) suggest is widespread among farmers. Supportive interventions, as described by farmer A, are advocated by a range of researchers and commentators from Winter *et al.* (2017) to Rust *et al.* (2021). This quote raises several points: the negative impact of criticism and blame, outsiders ("people coming in") making assumptions about farming practice, the importance of demonstration and positive feedback. All these points are supported by research (Inman *et al.*, 2018; Lobley *et al.*, 2013; Rose *et al.*, 2019).

Discussion, which, as Cooreman *et al.* (2021) suggest, is one of the ways in which knowledge is renegotiated and made relevant in farmer groups, is a skill which groups have to develop, partly because it is underpinned by trust between members (Reed *et al.*, 2018). Facilitators' progress reports reflect this:

"*Group members know each other better and are more confident to share ideas, ask questions and contribute their knowledge*" (Progress report, Group 33)

Breyer *et al.* (2021) argue, specifically in relation to Facilitation Funds, that groups take up to 18 months to develop trust. One facilitator reported the process happening over a year:

"*At the launch event, although several members already knew each other there were also several who had not met before, and the meeting was fairly quiet with some people obviously shy to speak out and wanted to talk individually to [the facilitator] instead. By the final event of the year there was much more general conversation, before and after the events and over refreshments and members were more comfortable about asking questions and taking part"* (Progress report, Group 10).

The timeframe of group dynamics is likely to defy standardisation because of the uniqueness of the individuals involved and other local factors, such as any histories of conflict or pre-existence of the group. However, as Breyer *et al.* (2021) conclude, the relative brevity of Facilitation Fund schemes, which are only funded for three to five years, are a poor 'scalar fit' (Reed *et al.*, 2018) with both group development and participatory processes related to environmental action.

The standard format for off-farm sessions, as described by facilitators, is presentation of expert input, often by a speaker brought in for the event, followed by formal discussion, in the form of questions and answers or debate, but concluded with informal discussion between group members. Other research has found informal discussion is an important building block for social capital within the group (Jones *et al.*, 2020; Prager, 2022). Several facilitators noted that farmers stay chatting for several hours after the speaker has gone, which was observed directly in meetings for this research. One facilitator linked the informal, social element of the meeting to its content:

"*If the room empties the moment the speaker finishes, I think, oh dear, that didn't go well. If people are hanging around a good while after the speak has gone, I'm thinking ... that must have gone well because everyone seems quite happy*" (Facilitator, Group 28, interview).

This is supported by a farmer who found that learning continued in the informal, social setting:

"You pick up things after it's finished as much as you do in the meeting … because sometimes you don't get the chance to put your question …. you ask them after …. It also gives those the chance that will never speak in a meeting, a chance to have their say then" (Farmer B, Group 27, interview).

"*We learn a lot from just having a get-together … have a natter until midnight and throw around some ideas and well, you actually learn things without trying, don't you*?" (Farmer B, Group 28, interview).

Learning can also extend into the social network built by the group:

"*I now have more people I can ring to say, I know that you're keen on doing whatever it is, how are you doing it? And certainly farming is, I wouldn't say it's a lonely business, because I've got plenty of friends, but the decision process is quite a lonely process and getting good advice is not always easy*" (Farmer B, Group 34, interview).

Formal structures and processes in meetings may not suit all farmers, so informal space and time is necessary for the development of the social capital required to achieve collaboration (Westerink *et al.*, 2017) (Arnott *et al.*, 2021) (Breyer *et al.*, 2021).

7.7.3 Building locally relevant knowledge: trials and monitoring

Present English AES do not allow farmers to trial land management options before adopting them. Trials would allow farmers to experiment with, demonstrate and innovate land management practices outside of the fixed prescriptions demanded by Countryside Stewardship; to try scheme options before committing to binding contracts (Montes de Oca Munguia *et al.*, 2021); and to test out the local applicability and relevance of practices (Inman *et al.*, 2018). Trials are not proposed or advocated by the Facilitation Fund scheme but ten out of 18 groups' progress reports mention trials designed by the groups. These included experimenting with bioreactors, wild bird seed or wildflower plots and using different methods to address water run-off from farm tracks. Research suggests trials can investigate how actions to deliver environmental objectives can be adapted to local geography and farming practice (Alavoine-Morans and Girard, 2017) and find workable ways to apply the universal prescriptions of AES to the specificity of the area or farm (Bernues et al, 2016). One farmer expressed this as follows:

"S*ome of these ideas that are coming out of Whitehall [Defra], broadstroke, yes, you can see where they're coming from, but how you apply it across the country?"* (Farmer A, Group 19, interview).

Trials could be interpreted as an attempt to address what farmers feel to be the uncertain and (in their view) untested outcomes of AES universal prescriptions when applied to local conditions, an assertion which previous research supports (Hall and Pretty, 2008). It may also relate to many farmers' reported preferences for experiential peer-to-peer learning that is practical and concrete (Dwyer and Blackstock, 2007; Inman *et al.*, 2018). One farmer reported: "*What I am interested in is people trying to do different things and going, oh look this happened, and this is what I think, this is why I think it happened*" (Farmer B, Group 6, interview).

From the evidence gathered for this research, it does not appear that perceived uncertainties about AES land management actions (see section 6.4.2) are a subject for discussion between farmers and environmental/science organisations and policymakers. This area merits further research: firstly the perception of both farmers and other stakeholders of the certainty or uncertainty of land management practice generally and AES specifically, and secondly the scope of potential negotiation about land management practices between farmers and other stakeholders.

Demonstration farms, which feature field trials, are a relatively long-established tradition of agricultural research which have been developed by AHDB, the Game and Wildlife Conservation Trust and scientific institutions such as Rothamsted Research in relation to a range of farm practices. This evidence found that Facilitation Fund groups are developing their own informal networks of trials which could be linked to, and utilized within, the existing demonstration farm network to inform future practice. Further research is necessary to accurately record and gather information on Facilitation Fund trials and determine their effectiveness.

Alongside trials, 30 out of 48 Facilitation Fund application forms mentioned putting in place some kind of monitoring regime: to measure the success of the group and create a feedback loop for farmers, making their actions relevant and meaningful. Most farmers will have experience of production metrics of quantitative yields and financial return. They will be less familiar with environmental outcomes, which are frequently difficult to measure because they require specialist skills and equipment. Farm advisor visits or inspections generally measure proxies such as the suitable habitat available to birds and pollinators, rather than environmental outcomes such as species numbers or water quality. Countryside Stewardship does, within its prescriptions, provide 'indicators of success' which are environmental outcomes, but it does not provide support for measuring these. It is not a requirement of the Facilitation Fund scheme that groups put monitoring in place but it is significant that many of them have chosen to. Groups have, for instance, formed links with species recording groups to undertake surveys or with water companies to sponsor water quality measurement. The positive feedback loop created through was important to farmers because, in the words of one respondent:

> "*You've got to have days when you walk into a field and think, 'Wow this is working, this is how you want to see it'*" (Farmer B, Group 45, interview).

Lobley *et al.* (2013, p. 14) link this positive feedback loop to farmers' "locus of control"; farmers feel they can make a difference, which is demonstrated through feedback, which supports and encourages their further actions.

7.8 Institutional feedback loop: Facilitation Funds and Countryside Stewardship (AES)

Reed (2008) asserts that one of the most significant failures of participatory processes is that initiating organisations do not incorporate the results of participation, which Reed (2008) terms the institutionalisation of participation.

Through the Facilitation Funds scheme, Defra invites farmers to participate in a form of environmental delivery related to a specific AES (Countryside Stewardship). Participation in Countryside Stewardship Facilitation Funds (to give them their full title) is intended to deliver environmental outcomes, primarily by encouraging uptake and improving delivery of Countryside Stewardship. Actions for environmental delivery are not funded through the Facilitation Fund scheme because funding for these is assumed to come through Countryside Stewardship. (In contrast, large-scale environmental projects received some grant funding to deliver land management action, albeit alongside an expectation that AES would be utilized where possible. One of the key measures of success, determined by the Facilitation Fund scheme's monitoring and evaluation programme, is increased Countryside Stewardship uptake (ADAS *et al.*, 2018). There were difficulties assessing this metric because 40% of Facilitation Fund members' Countryside Stewardship schemes were in place before the groups' creation; however, uptake was found to have improved, particularly in relation to more complex options (Jones *et al.*, 2020).

It could be argued that the architects of the Facilitation Fund scheme assumed, by their emphasis on education, that the barriers to farmers' adoption of AES and environmental delivery is a failure of understanding. However, facilitators reported other barriers, including the construction of the AES itself and other exogenous, but related factors, such as the uncertainty of post-Brexit trade. Facilitators are required to report on whether any group members have submitted a Countryside Stewardship application in their quarterly reports. In response, several have detailed the barriers that AES present to farmer participation, focusing on the schemes' limitations and complexity:

"*The farmers in the group were interested in [Countryside Stewardship] agreements but due to the narrow nature of the targeting were not able to have the options [they wanted]"* (Progress report, Group 9).

"*Definite concern about the complexity of the [Woodland Grant] scheme*" (Progress report, Group 10).

Others illustrate the potential difficulties presented to farmers who are confronted by financial uncertainties of future markets and (what they feel to be) the funding deficiencies of AES.

> "*With each event I can sense the interest and commitment of the farmers growing, which is exciting but I have to temper this with … concerns over the gaps in funding when moving [between AES iterations] and the uncertainty arising from leaving the EU*" (Progress report, Group 19).

Jones *et al.* (2020)'s evaluation concurs with this finding. Based on their research on Facilitation Funds, Breyer *et al.* (2021) recommended streamlining the relevant AES and making it more flexible so that groups could adapt it to their local context.

The participation that farmers are offered within Facilitation Funds does not allow them to directly influence the construction or content of AES. Prager (2022) suggests this would be a positive possible direction for future policy and points to groups' recent participation in the tests and trials of elements of the nascent ELMS (England's future AES). Staff from Defra who have attended some group meetings asked group members for feedback, encouraging farmers to feel that "*people are listening at the other end of the debate"* (interview with farmer A, Group 19). However, there is a lack of transparency about the influence which Facilitation Fund groups can have on the existing and future AES, and no formal mechanism through which feedback can be channelled.

The Facilitation Fund scheme could offer an opportunity to address the limitations of AES which Pretty and Chambers (1994) argue are prescriptive, controlling and uniform, rendering them unworkable and unacceptable to diverse local needs and conditions. Facilitation Funds could provide a mechanism to decentralise AES, which Wynne-Jones (2017) argues is essential for environmental collaboration. Alternatively, groups could provide a forum for collective AES design, which can be more effective than collaborative environmental action, because it results in effective AES that galvanise individual action (Berthet *et al.*, 2016). There remains a danger, highlighted by Todori et al. (2017), that farmers are involved too far downstream in the AES creation process and therefore are presented with a scheme which they cannot influence and which may not suit their circumstances (Toderi *et al.*, 2017).

7.9 Conclusion

Facilitation Funds are a government-designed scheme, often delivered by third-party organisations. Participatory processes initiated by organisations such as this require particular attention because of

the power they can potentially exert within the process (Chilvers and Kearnes, 2020; Reed, 2008; Reed *et al.*, 2018). To mitigate and address potential power imbalances requires reflexivity. What power does the organisation hold and is it shared with participants (Chilvers and Kearnes, 2020)? Facilitation Funds, in common with the large-scale environmental projects discussed in the previous chapter, make claims for participation (Defra, 2021d) but do not necessarily make transparent the scope and limitations of the process which they control. This chapter has investigated several key themes of participation identified within the conceptual framework (see Figure 6).

The stated purpose of Facilitation Funds is to build collaboration or cooperation between farmers and encourage environmental knowledge exchange. These are, arguably, two distinct activities, the first of which requires cross-holding working (which is discussed in Chapter 8) and the second of which is a form of agricultural extension or knowledge exchange.

The emphasis on knowledge exchange assumes that a deficit of knowledge among farmers and landowners is a significant barrier to environmental delivery through adoption of sustainable farming practices – an assumption which is supported by previous research. However, other factors that influence farm practices such as resources, time and equipment are not addressed directly. The Facilitation Funds scheme could be argued to be an attempt to educate farmers into AES, an assertion which is supported, to some an extent, by the construction of the scheme. However, environmental knowledge exchange for farmers has not been a significant feature of large-scale environmental projects to date (see Chapter 6) and Facilitation Funds' contribution to building capacity present a positive step forward for environmental delivery. Knowledge exchange occurs both on farm and off farm in roughly equal proportion. As trust between group members develops, open discussion and debate begin to take place, sometimes resulting in innovative solutions.

Farmer learning appears to occur in formal and informal ways, which some facilitators recognise and cater for within group activities. Farmers particularly value informal and social aspects of knowledge-sharing events because this allows them, among other things, to develop contacts who they can learn from, and with, outside the event. This evidence is supported by the formal monitoring and evaluation reports of the Facilitation Fund scheme (Breyer *et al.*, 2021; Jones *et al.*, 2020).

However, there are some administrative issues that could limit the potential of Facilitation Funds. The administration of Facilitation Fund funding reportedly disempowers the recipients, the facilitators or facilitating organisations, because of its:

- Immutable rules which ignore the complexity of farming and the farm community, an example being the single named member per farm/SBI;

- Demands for detailed evidence of both activity and expenditure, which arguably demonstrate lack of trust; and

- Impersonal organisational interface.

The construction of the scheme's administration appears to present both a poor example of, and a barrier to, collaboration.

Facilitation Funds also limit farmers' participation in the development of the groups' aims, which are pre-determined and linked to Countryside Stewardship priorities. This leaves little opportunity for aims to be developed around farmers' interests (as was undertaken by the farmer group-led project studied in Chapter 6). This issue may, however, be overstated. Farmers may not find the relatively abstract way in which aims are framed in groups' applications (or Countryside Stewardship priority statements) relevant but they may, through the groups' activities, develop a shared understanding of their groups' purpose, informed by their experience and knowledge of the locality.

Farmers exert influence and control over aspects of their groups' work through governance. Governance arrangements within Facilitation Fund groups appear to be adapted to the requirements of members, facilitators and the circumstances of the group. The active involvement of farmers in the planning and delivery of group activities reportedly encourages farmer participation within the group. However, the representativeness of influential members, and their influence on group governance, requires further investigation because it may replicate socio-economic power relationships in wider society, excluding some members of the group and indeed the wider farming community.

The Facilitation Funds scheme is technically part of, and related to, Countryside Stewardship, the current AES in England, and one of the aspirations for the scheme is that it increases uptake of the AES and improves the quality of the AES delivery. There is, however, no formal mechanism for Facilitation Fund participants to influence or change the structure of AES. Through the Facilitation Fund scheme, facilitators have articulated the limitations and difficulties an AES presents. If utilised, Facilitation Funds could present an empowering opportunity for Defra to incorporate farmer participation into ELMs. Without this feedback mechanism, Facilitation Funds do not appear to offer the delegated power and partnership, which would demarcate deeper participation as suggested within Arnstein's (1969) ladder, but instead are focused on informing, or even perhaps placating/reconciling farmers to AES (see Figure 1).

Innovations introduced by groups include:

- Trials, which enable groups to develop and demonstrate their own expertise in environmental delivery, making it relevant to local practices and circumstances;

- Environmental monitoring of the impact of their work, which provides feedback and encouragement.

Both of these could contribute to AES development. Trials particularly could be harnessed to inform AES good practice and local applicability, especially if linked to a wider demonstration network.

8. The affiliation, skills and experience of the facilitator

8.1 Introduction

As outlined in the previous chapter, organisations shape participation through the processes they initiate. The Facilitation Fund scheme affords facilitators a central role. The scheme exclusively funds facilitators, or facilitating organisations, for their services; they are the focus for the delivery and formal administrative requirements of the scheme. The skills and knowledge of facilitators are an important criterion assessed during the Facilitation Fund application process, suggesting it is regarded as a component which could contribute to group success. Research undertaken during Facilitation Funds' formal monitoring and evaluation found facilitators' role is central to the success of the group and that they are key for maintaining motivation (Jones *et al.*, 2020), although this was self-reported by facilitators.

There are a range of views on what the role of facilitator within large-scale environmental delivery. Reed (2008) argues for an impartial facilitator. Thompson *et al.* (2015) advocates that a trusted advisor, already known to the farming community, is necessary to ensure farmer participation in environmental farmer groups. Others suggest a neutral bridging organisation or institution is required to manage the complex process of consensus-building and collaboration between different types of knowledge and stakeholders (Clements *et al.*, 2021; Häfner and Piorr, 2021). Analysis of the facilitator's role in Land Care farming groups in Australia found that facilitators' background, affiliation, and experience mediated any potential idealised role they could play in rebalancing power relationships between farmers and government (Wilson, 2004).

Research suggests that a facilitator's approach to the group, and what informs it, is likely to have a strong influence on how farmers participate within the group. This chapter will investigate the affiliation, skills and experience of facilitators in Facilitation Fund groups and identify the approaches that they take to important elements within participation, including knowledge-sharing, the mode of engagement (collaborative or cooperative) and inclusivity.

8.2 Method

An overview of the methodology used to gather and analyse data for this chapter is described in Chapter 4. This section provides details about the data and the analysis that contributed to the results in this chapter.

Data was gathered from a range of sources:

- Primary sources: interviews with facilitators and farmers and observations of meetings which took place in the main study and pilot (Table 11);
- Secondary sources: Themes related to facilitator experience and skills were drawn from application forms. The analysis is summarised in Table 34 (in Appendix 2). The method by which these themes were identified and recorded is described in notes which accompany the table. Information is also drawn from progress reports (summarised in Table 35).

Facilitators were categorised into two groups using information offered in the application form: organisation-affiliated facilitators and independent facilitators. The categorisation process is described within the method chapter in section 5.4.3.

Group size of the 2015 and 2016 cohorts was recorded and categorised into 1–20 members, 21–30 members, 31–40 members and 40-plus members. This was undertaken for group sizes at 2015/16 and in 2022. The size categories were subdivided into organisation-affiliated and independent facilitated groups.

A limitation of the facilitator and farmer interviews was that the sample did not reflect the proportion of organisation-affiliated to independent advisors (as detailed in section 5.4.3 of the method chapter). The secondary data addressed this limitation (as described in section 5.4.4.2). Applications forms were used from the complete 2015 and 2016 cohorts and the sample of progress reports reflects the proportion of affiliated and independent advisors, as described in more detail in the method chapter (see section 5.2.2).

The analysis of farmer participation in events, and the statistical analysis applied to it, is detailed in section 5.4.4.4. Briefly, the attendance of farmer members at Facilitation Fund events was recorded using the event registers for a sample of 18 groups. The use of attendance at events as a proxy for farmer participation is discussed in para 9.3. The pattern of attendance was analysed (and is described more fully in Chapter 9). To compare differing numbers of members and events across the groups, the number of members attending a percentile of events was recorded. A test for association

(chi-squared) was conducted to assess if facilitator affiliation was associated with the pattern of farmer attendance. Similarly, group size was also tested for association with pattern of farmer attendance.

8.3 Affiliation

Facilitators from the groups established in 2015 and 2016 were categorised into two groups, organisation-affiliated and independent, using criteria described in the method. The findings are represented in Figure 10 below. These results conflict, to some extent, with Jones *et al.* (2020)' analysis of a sample of 67 groups (which included Facilitation Fund applications specifically aimed at flood-hit geographical areas) which found that 42% of groups were organisation-affiliated, 22% of groups were advisor-led, 15% were farmer-led and 27% were categorised as other. An explanation of the difference between these two findings could be attributed to the sample, but is more likely due to potential differences between facilitators' self-reporting (Jones *et al.*, 2020) and the determination of categorisation through secondary sources undertaken in this research. The categorisation undertaken for this research could find no evidence of groups that were solely farmer-led, which is supported by Prager (2022). The complexity of the farm advisor network may have confused the analysis done by Jones *et al.* (2020); for instance it is unclear if they categorise the Farm Wildlife Advisor Group (FWAG) as an organisation. Both analyses suggest that facilitators employed by organisations play a significant role in Facilitation Funds, facilitating approximately 40% of groups in the scheme.

The categorisation results are markedly different from the analysis undertaken on large-scale environmental projects for this research, where the majority (over 99%) could be described as organisation-affiliated. The presence of independent advisors within Facilitation Funds is a significant departure from the previous history of large-scale environmental projects.

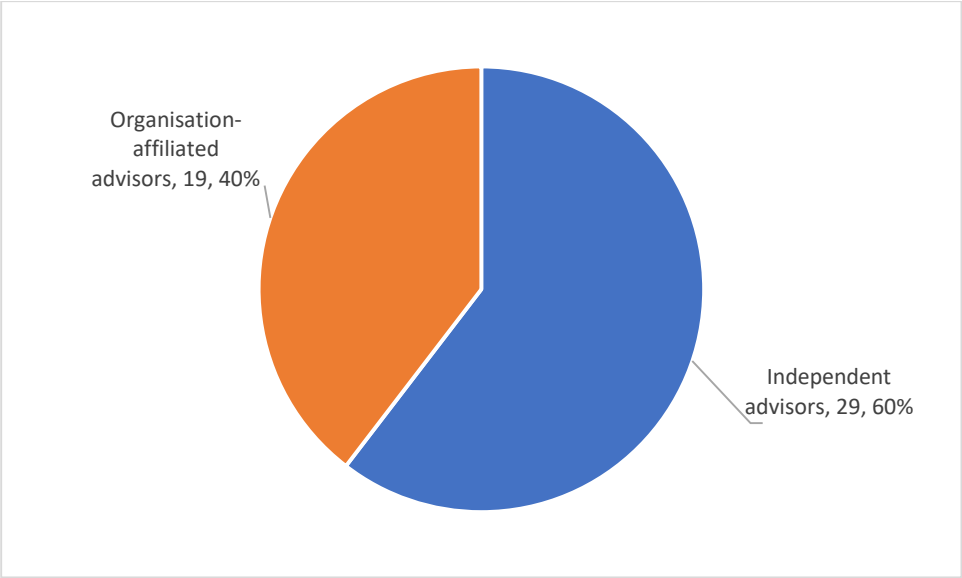


Figure 10 Organisation-affiliated advisors and independent advisors acting as facilitators for the 2015 and 2016 Facilitation Fund cohorts. *N*=48

Looking in more depth at the type of organisation involved in Facilitation Funds, NGOs are prominent: advisors employed by an NGO comprised 30% of the facilitators of the 2015 and 2016 groups (see Table 21). This is broadly equivalent to the analysis of large-scale environmental projects (see Table 13), where 40.3% of projects were led by NGOs. Local and central government led 4.7% of large-scale environmental projects and 2% of Facilitation Funds. The marked difference is between arms-length bodies, which lead 46.6% of large-scale environmental projects but only 6% of Facilitation Funds. The relationship between arms-length bodies and Facilitation Funds is likely to be more complex than this quantitative analysis suggests. Arms-length bodies such as the South Downs National Park have devoted significant resources to supporting Facilitation Funds but have not necessarily undertaken facilitation of the groups (South Downs National Park, 2022).

Table 21 Organisation-affiliated facilitators categorised by type of organisation

Organisation category	**Count**	**Percentage of organisation-affiliated facilitators?**	**Percentage of all facilitators?**
Arms-length body	3	16%	6%
Local or central government	1	5%	2%
Non-governmental organisation	15	79%	31%
Total	19	100%	39%

N=48

NGOs included a range of environmental charities and were similar to those associated with large-scale environmental projects (see Table 5, Table 14 and Table 21), making it possible to conclude that

these organisations continue to play a significant role across large-scale environmental conservation and the Facilitation Fund.

Table 22 Non-governmental organisation facilitators categorised by type of organisation

Organisation category	Count	Percentage of organisation-affiliated facilitators?	Percentage of all facilitators?
Environmental charity (other than those listed below)	2	13%	4%
The Rivers Trust	4	27%	8%
Royal Society for the Protection of Birds	2	13%	4%
Wildlife Trusts	7	47%	15%
Total	15	100%	31%

* *N*= 15

8.3.1 Association between facilitator affiliation and farmer participation

Using the attendance at events as a measure of farmer participation, a comparison was made between the pattern of farmer attendance in organisation-affiliated groups and those with independent advisors. The results are shown in

Table 23 which records the observed and expected frequency of pattern of attendance, with the accompanying chi-squared result. The null hypothesis for this statistical test was that there was no difference in pattern of attendance between categories of groups. *P* = 0 so this was disproved and the converse is true. Comparison between the observed and expected frequencies indicates that:

- The percentage of members attending no meetings is more than expected in organisation led groups (observed 21%, expected 17) and marginally less in independent-led groups (17 observed, 19 expected);
- Fewer than expected members attended 26–50% of events in organisation-affiliated groups (observed 7%, expected 13%), while more members than expected from independent groups attended the same category (observed 19%, expected 13%);
- Group members attending between 1 and 50% of events is less than expected in organisation led groups (observed 68%, expected 75%) while in independent groups more than expected attend (observed 82% and expected 75%)
- More than expected members attended 50–100% of events in organisation-affiliated groups (observed 12%, expected 6%), while fewer members than expected of independent groups

attended the same category (observed 1%, expected 6%). However the percentage of members attending over 50% of events across both categories is relatively low.

This suggests that organisation-led groups have a more polarised membership with a minority of keen members while independent groups more members attend between a quarter and a half of events. Organisation-led group may be reliant on a small number of keen members with less even engagement across the group. The more even engagement of the independent-led groups may be a result of the insight the facilitator has into group members interests and/or the trust between them and the group and within the group previously mentioned.

There is a statistical significance in the pattern of farmer attendance between the categories of groups which indicates that affiliation is a factor in farmer attendance. The reasons farmers offer for attendance at some events and not at others is explored in more detail in Chapter 9.

There are several factors that could influence the potential difference in farmer attendance at events within organisation-affiliated groups and independent facilitator groups, including: the type of events, the approach taken within events and potential differences in farmer members. The two factors considered within this research are the size of the group and the experience of the facilitator.

Table 23 Observed and expected frequency percentiles of members attending percentiles of events comparing organisation-affiliated groups and independent groups, with accompanying chi-squared test (below)

Observed frequency				**Expected frequency**		
Engagement type	**Organisation-affiliated facilitators (%)**	**Independent facilitators (%)**		**Engagement type**	**Organisation-affiliated facilitators (%)**	**Independent facilitators (%)**
Members attending no events	21	17		Members attending no events	19	19
Members attending 1-25% of events	61	63		Members attending 1-25% of events	62	62
Members attending 26-50% of events	7	19		Members attending 26-50% of events	13	13
Members attending 51-100% of events	12	1		Members attending 51-100% of events	6	6

Number of groups used for sample = 12, including 4 organisation-affiliated groups and 8 independent advisor groups.
Red highlight indicates where the expected frequency contrasts with the observed frequency.

Chi- squared test result.
Pearson P-Value = 0
Likelihood ratio = 0

People who act as facilitators for Facilitation Fund groups are not necessarily trained in facilitation as a discrete skill (see section 3.5.1) but are generally drawn from the ranks of existing farm advisors. Previous research has attempted to position farm advisors in relation to the farmers (Agricultural Industries Confederation, 2013) or other advisors (Klerkx and Proctor, 2013). Organisation affiliation has been acknowledged as a factor in the development of farmer trust (Inman *et al.*, 2018; Sutherland *et al.*, 2013) potentially because of a history of conflict (Whaley and Weatherhead, 2015). This research adopts an alternative approach and assesses the position of the facilitator in relation to the various roles they hold (see Table 24).

A fundamental difference between organisation-affiliated facilitators and independent advisors is that the former are recruited by an organisation and therefore serve the organisation's aims as well as that of the Facilitation Fund and the group. They are not neutral players but carry an agenda, as Wilson (2004) describes in relation to Land Care advisors in Australia (who are government-appointed). The influence and impact of organisations, particularly NGOs, is seldom investigated within research about environmental projects or AES. The position that these organisations hold as an intermediary body is significant because their organisational aims, structures and processes are as likely to have an impact on participation as the overarching institutional framework discussed in the previous chapter. As Chilvers and Kearnes (2020) argue, this positionality can be mitigated if it is made transparent and is open to negotiation. There is no evidence that this is undertaken within Facilitation Fund groups from the secondary sources assessed. This topic would benefit from more detailed investigation, which was not possible within the scope of this research: for instance, how do facilitators (and farm advisors) employed by organisations negotiate the multiple requirements made of them and how does affiliation influence the operation of the group? As mentioned in the previous chapter, organisation-affiliated groups were more likely to have aims aligned with organisational aims, which may drive important components of groups' purpose.

How do farmers view these organisations? Whaley and Weatherhead (2015) highlight a history of conflict between farmers and NGOs in particular, while this research (as described in Chapter 6) suggests that the relationship may be more complex. Further research is needed on the impact that organisation-affiliation has on group membership. Do some farmers avoid groups facilitated by organisations such as NGOs? Are they more likely to attract pro-environmental farmers? Even where farmer are members it may account for the polarisation of event attendance illustrated in the statistical analysis because, as Nye (2018)notes, organisationally run groups are less aligned to farmers' interests and do not necessarily work in a way that farmers find acceptable.

Table 24 Summary of the significance of facilitator affiliation

Organisation-affiliated facilitators	Independent facilitators
Serve Facilitation Fund scheme, for example ensuring scheme rules are met and that the group meets the schemes requirements	
Serve the group (see section 7.6 on governance)	
Serve their organisation	Likely to also work as a farm advisor providing one-to-one advice to farmers, including in relation to AES

Independent advisors are not neutral players either, however. Outside of their work for the group and Facilitation Fund, independent advisors are funded by farmers. Hejnowicz *et al.* (2016)'s research described the mediating position which independent advisors report that they occupy, negotiating the requirements of farmers, AES and environmental organisations. This skill set would seem an ideal basis for Facilitation Fund facilitators, but independent advisors also must manage a delicate balance between their relationship with farmers as a one-to-one farm advisor and their role as a group facilitator, which one facilitator expressed as follows:

"*I had to be careful, I have my facilitator hat on but then as an independent I then went on and put schemes together"* (Facilitator, Group 45, interview).

Another independent facilitator pointed out that they could ensure that AES schemes were aligned and deliver cross-holding efforts through their one-to-one advice work. However, independent facilitators are unlikely to provide advice for all farmers within a group, which could create preferential relationships. They also need to ensure ongoing advice relationships with farmers, who fund their farm consultancy work, which could prevent them from challenging power relationships within the group (discussed in section 8.10).

Further research is required into farmers' views of facilitator, and potentially farm advisor, affiliation. During the pilot study interviews, five farmers were asked to think about facilitators and their skills and knowledge. This is discussed further in section 8.5. The results of the pilot study suggested that farmers avoided talking about the facilitation of groups in the abstract; they focused on their specific facilitator and were supportive and, in some cases, defensive, of them.

8.4 Group size related to affiliation and farmer participation

The Facilitation Funds scheme defines the minimum and maximum size of a group (see section 7.3). Groups tend to grow in size over time. Breyer *et al.* (2021) found that a sample of 25 groups had increased their memberships by an average of 40% over three years. Analysis undertaken on the 2015 and 2016 cohorts confirms that groups do increase, in some cases significantly.

Table 25 Percentage of 48 groups categorised by group sizes (0-20, 21-30, 31-40, 41+) in 2016 and 2022 and by facilitator type (organisation-affiliated or independent)

Date	2016	2022	2016	2022	2016	2022	2016	2022
Group size (count of members)	0-20	0-20	21-30	21-30	31-40	31-40	41+	41+
Independent facilitator	44%	27%	8%	10%	6%	10%	0%	10%
Organisation-affiliated facilitator	27%	10%	6%	6%	0%	10%	8%	15%

N = 48

There appears to be a relationship between the facilitator's affiliation and group size which is illustrated in Figure 11, showing group size in 2016, and Figure 12, showing group size in 2022. Bearing in mind that the overall ratio of organisation-affiliated groups to independent groups is approximately 40% to 60%, organisation-affiliated groups were disproportionately larger in both 2016 and 2022. In 2016 only organisation-affiliated groups had over 41 members (4 of 19 groups).

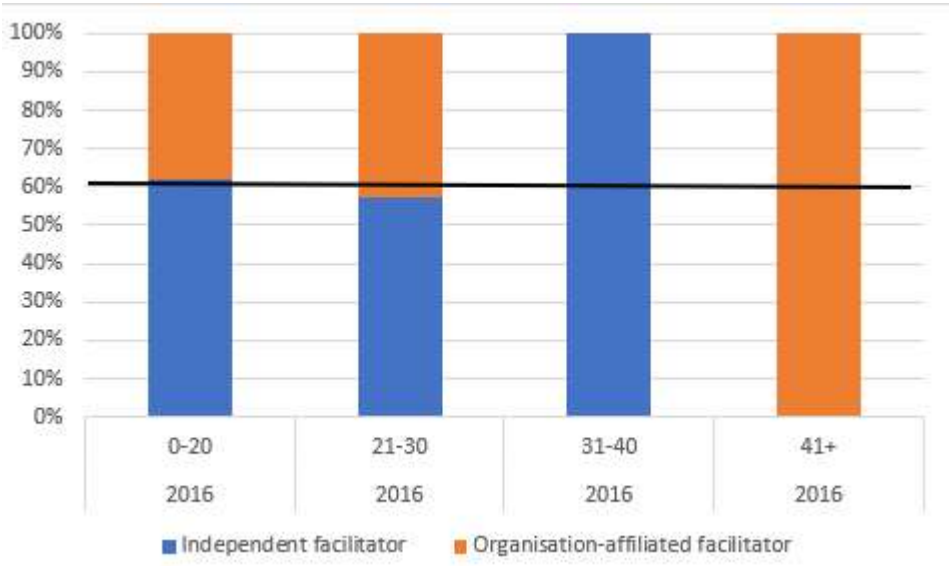


Figure 11 Comparison of group sizes in 2016 categorised by facilitator type (organisation-affiliated or independent) and by group size (0-20, 21-30, 31-40, 41+). *n = 48*. Ratio of independent facilitation to organisation-affiliated facilitator (60/40%) groups overall indicated by a black line.

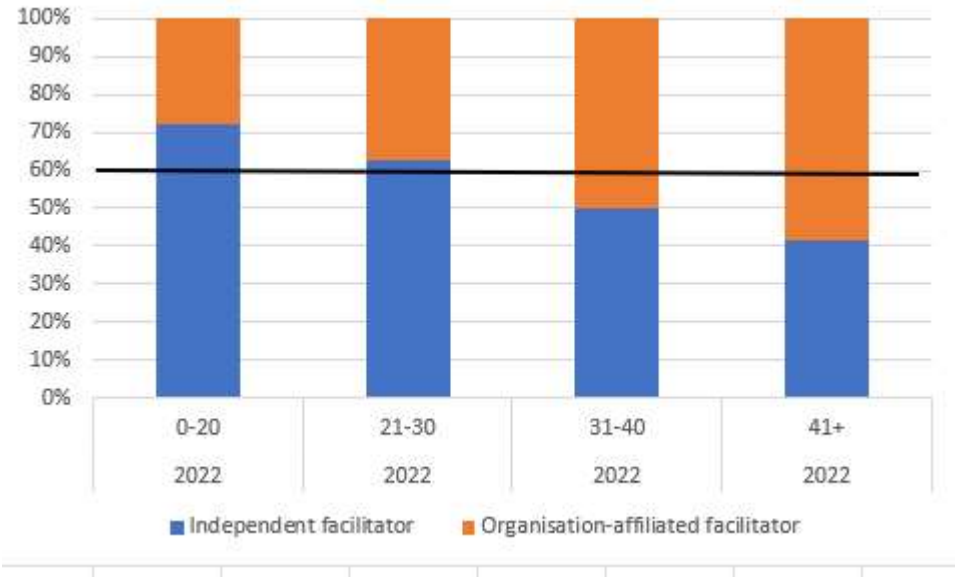


Figure 12 Comparison of group sizes in 2022 categorised by facilitator type (organisation-affiliated or independent) and by group size (0-20, 21-30, 31-40, 41+). *n = 48*. Ratio of independent facilitation to organisation-affiliated facilitator (60/40%) groups overall indicated by a black line.

Using attendance at events as a measure of farmer participation, a statistical test for association was made between the pattern of farmer attendance in categories of group sizes. The results are shown in Table 26 which records the observed and expected frequency, or pattern of attendance, with the accompanying chi-squared result. The null hypothesis for this statistical test was that there was no difference in pattern of attendance between size categories of groups. P = 0 so this was disproved so the converse is true. Comparison between the observed and expected frequencies indicates that:

- In smaller groups of 0-20 member groups fewer than expected attended no event (observed 3%, expected, 19%). Significantly more members than expected 26-100% of events (observed 66%, expected, 19%).

- The largest groups, of 41 plus members slightly more than expected members attending no events (observed 25%, expected 19%). Significantly less members than expected attended between 26-100% of events (observed 8%, expected, 19%).

The other two categories of group, 21-30 members and 31-40 members demonstrate gradations of these results leading to the conclusion that, in general, smaller group members are more likely to attend events and that they are more likely to attend over a quarter of events.

Table 26 Observed and expected percentage of members attending percentiles of events comparing four categories of size of group, 0-20 members, 21-30 members, 31-40 members and 41 plus members. Group membership recorded as of 2022

Observed frequency						Expected frequency				
Engagement type	**0-20 (%)**	**21-30 (%)**	**31-40 (%)**	**41 + (%)**		**Engagement type**	**0-20 (%)**	**21-30 (%)**	**31-40 (%)**	**41 + (%)**
Members attending no events	3	14	18	25		Members attending no events	19	19	19	19
Members attending between 1-25% of events	31	61	65	67		Members attending between 1-25% of events	62	62	62	62
Members attending between 26-100% of events	66	26	17	8		Members attending between 26-100% of events	19	19	19	19

Number of groups used for sample = 0-20 members = 2 groups, 21-30 = 2 groups, 31-40 = 4 groups, 40 plus groups = 4 groups
Red highlight indicates where the expected frequency contrasts with the observed frequency.

Chi- squared test result.
Pearson P-Value = 0
Likelihood ratio = 0

Existing research on group size supports the suggestion that smaller farmer groups appear to encourage greater engagement and participation from members. Wynne-Jones *et al.* (2020) suggested that the limited size of the Pontbren group (of approximately 10) helped promote collaboration between the participants. Stallman (2011) proposed groups of 25 which is supported by Pretty *et al.* (2020). Nye (2018) found that farmers and facilitators reported less consistent attendance in larger farmer groups which were generally organisation led.

Smaller groups make farmers' participation visible, they will be noticed if not present, but also may provide a more intimate forum which some farmers feel more comfortable with. Trust can be developed and discussion is easier allowing the development of social capital (Pretty *et al.*, 2020). As one farmer put it:

> *'You're not overloaded with people so everybody talks and they talk openly as well, you tell them your problems"* (Farmer B, Group 27, interview)

Another farmer (Farmer B, Group 45, interview) reported that the group was deliberately kept limited to a smaller group of farmers, rather allowed a wider, more diverse members of landowners like community groups, so that the group could focus on environmental delivery on farms. Small groups may also have disadvantages however, one farmer notes that "*if you have a small group and you haven't got very good attendance, it soon falls away*" (Farmer A, Group 11, interview). Small groups would therefore also need to be motivated and able to attend in order to be effective. Although smaller groups, where individuals are more visible, may encourage greater accountability, if attendance is generally poor, individual's motivation for attending is undermined.

The tendency of groups to increase in size over time may be, in part, because they are being inclusive.

> "*Members are inviting neighbours to come along to events leading to new members joining*." (Progress report, Group 33)

Returning to the suggestion, underpinned by evidence, that organisation-affiliated group are likely to be larger, the construction of funding within the scheme may contribute. The difference in annual income for a group of 20 members and a group of 40 is £10K which is a significant sum in environmental delivery. Organisations involved in Facilitation Funds may be tempted to increase membership to ensure that, for instance, a full-time salaried member of staff can be funded by the scheme. Independent advisors are more likely to have other commercial advice work which will

complement that of the Facilitation Fund so are not as dependent financially. So, a potential unintended consequence of the construction of Facilitation Fund Scheme funding, which is per member up to 50 members, may be that it encourages facilitators and facilitating organisations to increase group size when smaller groups may be more effective. Facilitators provided evidence to support this. They reported a phenomenon of 'ghost members', members who have signed up to the group but never attend (analysis in chapter 9 illustrates this). When facilitators were questioned about the nature of farmer participation. "*Some of them were sort of bullied into signing up in the first place. . . and they have never come"* (Facilitator, Group 34, interview), which was echoed by another facilitator who reported that members were signed up because they were "*anxious to get the numbers*." (Facilitator, Group 6, interview). Other research has found that farmers were unaware that they were members of the group (Prager, 2022). As previously argued, in relation to the funding of large-scale environmental projects, how funding is constructed, its processes and the impacts this has both on delivery and participation appears to be a significant but under researched area which demands greater scrutiny and attention.

8.5 Facilitator experience and skills

Analysis of experience of facilitator skills demonstrates a marked difference between organisation and affiliated advisors. Most facilitators across both categories had undertaken one-to-one advice and had delivered environmental projects which would have involved a variety of stakeholders which confirms previous research (Jones *et al.*, 2020; Prager, 2022). There are some notable differences in experience and skills across the categories illustrated in Figure 13 (organisation-affiliated facilitators) and Figure 14 (independent facilitators).

Independent facilitators were more likely to have experience of farm production advice, supported by formal training and have practical hands-on experience of farming than organisation-affiliated advisors (see Figure 14). Knowledge of farming, and of the farm community through their one-to-one advice could enable them to more readily build trust with farmers, and make it easier for them to understand and negotiate farmers potential barriers to environmental delivery. More research is required to confirm or negate this. The scheme focuses on the facilitators' environmental skills and knowledge rather than their understanding of farming which, by implication, suggests that farmer understanding is the significant barrier to environmental land management. This assumption is addressed in the following chapter.

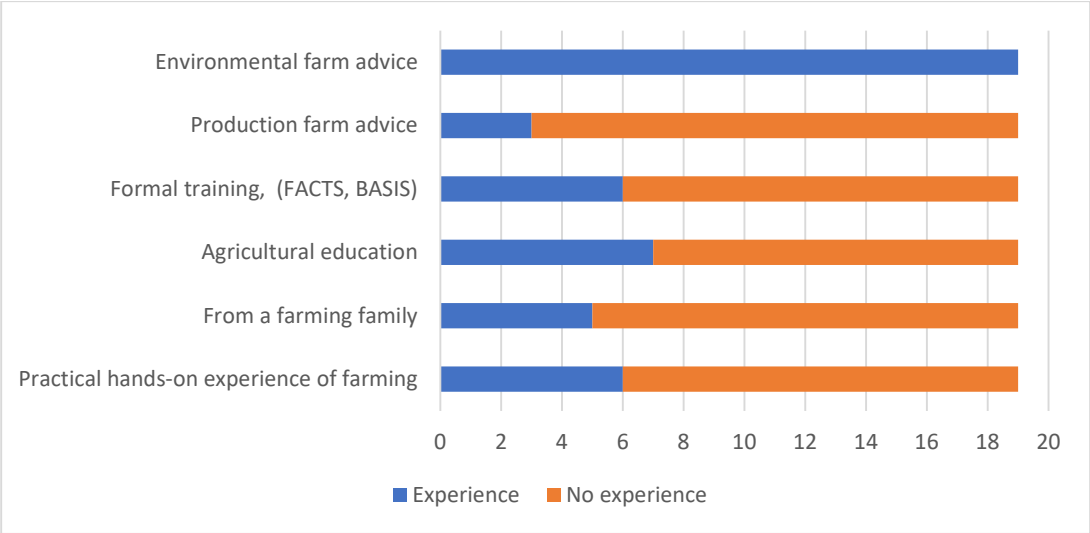


Figure 13 Experience and skills of organisation-affiliated facilitators (n = 19)

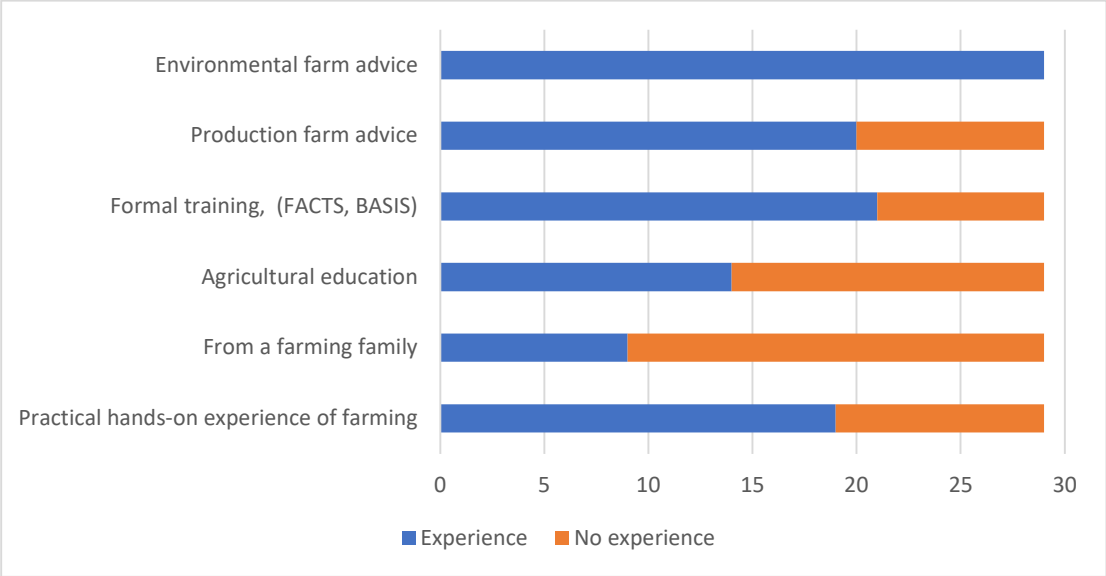


Figure 14 Experience and skills of independent facilitators (n=29)

Facilitation as a skill, as described in chapter 3 section 3.5.1, is not required for the Facilitation Fund scheme application despite evidence suggesting otherwise (Rose *et al.*, 2018). Only six of the 48 advisors had either formal training or gave evidence of facilitation skills. Facilitation training might encourage self-reflection on positionality (Hunter *et al.*, 2020). The same applies to extension or knowledge exchange, few advisors offered experience of providing training or undertaking knowledge-sharing activities. Again, the Facilitation Fund scheme demands evidence that facilitators have knowledge of environmental management but does not require or define the skills necessary to share knowledge, promote group cohesion or manage the collaborative process. Dooley (2020) argues that these skills are essential to promote self reflexivity in farmer groups, an essential stage necessary to question traditional farming practice. During interviews facilitators acknowledged that their lack of facilitating skills were an issue; some mentioned learning 'as they went along' or from each other.

As mentioned in section 8.3.1, during the pilot study, when five farmers were asked what skills and qualities were needed they tended to focus on facilitator's history (as a farm advisor working for farmers in the area), their understanding of farming and of the local area, the facilitator "*matches the landscape*" as one farmer put it, (Farmer A, Group 19, interview). They also need soft skills such as interpersonal skills, communication and enthusiasm, summarised by one farmer as "*someone whose chemistry is good, who is intelligent and who is a good communicator*"" (Farmer B, Group 19, interview). Farmers interviewed however, tended to describe what they valued in their own facilitator and attempts to probe this further, for instance by asking what the skills and knowledge the ideal facilitator should have, where generally approached warily by farmers who clearly valued their facilitator and did not wish to suggest anything which might be viewed as potential criticism.

Sutherland *et al.* (2013) notes that many farm advisors have no formal training and qualifications. The cohort of facilitators studied during this research demonstrated a significant range of skills and experience and (in interview) had developed important insights in how their group operated. Overall, however, within the Facilitation Fund scheme, facilitators' role seems to be poorly defined. They are required to be experts, trainers and facilitators (in the conventional sense of the term) and are drawn from a complex and diverse farm advice landscape where there are few recognised standard skills and knowledge requirements. Better definition of what skills the facilitation role requires, and where necessary, training in how to achieve it, might build confidence and ability and training has been suggested to achieve this (Hall, 2019).

8.5.1 Relationship with farmers: building trust

Previous Facilitation Fund research has found that the facilitator as an individual is important for developing trust in the group (Jones *et al.*, 2020; Prager, 2022) and that trust takes time to develop; a finding confirmed here.

> "*It takes a long time to develop that trust, that relationship, and work it with the group dynamic*" (Facilitator, Group 11, interview)

> "*I was lucky because . . . I started this job in 2002 so I'd worked with some of them for a number of years, so they really knew me and were relaxed in my company."* (Facilitator, Group 10, interview)

Many advisors had worked with the farmers in their group before on a one-to-one basis therefore had a previous relationship to build on. Breyer *et al.* (2021) reports that 88%, of the sample of 25 facilitators, knew the farmers before they started the group. The effective delivery of farm advice has been found to be influenced by trust which develops over time (Sutherland *et al.*, 2013). Group facilitation may have the same requirements as farm advice, although it could be argued to be a markedly different process.

Independent advisors, who have developed one-to-one relationships with farmers through their advice work, may be more likely to be known to the farmers within their group. However, as many organisations report on application forms, previous farmer-related projects, which would gain them similar contacts, this cannot be assumed and would need further research. The significant difference between organisation-affiliated groups and independent facilitators is that the group is attached to an organisation rather than an individual named person. A potential consequence of this may be that, in some organisation- affiliated groups, the named facilitator changed several times over the course of the scheme (noted in the progress reports). This mirrors the advisor turnover noted in large-scale environmental projects as detailed in Chapter 6. Other research has found that facilitator turnover impacts the groups' social capital (Prager, 2022). Facilitator turnover, the reasons for it, whether is it more prevalent in organisation-led groups, and its consequences, would merit further attention.

Farmers suggested that effective facilitators had a previous relationship and, perhaps equally importantly, understood farming were "*embraced by farmers because (they) have an understanding of how it all fits together,"* (Farmer A, Group 45, interview. They also had an understanding of the

local area and community "*the history of how things are*," (Farmer A, Group 19, interview). This would suggest that independent advisors are at an advantage in several respects: they are more likely to have understanding, skills and experience of farming (as demonstrated in section 8.5), more likely to already have established relationships with some farmers in the group and, through this, have developed an understanding of the local farming community and area. This can have negative consequences however, if the facilitator, who also acts as a farm advisor to some farmers within the group, is seen as biased towards those members. To illustrate this point, one independent facilitator gave an example where their relationship as an advisor to one farmer, a landlord, had a potential impact on their relationship with other farmers, who were tenants, in the group:

> "*I'm doing quite a lot of work for the ((landlord)) at the same time as trying to work with the tenants, I'm on a bit of a tightrope walk there. . . . I've had to work really hard at gaining their trust, and making it crystal clear that what comes to me stays with me, it doesn't go straight back to the landlord."* (Facilitator, Group 11, interview)

The weakness of groups' attachment to individual facilitators is that they are dependent on the continued presence of one individual creating potential dangers around succession and continuity. One independent advisor pointed this issue out and suggested two advisors should work alongside each other in each group to ensure continuity if one left.

Lastly, although independent advisors fulfil the frequently cited status of the 'trusted advisor' (Thompson *et al.*, 2015) they exist within a competitive market which can potentially act against collaboration between farmers and between advisors (Leventon *et al.*, 2017). Their role as a facilitator could give them an unfair advantage over other potential farm advisors, giving them visibility and a powerful role (through the counter signatory of Countryside Stewardship agreements).

8.6 Knowledge and knowledge exchange

Despite being required to demonstrate environmental skills and knowledge through the application process, few facilitators position themselves as experts. Facilitators frequently bought in expert input for specific events, usually in the form of speakers, and this was seen as an important draw for farmers:

"*We usually get someone in. . . we are learning from them and the landowners are learning from them as well*." (Facilitators, Group 27, interview)

More experienced facilitators, those that had a longer track record of working with farmers usually as an advisor, were more likely to mention peer-to-peer learning.

"They've learnt a lot from the training provider. But also they do come away, I think, and learn a lot from each other." (Facilitator, Group 34, interview)

As previously argued, England lacks an established history of environmental farm extension and most facilitators did not have formal training in extension/education delivery. Although many facilitators have a depth of knowledge and skills they seldom undertook training, instead taking on an organising and enabling role as described by Westerink *et al.* (2017) in relation to collaborative AES in the Netherlands. As described in the previous section, few facilitators had formal training in how to deliver training. Some facilitators demonstrated a complex understanding of the development of farmer skills and knowledge and how it developed over time:

"*I* made some very clear decisions early on to run the sorts of workshops that are most directly relevant to them. . . cover cropping, herbal leys, soil health, changing of crop rotation, . . things that are more within their comfort zone. . . If I'd said to them initially, oh, we're going to do a bird ID day, they'd have laughed at me. " (Facilitator, Group 11, interview)

"*The majority of them don't really realise that . . . you can see their attitude changing, their perspective changing, their knowledge growing, and therefore you can take that forward and give them things that previously wouldn't have interested them*" (Facilitator, Group 11, interview)

This approach meets Cook *et al.* (2021)'s criteria for participatory extension, where knowledge is created through a two way dialogue between facilitator and farmers. The above quote demonstrates a learning process, planned by the facilitator, which acknowledges farmers' present knowledge and develops training around extending this, rather than imposing an 'off the shelf' training programme integrating self-discovery and reflection as advocated by Dooley (2020).

Other facilitators consciously attempting to combine discussions and training of environmental management with productive farming (see section 7.7)

"*It also improved the reputation of the group as a forum where members can consider agronomic and practical advances. It is not just seen as an environmental pressure group but also as a resource that members can benefit from*." (Progress report, Group 6)

Interestingly this quote demonstrates the farmers derive benefit from information about productive farming while environmental concerns are seen as an external pressure inward onto farming.

"*We are now getting good discussion between group members about the management of farm features and agri-environment options as well as valuable conversations on some of the environmental problems of farming itself such as weed control, rotations and use of problem chemicals*." (Progress report, Group 10)

Both of these groups had independent facilitators. More research is required to test whether independent facilitator groups are more likely to take this approach and the potential impact of the approach on participation.

The limitations of the qualitative interview sample (see section 8.2) did not allow for comparative analysis of approaches to knowledge sharing between organisation-affiliations and independent facilitators. Facilitators with an in-depth knowledge of farming and farmers are more likely to be able to appreciate farmers' starting points in the learning process and work with them in the participatory dialogue described by Cook *et al.* (2021). Events run by some organisation-affiliated groups repeated the same training, sometimes annually, suggesting that learning needs were driven by the prescription of aims, rather than being based around the development of the group. However, to confirm this, more detailed analysis of the events provided by organisation affiliated groups and independent groups would be required. Arguably the organisational constraints (as described in Chapter 7) which, for instance, prevent development of entirely group-directed aims, prevents facilitators from developing systems thinking/co-design approaches to knowledge sharing (Cook *et al.*, 2021).

8.6.1 Building relationships with organisations and advisors

Facilitators are required by the scheme to:

"suggest, make and keep links with local partnerships and initiatives, as well as Defra delivery bodies, to make sure the group is carrying out work that complements the local actions of these partnerships and initiatives. We will ask you to tell us about this when you make your claim" (Defra, 2021c)

(The last sentence in this quote illustrates the institutional nature of the scheme, linking action to payment, which is discussed in in Chapter 7). Previous research has confirmed that facilitators have successfully undertaken this role (Breyer *et al.*, 2021; Jones *et al.*, 2020). All 18 groups for which progress reports were sampled mentioned contact with organisations (see Table 33). This could take the form of input or leadership of meetings, individuals from organisations attending meetings or meetings between the organisation and facilitator. A wide range of organisations featured including

- Universities and colleges,
- Regulatory bodies, including Environment Agency, Natural England, Forestry Commission,
- Local environmental charities including wildlife trusts, rivers trusts and species groups,
- National environmental charities including RSPB and GWCT (see Table 33).

Farmers valued this contact particularly where it was face-to-face which is reflected in the event evaluation reports:

> "*Very useful, a good way to interact with the Environment Agency*". (Event evaluation report, Group 6)

Several farmers mentioned in interviews that they appreciated having a local named contact for organisations, someone who they could call. Farmers prefer humanised interaction with organisations/institutions which is at odds with, for instance, the Rural Payments Agency, who provide an anonymous 'single point of contact' by phone and email.

Facilitators also attempt to address the complexity of the farm advice network. One group organised a meeting of farm advisors "*in response to group member concerns over . . . the number of advisors vying for their attention. We used the meeting to advise on all known funding streams and . . their priority areas."* (Progress report, Group 26)

Other groups signposted farmers to the relevant advisors, "*we can put them in touch with the right people*" (Progress report, Group 27) , enabling them to navigate the complexity of the advice landscape which Vrain and Lovett (2016) identify as a barrier to knowledge dissemination.

Facilitators seem to adopt the bridging role between farmers/participants and organisations/institutions advocated by Clements *et al.* (2021) and Häfner and Piorr (2021). It is unclear from this research whether the relationships between Facilitation Fund groups and organisations/institutions has developed into consensus building and resource and conflict

management. However, facilitators appear, through their support of the group, to have created bridging social capital, which is argued to be necessary to connect farmers to the external influences and can help unlock innovative pro-environmental behaviour (Arnott *et al.*, 2021; Westerink *et al.*, 2017).

8.7 Facilitators as a driving force

As reflected in the account of the farmer group large-scale environmental project described in Chapter 6, the facilitator within Facilitation Funds does not take a passive role so does not necessarily fit neatly with conventional facilitation, in which the facilitator is a neutral enabler. Facilitators sometimes took a driving role in the creation of the group confirming Prager (2022)'s findings.

> "*I went to see them and then we formed the group collectively. I would always say it was me who was the driving force*." (Facilitator, Group 11, interview)

Most of the facilitators interviewed reported that they took an active role in the group's work:

> "*There is a lot of chasing . . . . that takes up a lot of time and energy constantly pushing people and encouraging people to do things."* (Facilitator, Group 45, interview)

From the farmer viewpoint "*you've got to have someone who puts in a lot of energy into the group because most of us are fairly passive*." (Farmer B, Group 45, interview)

This would suggest that the facilitator, to some extent, owns and takes responsibility for the work of the group. Although in many cases they were supported through some kind of formal or informal governance arrangement, as described in Chapter 7 section 7.6. Facilitation Fund facilitators play an important instigating role, perhaps due to their position as a partial outsider within the group (they are often well known to the farming community as described above, but are not necessarily farmers). An alternative view is that facilitators are necessary to support the structured approach, framed by the Facilitation Fund scheme, which demands measurable and recorded outcomes, against which progress and value for money can be assessed. Prager *et al.* (2017) found that the iterative nature of farmer-led groups and the open and flexible approach they demanded, was at odds with prescriptive organisationally-driven programmes. Facilitators are funded by, and therefore responsible for, delivering the Facilitation Fund. They are required to report on groups' progress as a part of the groups' financial claims, which will pay for their time. Therefore they have a vested interest in ensuring group delivery. However, facilitators' drive and energy is not solely required to serve the

requirements of the Facilitation Fund scheme; there is also an argument that they undertake the delicate balance of a change agent role (Rogers, 1995), challenging the status quo while maintaining groups' trust as discussed in section 8.6 above)

8.8 Cross holding working: coordination or collaboration

Facilitators have reported, during Jones *et al.* (2020)'s assessment, that collaboration is one of the most achieved outcomes of groups although the nature and definition of this collaboration are not detailed. This research investigated this claim in detail through questioning of facilitators during interviews by asking for examples of cross holding working. As previously noted, cross holding working can involve collaboration between farmers or coordination by an advisor across farms.

Jones *et al.* (2020) measured spatial coordination of AES across Facilitation Fund groups to quantitively assess the contribution of Facilitation Funds to landscape-scale land management delivery. They undertook quantitative analysis of spatial coherence and/or connectivity of biodiversity and of water resources AES options in groups and found that they were variable. Although they concluded an overall positive contribution of Facilitation Funds to spatial coherence in AES, their analysis does not differentiate between AES options put in place before and after the creation of the group (Jones *et al.*, 2020).

Six facilitators were questioned specifically about the nature of the cross holding working the group had delivered and analysis was undertaken of cross holding examples from secondary data (see table 37). All six facilitators reported that they had struggled to deliver cross holding working: "*We didn't do as much of that as we should have done*." (Facilitator, Group 10, interview). Most cross-holding working examples offered by facilitators, either through interviews or accounts in progress reports, took the form of coordination, where the facilitator had an overview and encouraged individual farmers to align their work to achieve this. An example of this was a group where the facilitator, who also acted as the farm advisor for several of the members, negotiated cross holding alignment of hedges through one-to-one visits. These visits would not have been funded by the Facilitation Fund. In other cases, alignment of pollinators-friendly options was encouraged through one-to-one advice offered by the facilitating organisation (funded through another mechanism). This type of coordination, as discussed previously (in Chapter 2, para 2.4.1) does not require farmer-to-farmer collaboration.

When coordinating, the advisor/facilitator takes on a traditional farm advice role with the farmer, advising one-to-one on the specifics of the farm. Most facilitators had environmental farm advice experience, and, in the case of independent facilitators, continued working as farm advisors while facilitating. One-to-one farm advice is a role in which they felt confident. The coordinated approach follows the practice adopted by the majority of large-scale environmental projects described in Chapter 6. Supported farmer-to-farmer negotiation requires a different skillset which more accurately reflects conventional descriptions of facilitation. The facilitator's role would be to objectively manage and support a delicate negotiation in which farm businesses would align their work. As previously argued, this role may present difficulties for existing farm advisors, particularly independent advisors who rely financially on one-to-one advice, and may not necessarily be a skillset that they have developed. Additionally, even when farmers have agreed with each other, through collaboration, what actions will be undertaken, one-to-one advice may be necessary to support farmers so that they can determine what needs to be delivered, when and where. Collaboration and coordination are not necessarily two separate processes but are related.

This research, like Prager (2022)'s found few examples of collaboration, examples identified in secondary sources or cited in interviews by facilitators, were coordinated. One facilitator:

> *"organised a small group session between three adjoining farms. This was to allow for discussions of specific/local 'on the ground' problems and opportunities to work together. We also discussed what makes a good wildlife corridor and explored ways of joining up these 'stepping stones' in between farms.* " (Progress report, Group 9)

Another: "*coordinated cooperation between two adjacent farms to establish two green cover margins in a key area. One provided the seed while the other farm drilled the cover group*." (Progress report, Group 12)

Other groups did not directly address inter-farm negotiation but used mapping exercises to illustrate the bigger picture of how the holdings joined up, in order to encourage cross-holding works

> "*Individuals have also shared details of their Stewardship options, allowing a larger map to be developed showing how their options relate to each other geographically."* (Progress report, Group 16)

Objectives, like water quality, required collective action over a geographical area, rather than cross-holding working. Groups were effective in encouraging this through peer pressure: they "*all know that what one does affects everybody else*" so there was "*an element of talking to the people who*

their neighbours knew were most at risk of stuffing it up for everyone else" (Facilitator, Group 6, interview). This supports the contention that the social capital developed in groups encourages the acceptability of pro-environmental action partially through peer pressure (Mills *et al.*, 2011). The translation of peer pressure into action assumes that the "talking to" is effective, which cannot be assumed. Another farmer gave the example of a water pollution incident where the responsible farmer was apparently unrepentant, despite being subject to regulatory repercussions.

The formal mechanism through which Facilitation Fund schemes ensure cross holding working (and achievement of aims) is through the facilitator's counter signatory of farmers' Countryside Stewardship application forms. Jones *et al.* (2020) found that 29% of group members applied for AES after joining the group. This counter signatory process is designed to allow the facilitator some input into, and oversight of, members' AES applications and offers members additional points which may ensure their application is successful. One facilitator reported that this mechanism was generally unsuccessful because their input was sought too late:

> "*Generally what you get is, if they are using somebody else to do their applications, they'll go away and do it and then, two days before the deadline, when I'm up to my neck in final applications myself, they say, can you sign this off. And then there's no time to go through it*" (Facilitator, Group 34, interview)

This quote highlights the potential tensions and contradictions between one-to-one advice, Facilitation Fund groups and cross holding working.

If AES is the principle method for delivering funded actions by Facilitation Funds, it presents some significant issues, not least that schemes are time contingent. Adjoining farms may be in different iterations of schemes which start and finish at different times as noted in in Prager (2022). Jones *et al.* (2020)'s research suggested that limitations of the present Countryside Stewardship scheme, where no amendments or alterations are allowed during the five year term of the agreement, prevents farmers' and the groups' ability to align AES across holdings.

8.9 One-to-one advice

One-to-one on farm advice is specifically excluded from funding within the Facilitation Fund. Jones *et al.* (2020) found that a third of facilitators (out of a sample of 67) felt that one-to-one advice should be provided as part of the scheme because allowed a targeted approach and strengthens relationships. Facilitators were questioned further on this subject during interviews and they

presented a consistent range of reasons why one-to-one advice was necessary. It enables facilitators to:

- understand the farm business, environmental issues and possibilities of the holding and the farmers' skills and knowledge, motivation and agency,
- better coordinate across holdings (because of the above)
- form stronger and more meaningful relationships with farmers.

This is summarised neatly by a facilitator in the following quote:

> "*I go and have a good talk with them. . . in the kitchen . . . And I look at their land in some detail, so I get to know them as people, I get to know their sort of family circumstances and the state of their business, and their land and the problems they've got with it. . . you can see the skills that they have and that they don't have, the culture that they have and don't have, the constraints they have and don't have, all of those things*." (Facilitator, Group 11, interview)

Several facilitators report that some farmers are more open one-to-one compared to group situations.

It would be useful to understand why the scheme presently does not fund one-to-one visits with farmers because they would seem to provide necessary underpinning of the group social processes and the delivery of cross-holding action. However, facilitators, as outlined in section 8.5, frequently have come from a background of providing one-to-one advice and so may feel comfortable in that role, particularly as they do not necessarily have skills or training in group learning, group management or facilitation.

8.10 Inclusivity; managing power relationships within the group

Some facilitators reflect on inclusivity within their group; the need to ensure that all felt welcome and valued. One facilitator pointed out that knowledge of individual member's circumstances and motivations provides the background information necessary to achieve inclusivity.

> "*To make sure that everyone felt included, the first thing I asked them when I went to see them is " What do you want? What are your reasons for joining the group? What do you*

want to get out of the group? What do you feel you could input and what do you feel you can't? It was necessary really." (Facilitator, Group 45, interview)

Another facilitator reinforced this, suggesting that it was important to recognise and respect the spectrum of attitudes within the groups towards some environmental practices using rewilding and beaver reintroduction as an example: *"some of the farmers excited by it and some were really, really against it*" (Facilitators, Group 34, interview). This implies that facilitators had to navigate a careful balance between encouraging and challenging some farming attitudes and showing respect for farmers' point of view.

Some facilitators recognised and attempted to address diversity within the group, such as age.

"We've got a couple of more mature ones there who are sensible and wise. . .younger members important because they have got energy and are more willing to experiment, they want to make their mark" (Facilitator, Group 11, interview)

Facilitators report having to manage what one facilitator tactfully described as "*quite big personalities in the group, as there often is with farming groups*," (Facilitator, Group 34, interview).

However, a subject which was not evident in either primary or secondary data was management of socio-economic power relationships within groups, although this was not directly addressed in questioning. As previously suggested, farmers taking a leading role within groups seemed to have relatively substantial farm holdings. Observations taken in meetings noted that influential and relatively wealthy farmers tended to talk to each other. At one meeting they shared the same van on the farm walk (group 19), in another they sat together at a table for lunch while others stood (group 45). They also spoke more readily in group discussions. More research would be necessary to differentiate relative socio-economic status of farmers within and outside groups, and the influence of socio-economic status within the group. As previously argued, independent facilitators, who may work for individual farmers within the group as a farm advisor, might find challenging existing power structures difficult, particularly where they had been approached and asked to facilitate by influential farmers within the group.

The influence of socio-economic power within the group was not recognised by facilitators explicitly. There is therefore a danger that the influence of socio-economic status on group activities was not be assessed and, if necessary, mitigated by facilitators. Commentators ranging from Arnstein (1969) to Chilvers and Kearnes (2020) argue that this is essential for equitable participation.

8.11 Conclusions

When categorised, 40% of facilitators were affiliated to organisations, while 60% were independent facilitators. Facilitators were mainly drawn from the ranks of existing farm advisors. In contrast to analysis of large-scale environmental projects, independent farm advisors played a significant role while arms-length bodies played a limited role. The affiliation of facilitators had an impact on farmer attendance at events. Affiliation also had an influence on group size: organisation-led groups were likely to be larger, which may be due to the financial incentive the Facilitation Fund scheme offers for larger groups. The size of group was also associated with farmer participation; smaller groups had statistically better than expected attendance than larger groups.

Independent facilitators were more likely to have a background in farming, formal training and experience of giving farm advice on farm business, which may make it easier for them to form trusting relationships with farmers individually and as a group. Organisation-affiliated facilitators were likely to have to serve the requirements of their organisation as well as the Facilitation Fund and their group, while independent facilitators had to navigate their relationships with individual farmers as a one-to-one advisors alongside their relationship with the group.

All facilitators had some experience of providing AES environment advice. Few had formal training in facilitation as a skill or in extension/education. Facilitators do not position themselves as experts in environmental delivery, although most have skills and knowledge of the topic, but see themselves as enabling farmer learning by organising input from other experts. The facilitators' role is poorly defined. They are required to be experts in environmental management, trainers and facilitators, all of which require different skillsets and experience. It would helpful if farm advice, and farm group facilitators, had a recognised professional curriculum or competency framework of core skills and knowledge which advisors could develop, establishing the 'pedigree' which Sutherland *et al.* (2013) suggest farm advice presently lacks. Using a participatory approach, farmers, advisors and other key stakeholders could work together to develop this competency framework, which would also allow a career progression within the farm advice profession which is presently largely absent. Training would also have the advantage of allowing farm advisors to engage in peer-to-peer learning themselves and gain support in a role which, as one advisor suggested, can be isolated.

Facilitators have successfully built bridges between groups and a range of organisations which farmers' appreciate. They have also, in some cases, attempted to manage and mitigate the

complexity of the farm advice network for farmers by coordinating advice or signposting where advice and support is available.

Facilitators frequently drive the work of groups and are instrumental in forming them. This research found that cross-holding environmental delivery in the groups is delivered through facilitator coordination rather than through farmer-to-farmer collaboration. Perhaps because of this, many facilitators see the provision of one-to-one advice as necessary for the fulfilment of the Facilitation Funds environmental aims.

9. Farmer's participation: attendance, motivation and on-farm change

9.1 Introduction

The assumption underpinning some models is that meaningful participation is transformative of attitudes and behaviour, and can lead to enhanced pro-environmental action (Hohl *et al.*, 2015b; Reed *et al.*, 2018). Although participatory processes are relatively well documented, the nature of participation for individual participants is not well described. For participants in environmental initiatives, the spectrum of participation could range from being present, to contributing to discussion, to undertaking action. This chapter begins with a quantitative analysis of farmers' engagement within the Facilitation Funds using attendance at events as a proxy measurement; this is augmented with qualitative assessment reflecting on the reasons for, and limitations, of event attendance.

Farmers' participation is further assessed using the conceptual framework components. The framework identified several elements related to farmer participation: motivation, why farmers take part and whether their motivation is aligned with the purpose of the participation; the influence of relationships with other farmer on behaviour and attitudes; agency, what may aid or prevent farmers from enacting environmental land management; and social connection. Lastly, Facilitation Funds are compared to the coordination/collaboration spectrum of large-scale environmental projects described in Chapter 6.

9.2 Method

An overview of the methodology used to gather and analyse data for this chapter is described in Chapter 5. The following section provides a summary of data and the analysis that contributed to the results in this chapter.

- Qualitative analysis was drawn from eight facilitator interviews and 17 farmer interviews undertaken in the pilot and main study. See this section 5.4.2 for details of the pilot study and section 5.4.5 for the main study including the sampling limitations. Further analysis was drawn from secondary data, particularly progress reports and group evaluations (see

sections 5.4.4.2 and 5.4.4.3 for more details.) Analysis of this data focused on the farmer participation elements of the conceptual framework: motivation, agency and connection.

- Secondary sources: event registers for 12 groups were analysed and the attendance of members at events between 2015/2016 and 2019 was recorded. See section 5.4.4.4 for details of this process.

The number of events and members was highly variable across the groups (see Table 27). In order to make the data between groups comparable, the percentage of members was calculated for each percentile of events (see Table 37 in appendix two). The data from this analysis was represented in a cluster bar chart (see Figure 14). The mean, maximum, minimum and range of percentage members in each percentile of events was record in Table 27 and represented in a bar chart in **Error! Reference source not found.**.

It became clear from initial quantitative analysis that farmer attendance at events was variable. To investigate this further it was hoped to contact farmers who did not attend events (because they could be identified through analysis of the registers). It was not, however, possible to contact specific farmers in groups due to data protection issues. A snowball sampling technique was adopted whereby facilitators were asked to recruit farmers from their groups for the interviews to represent a range of attendance. In practice facilitators reported that they struggled with this and therefore it is likely that the sample of farmers interviewed represented better attenders. No farmers interviewed reported that they had not attending any meetings. The qualitative analysis therefore does not represent this group, although facilitators' views were recorded and are used in the analysis.

The chapter ends by returning to comparison with the analysis of large-scale environmental projects illustrated in Figure 8 where projects were represented on an institution/farmer and coordination/collaboration grid. Facilitation Funds were subject to the analysis undertaken and described in Chapter 6. Modes of participation were assessed in Table 29 and knowledge transfer in Table 30. Facilitation Funds were scored subjectively on a spectrum between one and four using two criteria: (for a fuller explanation of the analysis see the method section in Chapter 6 method section 6.2)

- **Project driver:** Potential scores ranged from one for farmer-led ranging to four for organisation-led.

- **Coordination and collaboration**: Potential scores ranged from one for projects where action was coordinated to one where action was collaborative. The definition used for coordination and collaboration is outlined in section 2.4 drawn from Prager (2015b).

The scores given to projects for both categories are recorded in Table 31 and mapped Figure 16 adapted from Prager (2015b).

9.3 Presence at events as participation

Attendance at events demonstrates a basic level of participation in a Facilitation Fund group. As one farmer described:

> *"People don't turn up not to listen. If they don't turn up then that's indicative that they're not learning or they're not engaging. I think just being there has got some merit*"
>
> (Farmer B, Group 45, interview)

The numbers of events and members varied widely across groups. (The variation in the number of members is discussed in section 8.4.) The variation is events is partially discussed using qualitative analysis below but would benefit from further research.

Table 27 Summary of Facilitation Fund group and event information (drawn from a sample of 12 groups.

Number of groups	Range of membership	Mean number of members per group	Median number of members	Range of events in 2015-2019 period, per group	Average number of events, per group	Median number of events	Total number of events	Total number of members
12	16–72	31	24	9–64	32	27	384	371

In order to make the data comparable the percentage of members was recorded for each group in percentage events (see Table 37 and represented in a cluster bar chart in Figure 15). A pattern emerged from this data suggesting that:

- more members of groups attend between 1-25 % of events,
- less members attend 51% and over of events,
- some members attend no events.

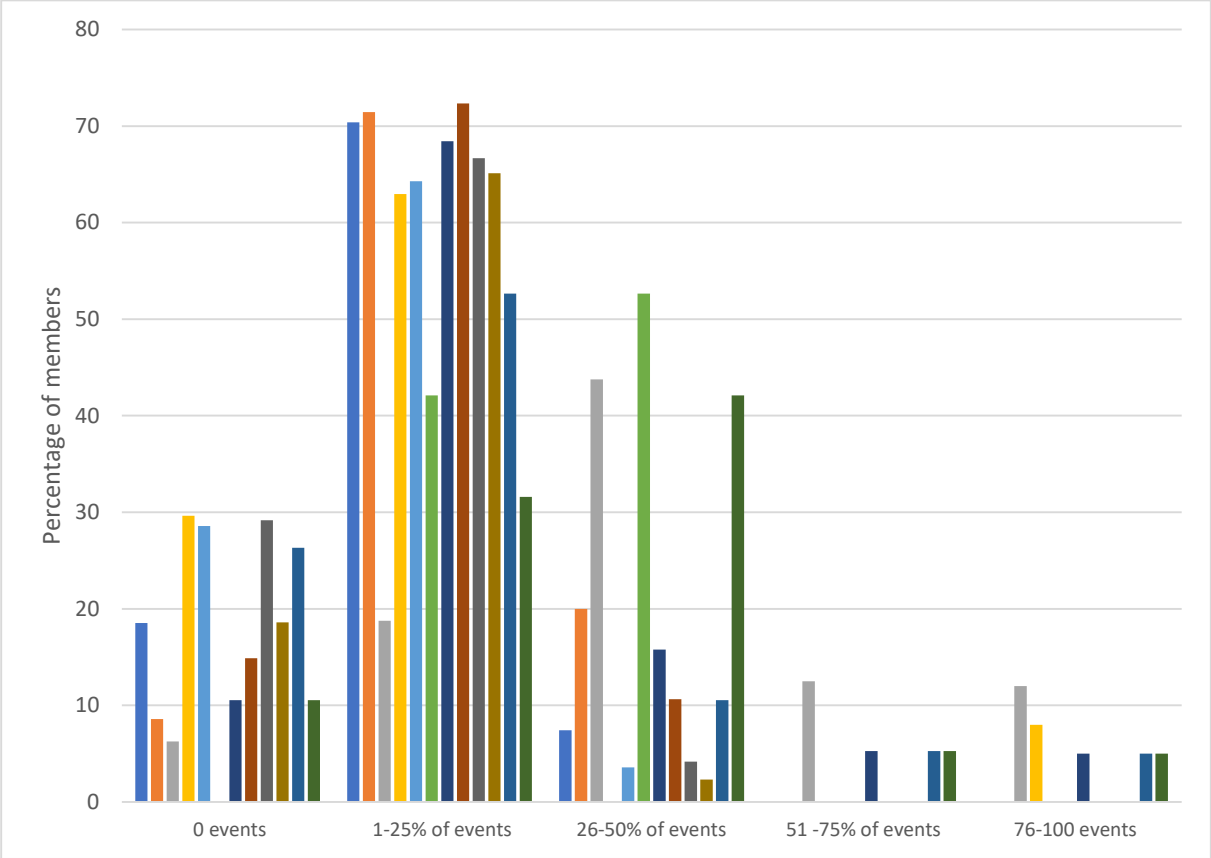


Figure 15 Percentage of members of 12 groups attending percentiles of events. Total no of events = 385 Total no of members = 371

This pattern was confirmed by calculating the mean percentage of members attending percentiles of events (see Table 28 and **Error! Reference source not found.**). Over the 12 groups analysed:

- The mean percentage of members attending no events was 17%
- Approximately two thirds, or 57% of members attend between 1-25% of events
- Approximately one fifth, or 18% of members attend between 26-50 events
- 5% of members attend over half of events.

Table 28 Percentage of members of 12 groups attending percentiles of events. Minimum, maximum, median and mean. Total no of events = 385 Total no of members = 371

	Minimum	Maximum	Median	Mean
Percentage of members attending no events	0%	30%	17%	17%
Percentage of member attending between 1-25% of events	19%	72%	65%	57%
Percentage of members attending between 26-50% of events	0%	53%	11%	18%
Percentage of members attending 51-75% events	0%	13%	0%	2%
Percentage of members attending 76-100% events	0%	12%	0%	3%

The percentage of members who attend no events at all is significant. This phenomenon is discussed in more detail in section 8.4 in relation to the funding structure of the scheme which could tempt facilitators or facilitating organisations to sign up farmers to increase the per capital funding of the group, even if the group didn't particularly interest or motivate them. Farmers are not required to contribute or commit themselves to anything to be a part of the group so there was no sanction or disbenefit from non-attendance. Farmers, unlike facilitators, are not paid for their attendance at meetings. Prager (2022) argues, from their research, that this meant that farmers treated group events as free training. The training for group members provided is free to farmers but government funded through the Facilitation Fund scheme. Farmers are required to sign a group agreement, drafted by the groups, but these do not require attendance, or specific actions. One farmer (Farmer An Group 10, interview) contrasted this with a commercial farming group which his son attended for which he paid membership. Presumably the payment was regarded as worthwhile because it might contribute to farm profitability. The Facilitation Fund Scheme and individual groups should, perhaps, define their potential value for farmers more exactly. This could, potentially, have an impact on participation. There is also an argument that charging for a service assigns it a value which, again, could impact on participation. Prager (2022) reported that farmers would be unwilling to fund groups themselves although other research suggested that it might be possible in some cases (Breyer *et al.*, 2021; Jones *et al.*, 2020).

The following qualitative analysis adds further insight to the quantitative assessment by providing insight into why farmers may attend or not attend events. Themes presented by the data included: the timing of events and events' relevance to the farm and farmer. The nature of participation for farmers who attend events is also explored.

9.3.1 Facilitators and farmers reflection on attendance at events

All six facilitators who were directly asked about participation (in the main study) recognised that there was a broad spectrum of attendance across the group, as reflected in the quantitative analysis. This spectrum was summed up neatly by one facilitator as: "*one that attends every single one . . . a few that attend most of them and then you've got some that don't attend any.*" (Facilitator, Group 27, interview)

Event attendance was a source of anxiety for facilitators (as illustrated in section 7.6 describing how influential farmers in the group can influence attendance). One facilitator described their encouragement of attendance as "*incessant nagging"* (Facilitator, Group 11, interview).

There was a balance to be maintained between using member time wisely and maintaining the momentum of the group:

> "*We have farmers that are so busy we have to be prudent as to the number of events and the topics we cover to make sure it is well worthwhile and we ensure good attendance and engagement*." (Progress report, Group 19)

Conversely if meetings are not regular there is a loss of momentum (and presumably social capital and the "*group just disappears*" (Facilitator, Group 27, interview).

As previously reported (in section 7.7.1), farmers were reported to generally engage with learning opportunities which is supported by other research (Prager, 2022). However, their engagement was contingent on whether they felt that the topic was relevant to them or their farm. Facilitators suggested that some events might attract a smaller audience but those who attended would be more engaged, one example given was invertebrate training, (Facilitator, Group 34, interview).

The quantitative data about farmer attendance at events was complemented by qualitative data from questioning of 12 farmers. The spectrum of interviewees broadly reflected that demonstrated in the quantitative data. Some would attend regularly *"I try to go as many as I can*." (Farmer A, Group interview). Others attended less regularly. One farmer estimated they attended three out of five meetings (Farmer A, Group 10, interview). Of these some reported practical barriers to attendance usually related to farm work, "*something I can't get out of*" (Farmer B, Group 6, interview) which is discussed further under in section 9.3.1.2. Farmers' interests influenced attendance for some, as described in section 9.3.1.1, relevance. None of the farmers interviewed reported going to less than half of the events scheduled by their group. This may be down to reluctance in reporting non-attendance, or the representativeness of the sample. The contrast

between the quantitative and qualitative evidence about attendance underlines the importance of using mixed methods, particularly in engagement and participation.

9.3.1.1 Relevance

In progress reports and interviews facilitators noted that it was sometimes difficult to plan activities which were universally attractive to all farmers, particularly if the group represented a range of farm categories such as dairy, livestock and arable. While individual events could not appeal to all farmers in the group, facilitators made efforts to ensure that the range of events would include something of relevance for all members. This issue is discussed further in the context of pre-existing groups 7.3.2, highlighting the difficulties in providing environmental extension to geographical groups, who may feature a range of farms and farm practice groups.

Relevance clearly played a role in motivating farmer attendance. As one farmer reported "*if it's interesting then I'll go*", when asked what kinds of things interested them they replied "*anything that might benefit the farm*," (Farmer B, Group 10, interview). This farmer was clear on their motivation for attendance. Motivation is discussed further in section 9.4. Following interests isn't necessarily straightforward because, as one farmer noted, "*the things that I think I wasn't going to be interested in have turned out to be interesting*" (Farmer B, Group 34, interview).

9.3.1.2 Timing of events

Facilitators were aware that farmer time was a limited resource and that timing was a factor effecting attendance which is reflected in facilitators' accounts demonstrating the impact of the farming calendar:

> "*The event generated a lot of interest among members although the timing meant some were on holiday before the rush of spring work and some were already busy on spring cultivation*." Progress report, Group 6)

> "*It was decided that. . . , when harvest is underway, that the only events that would take place was Countryside Stewardship training for ELS expiries*." (Progress report, Group 10)

Aside from the farming year, farmers' day-to-day work, particularly on smaller farms where there is a limited capacity for work to be delegated, made committing time to the group difficult: "I*'m a one man band. If there is a meeting at 2 o clock this afternoon and I've got a grain lorry coming into my yard somewhere between 1 and 4 this afternoon then I don't go*. " (Farmer A, Group 10, interview). Other farmers mentioned lambing/calving and harvesting as practical barriers. The "timeliness" of

farming, that farming tasks have to be undertaken in a fixed time period, has been noted in other research as a barrier to group activity (Emery, 2015).

Aside from timing and relevance, interviewees suggested other factors which could impact on farmer attendance.

- The pressures of family circumstances, for instance a young farmer who had just taken on the farm from elderly relatives and had a young family,

- Attitude to AES. One facilitator suggested that where AES was a significant income stream, on larger farms, they were more likely to take part. While on smaller farms there was less room to take on AES/environmental practices around productive farming which they described as "*tinkering around the edges of a little bit of stewardship*" (Facilitator, Group 28, interview),

- One independent facilitator noted that they were more likely to get regular attendance from farmers whom they gave farm advice to outside the group (Facilitator, Group 34, interview), with whom they had long-standing relationships.

More research is required to determine why farmers sign up to groups and do not attend them by asking farmers directly (this research used facilitator reflections because non-attenders could not be contacted directly as described in the limitations in the method 9.2). It may be that these members participate in other ways, by talking or networking with farmer members, or, alternatively, that they have personal or other reasons for not attending similar to farmers who have been found to be "hard to reach" by other research (Hurley *et al.*, 2022). There is a broader question about farmers inside and outside groups which is discussed in section 9.6.

9.3.1.3 The nature of participation

Facilitators recognised that, even among those who attended events, participation was varied. Some farmers join discussions while others do not, however: "*everyone turns out and whether or not they contribute vocally at that meeting doesn't matter, the fact that they are there means they have a genuine interest*" (Facilitator, Group 45, interview). A farmer (Group 45, farmer B, interview) from the same group reported that reticence comes from not feeling that they know enough to speak up. Conversely attendance did not necessarily mean alignment with group aims, or that learning was taken on board: "*I had one chap who really loved the farm walks but I never felt that he was actually*

taking any of it in if you know what I mean?" (Facilitator, Group 10, interview). As observed during this research, and described in section 7.7.1, farmers may not necessarily come to events, particularly when they are held on-farm, because they are interested in the event topic, but may be motivated by other factors such as curiosity or a desire to see others' productive farm practice.

Participation among attending farmers may also be informed by their alignment with the groups' aims. One farmer recognised his position in relation to the environmental aims of the group comparative to others: "*their ambitions are quite a bit bigger than my ambitions. . .I am a sit back and watcher*" (Farmer A, Group 10, interview). This farmer's case was partially influenced by his circumstances (discussed further under agency in section 9.5.1); he was going to sell some of his land for development so that he could retire from farming. Further investigation could attempt to characterise the spectrum of individuals' farmer participation within the group in terms of alignment with aims, active engagement with debate and discussion, engagement with group planning and individual contribution to group aims (which is discussed in section 9.5).

Some facilitators recognised that participation could not be forced:

> "*I work with the ones who are willing to turn up without being badgered. I check on the other ones occasionally to see that they're happy and leave it at that."* (Facilitator, Group 6, interview).

9.4 Motivation for being in the group

Attendance at events, and participation in the group more widely, is likely to be linked to farmers' motivations for taking part in the group. Prager (2022, p.7) found that "generating environmental benefits was not the main motivation for any farmer joining a group" which findings by this research supports. Nye (2018), in contrast, found that the majority of farmers studies joined the groups for environmental reasons. Environmental benefits do play a part, as described by a facilitator but they also suggest social motivations, curiosity, and fear of missing out:

> "*a lot of the group members maybe can't pinpoint why they want to be involved . . . They like the idea of doing stuff for wildlife and they like the idea of working together. . . there are some group members who felt, not obliged to get involved, but 'what's going on? I don't want to miss out' but maybe aren't as passionate about some of the wildlife things that drive other people. But they felt that 'my neighbours are getting involved, it makes sense for*

me to get involved' that is probably common across the board." (Facilitator, Group 45, interview)

The absence of a defining reason is supported by a farmer who described joining the group "*by osmosis*" (Farmer B, Group 11, interviews). Farmers report being introduced to the group by their farm advisors, who subsequently became the group facilitator, or by another farmer. However, farmers also reported a variety of motivations for participating in the group, separate from environmental aims which are outlined in the sections below and include: access to funding, information and influence over regulation, access to information during a significant time of change and social connections.

9.4.1 Access to funding

Farmers felt groups offered information and access to potential funding streams, including, but not limited to, AES. 12 of the 18 groups for which progress reports were analysed made funding bids outside of AES, for instance for water company funding and other grant funding as the Environment Agency's Water Environment Grant (WEG). This finding is supported by the monitoring and evaluation undertaken on Facilitation Funds where additional funding is quantified (Jones *et al.*, 2020). Secondly, several farmers and facilitators had interpreted Defra's attention to Facilitation Funds as a signal that the groups would be the conduit of future AES funding:

"*When there's money to be doshed out, it's going to be doshed out to these groups, not to individuals."* (Farmer, A, Group 34, interview)

9.4.2 Regulation

Farmers mentioned future and current farming regulation as a factor in determining their participation. The motivation to participate was either a way of gaining understanding of regulation or having early warning of future regulation: "*either that I ought to be doing something or I didn't ought to be doing something*." (Farmer A, Group 10, interview). This finding is supported by existing research (McCarthy *et al.*, 2021; Prager, 2015b). However, in this study there was no suggestion that farmers' intention was to create a collective voice to push back potential future regulation as found by McCarthy *et al.* (2021). One farmer felt that the group enabled them to navigate regulation because it ensured contact with regulatory agencies (discussed further in section 8.6.1): "*it helps knowing that you've got a contact to ring up when you got a problem. And you tend then to ring up*

rather than try and sweep it under the carpet' (Farmer A, Group 27, interview). As discussed in section 8.6.1 groups offer farmers the opportunity to make named contacts with a range of organisations so that they have a named individual to contact, which they appreciate.

9.4.3 Navigating changing times

The significant changes taking place in UK farming to both subsidy, through phasing out of the Basic Payment scheme, and access to markets, through Brexit, was a factor for several farmers. In some cases they referenced the uncertainty future AES (ELMS), linking to the previous point about funding above: "*the ones who realise what the potential value of being in a group. . . They've seen all the ELMs stuff and they think I better be in a group."* (Facilitator, Group 10, interview).

9.4.4 Connection: Social capital

Most farmers interviewed felt it had strengthened relationships with other farmers in the area and this was supported by analysis of secondary sources (which had the advantage of being collected during the lifetime of the group). Jones *et al.* (2020) reported that groups improved farmer networks which Breyer *et al.* (2021) confirmed. Evaluation comments taken from events reflect this:

> *"Relatively new to group (taken over from father). A rare opportunity to meet neighbours and discuss topics of mutual interest. Map of farm neighbours very helpful" (Event evaluation, Group 1)*

> *"It was the first time I can remember most of the farms in the area being in one room." (Event evaluation, Group 12)*

Farmers do not necessarily know their neighbours or have knowledge of their business and farm and this is partly due to the nature of farm work, which is generally confined to the holding, The nature of some types of modern farming and supply chains on and off the farm also play a part:

> *"It was only yesterday when people went to market . . .people are in big kit doing a thousand acres and barely getting off. The social side is really fractured."* (Facilitator, Group 11, interview)

One farmer, although born into the family farm, had worked off the farm for the first part of his career so the group provided the opportunity to meet neighbours (Farmer B, Group 11, interview). Another farmer reports:

"Sometimes in farming that's the only time you get to see your neighbours. . . You'll pass them, put your hand up and that's about it, but you actually get to speak to them and find out what they're doing as well as the information that's put forward at the meeting." (Farmer A, Group 27, interview)

Farmers combined social and professional networking in the group:

"So it was a really good way of building social relationships as well as professional relationships with the farmers." (Farmer B, Group 6, interview).

They also valued the development of social capital for its own sake, unrelated to its potential for meeting the groups' aims.

"Just by getting together . . local folk . . . local farmers . . .an opportunity to get people who are farming in the same area, with potentially the same problems and the same successes and the same issues." (Farmer A, Group 34, interview).

However, it is clear from some progress reports and evaluation reports that the diversity of farming types may cut across the shared experience (as discussed in section 7.3.2).

A variety of research argue social capital between farmers and farmers and other stakeholders is important for achieving pro-environmental action (Burton and Paragahawewa, 2011; Pretty *et al.*, 2020; Wynne-Jones, 2017), some of it related directly to Facilitation Funds (Breyer *et al.*, 2021; Colloff *et al.*, 2021; Hall, 2019). This research confirms, to an extent, the relative isolation of contemporary English farmers described in earlier work (Franks and Emery, 2013). There is, however, a question over the link between social capital and environmental action. Wynne-Jones *et al.* (2020) argues that social capital is necessary for the achievement of environmental aims, supported by evidence from the Pontbren farmers groups. Low social capital can lead to disengagement from new practices generally and AES in particular (Hurley *et al.*, 2022). This research suggests that social capital does not automatically lead to pro-environmental action. Farmers in this study valued social capital in its own right ,and didn't necessarily see it as leading to action as the quotes above suggest. How social capital can be operationalised for environmental action requires further investigation. There appears to be a missing element in the process; the consensus building between stakeholders about the issues/actions required (Häfner and Piorr, 2021; Hohl *et al.*, 2015a; Reed, 2008), which would support the extrinsic and intrinsic motivations necessary to deliver action (Kollmuss and Agyeman, 2002; Mills *et al.*, 2018)

9.5 Change in farming practice as a result of membership of the group

As described in the introduction, one of the claims made for participation is that it can lead to attitude and behavioural change. Of the 12 farmers questioned, one reported a significant change in their approach to the farm as a result of group membership; resulting in uptake of more ambitious options within their Countryside Stewardship application. This broadly supports Jones *et al.* (2020) research where facilitators reported 21% of members had made changes to their farm practice and that the most common change was to the complexity and ambition of AES applications. Environmental action is not synonymous with AES however (Darragh and Emery, 2017). One farmer interviewed had not changed their practice but due to membership in the group had retained AES (Entry Level Environmental Stewardship) for which they were no longer contracted or funded.

Two farmers pointed out that change in farming is incremental, confirming previous research (Kuhfuss *et al.*, 2016):"*it's just the little things you pick up from it rather than any big changes*" (Farmer A, Group 28, interview). Another farmer framed this as improvements to existing systems rather than change (Farmer A, Group 27, interview). This was summarised by another farmer:

> "*Making radical changes isn't what we're very good at. We're quite good at making incremental changes, but we don't want to suddenly change our system because someone else seems to be making it work. We do what we feel we can do and that's more important because it holds everyone together.*" (Farmer B, Group 45, interview).

The "everyone" in this quote is presumably people involved in the farm business.

Farmers reported that any changes on the farm needed to be discussed with their farm advisor. This quote gives an example, "*We have our own agronomist, so he advises on chemicals to use and what have you and his brief is to maximise gross margin, so I don't want to undermine him*" (Farmer B, Group 10, interview). Another farmer offered a counterview, that the group provided an alternative and potentially 'bigger picture' view than provided by the farm-specific advice offered by the agronomist: *"An agronomist isn't going to take any risks he. . .wants to make it a perfect crop. . .Whereas you, as the farmer. . .may be prepared to not spend money ((on spraying)) and accept a lower yield and end up with a crop that is more profitable. "* (Farmer B, Group 34, interview)

Productive farming was, unsurprisingly, at the centre of farmers' attitudes. Environmental practice seemed to resonate where it related to farm production, where it "*fitted with the business model*" (Farmer A, Group 34, interview), for instance, by cutting the carbon footprint on a dairy farm. As one farmer put it: "*you should be able to cut down on costs enormously. . . if you get nature working for you rather than against you*" (Farmer B, Group 34, interview). Other examples cited included cover

crops and soil health. Further, there was recognition from four of the 12 farmers that profit, yield and sustainability was related:

> *"You have to farm commercially. . . . profit can come from lots of things, reducing overheads, Stewardship. It doesn't come from trying to jack up output by £1 having spent 75p to get there. A lot more awareness of that is going on in the group" (Farmer B, Group 19, interview)*

In one case, profitability influenced why the farmer joined the group:

> *"That's why I joined. . . we weren't making a lot of profit. . . our cows weren't milking that great, we got a big mortgage when we took it on. . . why I went to the meetings, I wanted to secure the future for my family going forward*". *(Farmer C, Group 6, interview).*

This farmer made a direct link between input costs and carbon footprint.

Some commentators have framed environmental management as at odds with farmers' productivist mindset (Howley *et al.*, 2015) suggesting a binary relationship between productive farming and environmental delivery. This research indicates that some farmers involved in Facilitation Funds are attempting to construct an interpretation of sustainable agriculture which unites food production with environmental delivery as advocated by Winter *et al.* (2017). There is a recognition, by some farmers within Facilitation Fund Groups, that existing farm production knowledge is insufficient to address the challenges facing farming, both environmental and productive and that environmental practices could offer an alternative to "*just chasing grants and single farm payments*, " (Farmer C, Group 6, interview), by reducing inputs, energy, fertiliser, pesticides, anti-biotics, and maintaining or increasing farm product outputs. As previously argued, a potential weakness within the construction of the Facilitation Fund scheme is that it addresses environmental land management practice without reference to, or combination with, current farming practice or farm business. Although some facilitators are attempting to unite these elements within the groups (as discussed in section 7.7). Facilitation Funds reflects the policy disconnect between food production and environmental delivery (discussed here 2.4.2) although they have the potential to address this.

9.5.1 Change: limitations of agency

Farmers reported that there are limitations to the changes which can be made to farming practice:: "*you can only farm to what labour, land and capital you have*" (Farmer B, Group 19, interview). The farmers interviewed were not, however, change averse, as an example, most of the farmers

interviewed had already diversified their business so that they were not solely dependent on productive farming for income.

Limitations to adopting new farming practices/delivering environmental objectives mentioned by farmers included the cost of farm equipment necessary for new practices, for instance one farmer would like to undertake minimum/no tillage practices (which are potentially beneficial to soil and water quality) but could not afford a direct drill (a £60-70K cost was cited), another that their contractor did not have a direct drill. As another farmer put it: "*I can't go and spend £20K on a first class spreader with all the waste cells and computers on. I've got to wait for that machine to come through the second hand market and find one which has got some life in it"* (Farmer A, Group 19, interview). Another pointed out the issue of cost/benefit when related to environmental practices:

> "*The problem is, 200 acres of arable, how to do you make that profitable? . . No shiny new kit, we don't buy anything new. . .technology in the near term is going to be an issue."*
> (Farmer B, Group 19, interview)

Another farmer had invested in heat recovery (from their dairy farm) and reflected that:

> *"A lot of farmers won't spend the money but I think if the grants were there . . there's energy in their animals that they could use to lower their bills"* (Group 6, Farmer C, interview)

Some Facilitation Fund groups have addressed these issues by setting up machinery rings and building databases of skilled contractors, but these are usually specifically in relation to environmental habitat enhancement separate to farm production, such as hedge laying or green hay spreading.

The practical aspects of agency, and the limitations it could set on farms and farmers ability to change, does not seem to have been well researched in comparison with farmer attitudes and behaviours. Sutherland *et al.* (2012) identified agency as one of the factors contributing to a "trigger event" for major farm change. There is a case for more research to investigate practical barriers to environmental management adoption, which would require analysis of farm profitability, equipment and land, alongside that of skills and knowledge. This information could usefully inform the future policy and scheme construction.

9.6 Farmers inside and outside of Facilitation Funds

This research did not focus on the membership of Facilitation Funds relative to the farming population as whole. Several farmers reported that they felt group members were a self-selected pro-environmental group confirming earlier research on environmental farmer training (Dwyer and Blackstock, 2007). "*It's a bit like birds of a feather flock together don't they, people of the same mind do the same thing*" (Farmer B, Group 27, interview). Alternatively: "*annoyingly, it's the people who should get involved who don't get involved*, "(Farmer A, Group 34, interview). One farmer suggested of a neighbour who would not join the group:

> *"I don't think whatever I said to them would get to them. . . . you know when you are beat don't you. So, to be honest, because you don't want to upset anybody, you are not going to . . . try and push them. . . you have to respect their views in the end*." *(Farmer B, Group 27, interview)*

This quote would suggest that the capacity of Facilitation Funds to exert change on farming attitudes and behaviour is limited in two respects: farmers within groups are not necessarily ambassadors for, or proponents of, the group or environmental action; secondly that those inside and outside the group may have significant attitudinal differences therefore cannot relate to each other.

One farmer suggested smaller farmers were less likely to attend because they were less motivated by regulatory concerns, "*when you are bigger you know you've got to keep things right, whereas the smaller ones don't see it as the same problem."* (Farmer B, Group 27, interview)

Another suggested change-resistant farmers avoided the group: "*he wouldn't change and he would be one of these at the meeting just going on and on and on that the single farm payment is going*." (Farmer C, Group 6, interview)

Research on "hard to reach" farmers in England found that they lacked time, had lower incomes and smaller farms (all of which may be related) which this research appears to confirm (Hurley *et al.*, 2022). Lack of social capital, as previously discussed, age, limited digital access and negative experiences of bureaucracy are also suggested to play a part (Hurley *et al.*, 2022). It would be useful to have further research into Facilitation Funds to identify these characteristics, inside and outside groups, to identify factors in group members and active participation in groups (by comparing attendance and/ or observing groups). Further the socio-economic status of those inside and outside groups could be assessed (as suggested in section 7.6).

9.7 Comparison with coordination-collaboration continuum of large-scale environmental projects

This section compares Facilitation Funds with the analysis undertaken in Chapter 6. In section 6.4.7 large-scale environmental projects were analysed thematically in Table 15 and Table 16 and scored in Table 17. This was used to inform the position of large-scale environmental projects on a organisation-farmer, coordination-collaboration continuum replicating elements of Prager's (2015b) spectrum (see Figure 4) which was represented in Figure 8. Facilitation Funds were analysed using the criteria employed in Chapter 6 which is drawn from the conceptual framework. The analysis undertaken in Table 15, Table 16 and Table 17 for large-scale environmental projects is repeated in Table 29 Table 30 Table 31 respectively and Facilitation Funds are positioned in Figure 16 alongside that of large-scale environmental project.

Facilitation Funds, like the farmer group large-scale environmental project, were largely coordinated, and key aspects, for instance the aims and objectives were limited by the organisational framework of the scheme outlined in Chapter 7. In contrast with large-scale environmental projects, actions were not funded within the scope of the scheme and one-to-one advice did not feature because the Facilitation Fund does not fund it. They were also organised with farmers, rather than other stakeholders, as the principle focus and featured a novel professional group, independent advisors, as organisers albeit alongside NGOS, who also play a significant role in large-scale environmental projects.

Action to address large-scale environmental issues was largely coordinated by the facilitator, who was in many cases also acting as a farm advisor offering one-to-one advice. Several aspects of the Facilitation Fund were more collaborative: the governance and control farmers exerted on the group activities, the links with organisations/institutions and the implementation of actions through AES. As a result of this analysis Facilitation Funds occupy a similar place in the grid to the farmer group large-scale environmental projects because they are comparatively collaboration and farmer driven.

Table 29 Analysis of conceptual framework components of Facilitation Funds (see Table 15 for comparison with 10 large-scale environmental projects.

Project	Facilitation Funds
Aims and objectives	Limited by AES
Farmers actively involved in aims/objective setting	Partially
Farmer/landowners involved in governance/steering group	Yes

Action implementation: undertaken by farmer	Yes but through AES
Action implementation: undertaken by project organisation	NA
Timeframe	Three to five years

Table 30 Analysis of knowledge transfer in Facilitation Funds (see Table 16 for comparison with 10 large-scale environmental projects).

Project	Facilitation Fund
One to one advice	No
Group knowledge transfer/ training; by experts	Yes
Group knowledge transfer/training: peer to peer	Yes
Monitoring of outcomes: farmer involvement	Yes

Table 31 Scoring of farmer/organisation and coordination/collaboration within Facilitation Funds (see Table 17 for comparison with 10 large-scale environmental projects)

Project	Facilitation Fund
Farmer Led/Organisation led score (1 = farmer led and 4 = organisation led)	2
Coordination/collaboration score (1 = coordination and 4 = collaboration)	3

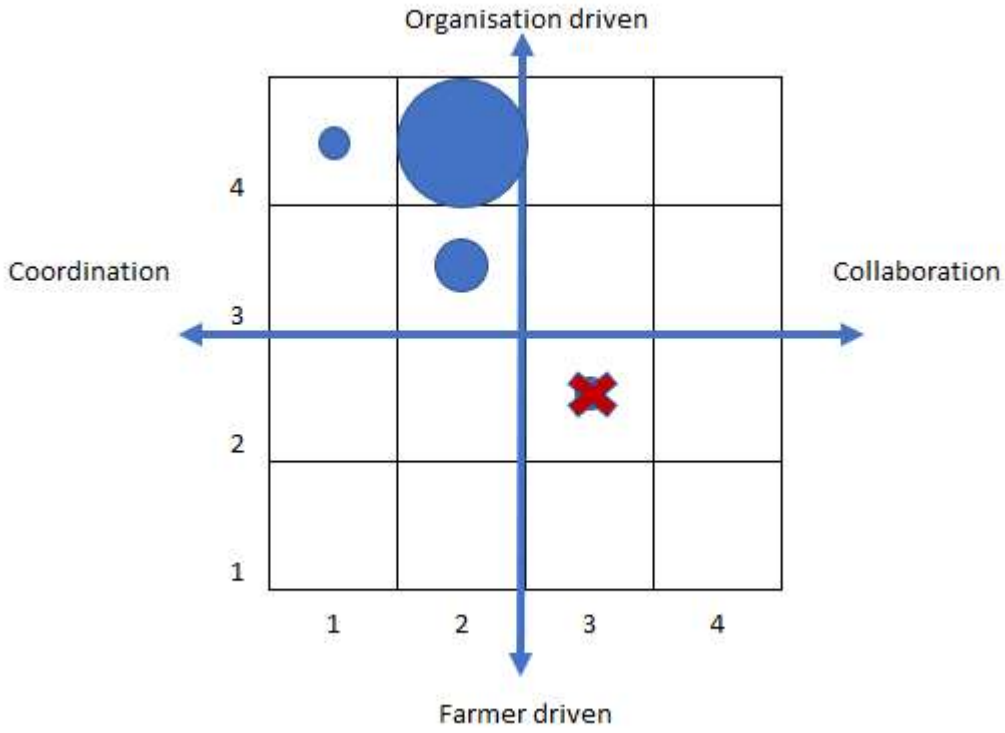


Figure 16. Comparison of Facilitation Funds to 10 large scale projects represented on an organisation-farmer, coordination-collaboration continuum (see Figure 8).

The size of the circle on the grid increases to reflect the number of projects which occupy that position. Project position on the grid of large-scale environmental projects (in blue) are determined by Table 17. Facilitation Funds are marked as a red cross

9.8 Conclusions

Farmer attendance at Facilitation Fund groups events is variable. Analysis of 12 groups found that a mean of 17% of members did not attend any events, according to the event registers. The majority of members attend between 1-25% and a minority attend more than that. Several factors may affect individuals' attendance of events. Of these factors the two most significant are: relevance, to the farm category and the farmers' interest and timing, whether the meeting fits in with farming work. Other aspects of farmers' participation within groups, whether they contribute to discussion, are also reported to be variable according to facilitators. More research is needed into how individuals engage within participatory processes to characterise a potential spectrum of engagement. This spectrum could include both presence/absence and the nature of participation when present.

Farmers' motivations for joining and participating in Facilitation Fund groups is seldom motivated by environmental issues. Farmers report being motivated by: access to funding and information about

funding; regulation, guidance and contact with regulatory authorities; the opportunity to meet other farmers. The latter aspect, of social capital, is not necessarily regarded by farmers as a vehicle for environmental collaboration, but is seen as valuable in its own right.

Only one out of 12 farmers could identify changes on their farm undertaken as a result of group membership. Some farmers, who perceive future challenges for farming due, in part, to Brexit's impact on subsidy and markets, are interested in the potential opportunities environmental land management holds for farming; the impact it could have on productive farming and its profitability, as well as on the environment. Farmers seemed averse to major changes, preferring incremental changes instead. Agency, the constraints presented by land, equipment and labour, were a significant, and under researched, change limiting factor.

Facilitation Fund groups may attract farmers who are already interested in environmental farming which may limit their ability to influence the wider farming community. However, more detailed research is needed to determine the characteristics, if any, of farmers within and outside groups.

Comparing Facilitation Funds to the previous analysis of large-scale environmental projects (in Chapter 6), there is little evidence that they are more collaborative or indeed are farmer-led. They are, however, a departure from large-scale environmental projects, because they are organised around farmer membership and are, in many cases, led by independent farm advisors and provide group environmental land management knowledge exchange. The Facilitation Funds' link to AES (Countryside Stewardship) presents both a limitation for farmer participation, because Facilitation Fund groups cannot directly influence AES, and an opportunity, because some aspects of groups' activities could usefully inform adaptions of AES if this was included within an institutional feedback loop.

10. Conclusions

This chapter summarises the research undertaken for this thesis then addresses each of the research questions in turn. The unique contribution offered to the topic of Facilitation Funds in England are highlighted. The conceptual framework for participation is revisited and revised in the light of the research analysis. The limitations of the research are outlined and suggestions made for further potential topics of research.

10.1 Research questions

10.1.1 How have farmers participated in large-scale environmental projects pre-dating Facilitation Funds?

Large-scale environmental projects, pre-2015, were generally led by environmental NGOs and ALBs. The aims of the projects were shaped by the organisations leading the projects and the funding which provided the resources necessary to deliver the projects. Some projects were resourced through several iterations of different funding during the course of the project. The relatively short-term nature of funding was generally at odds with the requirements of project outcomes.

Funding for large-scale environmental projects were difficult for farmers to access due to their construction and administration which may account for the dominance of organisations as lead project bodies. Farmer organisations such as the CLA and NFU were sometimes included within project steering groups. Generally, however, farmers were not directly involved in project design or implementation. Further, farmers were frequently positioned as the subject, sometimes even the problem, to be addressed by the project. Organisation-led projects tended to coordinate action across farm holdings, sometimes using a farm advisor to deliver this through one-to-one advice, rather than through farmer groups. The relatively short-term nature of project funding sometimes led to staff turnover which project managers reported damaged both the development and maintenance of ongoing relationships with farmers. The time pressure of funding also led some organisation-led projects to work with farmers who were more immediately able, or willing to, work with them. Work undertaken by projects on farmland tended to be undertaken directly through commissioning by project staff, rather than delegated to farmers to undertake on their land, and focused on capital items, such as fencing, rather than payment for land management change. One of the suggested consequences of farmers' lack of involvement was that they had little commitment to the long-term maintenance of these features, for instance where fencing failed, farmers asked the project to repair it rather than repairing it themselves. Most projects assumed farmers lacked the knowledge to undertake environmental action. Environmental farm knowledge exchange in all

except one case (the farmer group) was delivered one-to-one through farm advice. The requirements and practicalities of productive farming were largely unacknowledged by project managers.

The farmer group project, which was a notable exception within the ten projects interviewed, was coordinated and organised by an independent farm advisor who took an instigating and active role. The approach taken by this project differed to organisationally-led projects in the following respects: aims were designed around farmers' interests and knowledge exchange was undertaken peer-to-peer. However, the farmer group project struggled with administration because they lacked organisational infrastructure, for instance having a bank account and an accounting system to cover payment in arrears.

The nature of participation within most projects was cooperative, rather than collaborative. Project-leading organisations retained oversight of aims which were delivered through interventions with individual farmers. It was notable that the control exerted by the project structure which included setting aims, determining actions and deciding how funding would be used, was largely unacknowledged by project managers. The lack of direct control over privately owned farmland within the project was similarly not openly recognised. Both these issues could potentially limit the scope and nature of farmer participation within large-scale environmental projects.

10.1.2 What kind of participation do Facilitation Funds offer farmers?

In contrast with the large-scale environmental projects examined during the investigation of the previous research question, Facilitation Funds are designed to support groups of farmers. The two-fold aims of the scheme are knowledge exchange and cross-holding environmental delivery. The relationship between these two aims is not made explicit by the scheme.

Facilitation Funds require groups to deliver the aims predetermined by England's current AES, Countryside Stewardship. Funding for land management action is not provided within the Facilitation Fund scheme because it is assumed to be available from Countryside Stewardship. Farmers within Facilitation Fund groups have usually been consulted on the groups' aims but these are limited to, and framed by, the pre-determined aims of AES. Some groups have adapted these aims, using farmer local knowledge to make them geographically specific.

The administration of the Facilitation Fund scheme seems to struggle with the complexity of farm business, for instance, by insisting that one person from each farm represents the farm business. As with large-scale environmental projects, the way in which the scheme is funded, in arrears, with

relatively onerous requirements for evidence and reporting, is problematic and could be argued to privilege organisations who have the administrative infrastructure necessary to answer its requirements.

Facilitation Fund groups have not been built from existing farmer groups in most cases, as suggested by previous research. Governance within groups is variable. Some groups have steering groups, who are either elected or self selected, who help design group activities. This reportedly helps to ensure the participation of group members. The representativeness of the farmers taking part in governance and leadership of groups requires further investigation.

Group events cover a range of purposes, but the majority are knowledge-exchange events which occur in roughly equal proportion on-farm and off- farm (in pubs, hotels and other similar venues). Farmers attend both types of events equally, although they report enjoying seeing other farms and talking to other farmers about their applied experience. Discussion and debate are more likely to take place where the group had developed some level of social capital between members, although this would need further investigation.

Some Facilitation Fund groups have developed trials of environmental actions which could be interpreted as an attempt to test the effectiveness and applicability of AES actions, and make them locally relevant. Groups have also developed monitoring of environmental outcomes to make their actions measurable and visible, both for their own benefit and to demonstrate farmers' environmental contribution.

As described above, environmental land management on farms is not directly funded within Facilitation Fund groups. Part of the scheme's purpose, as suggested by the Facilitation Fund Scheme monitoring and evaluation programme, is to increase and improve AES delivery. Farmers participating with Facilitation Fund schemes have no influence on the format or content of AES. Some facilitators report that although farmer group members are willing to undertake environmental action, they are not willing to be contracted to undertake actions through AES because of its detailed requirements (of paperwork and prescriptions). The participation of farmers with Facilitation Funds is, arguably, limited to educating farmers about environmental actions and AES, but does not allow co-production of AES. Co-production of the future English AES, the Environmental Land Management Scheme, has been proposed by UK government but there is little evidence of this taking place directly through the Facilitation Fund scheme, although some groups have undertaken research for the ELMS scheme (through Defra's ' ELMS Test and Trials').

10.1.3 Who are facilitators and what are their skills and experience? How does this influence farmer participation?

Facilitators within Facilitation Funds play an important role in groups, mediating, interpreting the requirements of the scheme, as well as providing organisation and administration for the group. They are responsible for the practical realisation of the Facilitation Fund scheme and farmer participation within it. Facilitators were categorised as those affiliated to organisations, which were mainly environmental NGOs and independent advisors, which included those linked to the Farm Wildlife Advisory group. Organisations facilitated 40% of the 2015-16 Facilitation Fund group cohort, while independent advisors facilitated 60%. Independent farm advisors did not feature in the forerunning large-scale environmental projects, with the exception of the farmer group. When member attendance at group events was measured, the affiliation of advisors was found to be statistically significant. In organisation-affiliated groups fewer than expected members attend up to half events, while in independent groups more members than expected attend up to half of events.

Facilitators are not neutral players within their groups as formal facilitation processes advocate. Organisation-affiliated facilitators serve both their organisation and the group. Independent facilitators frequently had existing farm advisor relationships which may have helped them to develop trust within the group, however this could also create preferential relationships with some group members and prevent them challenging power relationships within the group.

Group size also had a statistically significant association with member attendance. Larger groups had more uneven attendance while smaller groups had more consistent attendance. In groups of 41 or more members, more members than expected attended up to a quarter of events and less than expected attended more than a quarter. In groups of between 20-41 members attendance reflected expected values while in smaller groups more than expected attended more than a quarter of events. Organisation-affiliated groups were more likely to be bigger. The Facilitation Funds' per member funding of the scheme financially rewards larger group sizes which may have an unintended negative impact on farmer participation.

Independent facilitators were more likely to have direct experience of farming, formal agricultural qualifications and experience of farm production-related advice, which could have an influence on their relationship with farmers individually and as a group, although this would require more investigation. Few facilitators had formal training in how to provide extension/training or in facilitation (as a discrete skillset to foster participation, discussion and consensus building).

Facilitators played a key role in driving groups' work and, to some extent, appeared to own responsibility for the groups' work because they reported on and answered to the scheme administrators. They adopt a bridging role between farmers in the group and a variety of organisations, including education institutions, regulatory bodies and environmental NGOs. Although some facilitators reflected on inclusivity and diversity within the group, the relative socio- economic status of members and the power relations this could exert within the group was not a subject openly raised or addressed by them.

Facilitators struggled to give examples of cross-holding working achieved through the group. Where cross-holding working was delivered it was through coordination, where the facilitator took on the role of a farm advisor and encouraged the alignment of individual farm/farmers' delivery. In some cases, facilitators did encourage collaboration by, for instance, looking at maps of members holdings during group meetings and discussing potential environmental join-up. AES, as the principal method for delivering funding actions by Facilitation Funds, presented barriers to cross holding working because existing schemes could not be amended in their five-year lifetime. The consequence of this is that contiguous farms with schemes ending at different dates could not develop their AES schemes simultaneously.

10.1.4 How do farmers participate in Facilitation Funds and what influences this?

Farmers can participate within Facilitation Funds in a variety of ways; by attending, taking an active role in the group through discussion or governance or by undertaking actions which deliver the aims of the groups.

Where attendance at events is concerned of the sample of 12 groups analysed, 17% of members who are signed up within Facilitation Fund groups do not appear to attend any events. This phenomenon, of 'ghost members', was confirmed by facilitators who suggested that farmers were signed up to the group to achieve sufficient numbers to provide adequate funding despite a lack of interest or motivation evidenced in their subsequent absence. The majority of members (57%) attend between 1 and 25% of events. A variety of factors were reported to impact on attendance, which was a source of anxiety for facilitators, including: timing in relation to the farm year, family circumstances, attitude to AES and relationship with the facilitators.

Farmers' motivations offered for joining the group in this sample was not to achieve environmental aims. Farmers suggested motivations including: access to and information about potential funding,

understanding of present regulation and early warning of future regulation and a means to navigate some of the potential uncertainties facing post-Brexit farming. Farmers valued the opportunity to build social capital with their local farming community, recognising this as a valuable activity in its own right. There was some evidence that the networks and connections gained contributed to informal opportunities for learning through advice and discussion.

Of the 12 farmers interviewed only one reported a significant change to their farming practice as a result of being in the group. Change in farming practice was reported as being undertaken over a slower timeframe in comparison three to five year timeframe of the Facilitation Fund scheme. The resources a farm possesses, its labour, land and equipment, offer opportunities and limitations for environmental delivery. Farmers pointed out that where some environmental practices were concerned, for instance, minimum tillage, the cost and availability of equipment is a barrier.

While not within the scope of this research, farmers within groups reported that they felt that Facilitation Fund group members were pro-environmental compared with the wider farming community. This suggests that farmers within groups may not be representative of farmers as a whole and that the influence of groups outside of their members may be limited.

10.2 Addressing the overarching aim of the study.

The aim of this research was to investigate farmers' participation in mechanisms to promote co-ordinated and collaborative environmental action, including AES, by examining their participation in Facilitation Funds. This study suggests that a key limitation in farmers' participation is that the main delivery mechanism for farming practice change, AES, is not within the scope of the participatory process. This is likely to curtail the potential transformational power of the participation. Where changes to land management and farming practice are required, the principle mechanism, in this case AES, should be made a central part of the participatory process, involving farmers and other stakeholders in the co production of the scheme as suggested by Toderi *et al.* (2017).The co-production process could then recognise farmers' agency and offer appropriate support, both financial and in other forms such as knowledge and skills, to support change. As government is (usually) the architect and deliverer of AES, this would require a significant shift in thinking and process (as suggested by (Wynne-Jones *et al.*, 2020). Co-production would require key stakeholders, such as NGOS, who are, as this research suggests, significant the delivery of environmental projects, to recognise farmers' as equal partners in the process.

This research underlines the importance of farm advisors in facilitating and supporting farmers' decision making and delivery. Better definitions of farm advisors' role within schemes like the

Facilitation Fund would be helpful. They need to serve the group but also offer challenge and independence to encourage change and innovative thinking. Wider, the farm advice profession would benefit from a competency framework which laid out required skills and knowledge accompanied by suitable training. This could include, for instance, training in how to promote peer-to-peer learning.

10.3 Unique contribution of this research

This research offers several unique contributions to the limited research specific to Facilitation Funds:

- It offers detailed analysis of the opportunities for, and limitations of, farmer participation within Facilitation Funds because of the way in which the scheme is constructed and administered by government and in the way the scheme interpreted and operated by groups.

- It examines who takes on the role of facilitation and, based on this, proposes a potential categorisation of facilitators based on affiliation into organisation-led and independent advisors. The skills and experience of these categories is analysed in detail. The influence affiliation on farmer participation particularly in terms of attendance at events is analysed.

- It analyses the pattern of farmer participation, in terms of attendance at group events, demonstrating a spectrum of attendance. Farmer motivation for taking part in the groups, which is largely ignored by existing research, is investigated.

- Using a sample of 12 farmers, the impact of group membership on farmers' practice is assessed and the potential barriers to change assessed.

As outlined in Chapter 3, research into participation, in the context of environmental objectives, argues for the importance of the process to develop consensus across a range of stakeholders, including government, organisations and individuals, using complex and sometimes incomplete evidence (Reed, 2008). Further that environmental participation galvanises action at multiple levels from policy design to personal decisions (Reed et al., 2018). Research has highlighted the danger of poorly designed participation; that it reinforces power relationships and tends to answer the needs of government or organisations rather than those of the community (Cooke and Kothari, 2001). Commentators have attempted to address this by suggesting closer analysis of the process, particularly in relation to reflexivity and inclusivity (Chilvers and Kearnes, 2020) or by acknowledging and providing advice frameworks about the nature of the process (Reed et al., 2018).

10.4 Conceptual framework revisited

My research demonstrates the difficulties of delivering participation in practice, in contrast to idealised models using the conceptual framework (Figure 6) as a basis. This section assesses the usefulness of the original framework in the context of research findings and suggests how it could be adapted for further research. The original conceptual framework featured four overlapping thematic areas: the organisation driver, participatory mode, role of the facilitator and components of the process all inform farmer participation, which sits within all four. This framework provided a useful basis for the deconstruction and analysis of elements which could inform farmer participation. However, the process of this research has suggested an alternative framework, which could be more universally applicable to environmental delivery.

The revised framework (see Figure 17) addresses significant elements within participation which have been identified as being important including: initiation and funding of the process, how aims and knowledge are built and limitations and barriers to environmental delivery assessed and addressed. This framework is intended to sit alongside, rather than replace, that of Chilvers and Kearnes (2020, p.367) and Reed et al. (2018). All four areas identified in the revised framework: initiation, resources, components, participants, are required if co production of the processes required to achieve environmental change are to be achieved.

The organisational driver theme within the original conceptual framework was designed to unpick how and why organisations, particularly those who initiate or drive the process, influence it. It provided detailed analysis to augment the more simplistic 'top down/bottom up' model, in which it is easy for organisations to be positioned as 'controlling/bad' and individuals as 'victims/good'. As a result, one of the unique contributions offered by this research is the analysis of how the organisations who lead and fund large-scale environmental projects and Facilitation Funds shape participation. In both cases organisations arguably create processes which privilege the participation of organisations and limit that of individuals or groups of individuals, specifically farmers. This may not be deliberate, rather that organisations naturally construct processes and systems which reflect their capabilities, culture, structures and then do not reflect on the potential impact of this or mitigate for it. Further, and related to the previous point, this research found that individuals, in this case farmers, within the environmental participation are frequently framed as the subject of the process rather than actors within it (Chilvers and Kearnes, 2020). Facilitation Funds could be seen as an attempt to educate farmers into environmental action rather than a participative initiative in which all aspects of the environmental issue, from aims to action, are collaboratively developed. Although the organisation driver theme was helpful for the purpose of this research, its value was

the insight it offered into key components of the process and these are suggested within the revised framework.

As argued above, participation is usually instigated by organisations, not individuals (Reed et al., 2018), but there is, however, little research on how this informs the process. Who initiates the process, and what lies within and outside of its scope, shapes the potential of participation. This research found environmental participation did not start with a 'blank page' into which all stakeholders can equitably offer suggestions; aims or objectives were generally pre-determined. The participatory process arguably becomes one where the underlying purpose is to educate, as Arnstein (1969) suggests, participants into agreement with the pre-determined environmental objectives and to take action to achieve them. This partially undermines any potential empowerment or democratic intent within the process. A detailed examination of the initiation of the process is suggested in Figure 18 to unpick this issue.

Resourcing of the participation process emerged as a significant issue in this research and is therefore drawn out in the revised framework (Figure 18). Large-scale environmental projects were funded in ways that were difficult for farmers or groups farmers to access. Facilitation Funds were similarly constructed, with the result that the majority of groups were led by non-farmers. This research highlighted that the funding of participatory processes is a significant controlling factor which, to date, has not been subject to analysis. For instance, the grant funding of large-scale environmental projects comes with prescriptions and processes which strongly influence how participation is designed and who can lead it. Individuals, particularly farmers, are not funded to take part in participatory processes. Participation is assumed to be in their interest, and they are expected to offer their time at no cost. This is not an assumption made for facilitators/project managers who are paid for their professional input, while organisations fund staff to achieve their objectives in participatory forums. The lack of funding for farmers' time could be argued to underline the assertion that they are the subject of the process rather than equal participants within it.

The importance of key components of participation have been reinforced this research particularly agreement over aims, knowledge, governance and potential barriers to action. This research found that participants within large-scale environmental projects and Facilitation Funds did not necessarily have the power to reject the scheme/project aims, which Mohan (2001) suggests should be an option within participatory processes. Governance within participatory processes, who steers, chairs and makes decisions, needs to be carefully examined to ensure that it does not reinforce existing power structures or exclude groups or individuals. Farmers were generally poorly represented in governance structures of large-scale environmental projects. Where formal governance existed in

Facilitation Funds it potentially privileged some types of farmers. Within environmental participation the use of knowledge needs to be carefully considered and the value of scientifically developed evidence balanced with local, practical land management experience. There was an assumption in both large-scale environmental projects and Facilitation Funds that lack of knowledge of was responsible for the lack of pro-environmental action. This research found there were practical and business barriers to environmental change on farms. Where participatory processes are employed to encourage environmental action, which is arguably the case with Facilitation Funds, they are a potential opportunity to identify and address barriers. This is, arguably, a crucial piece of shared knowledge which the environmental participation process could develop. For instance, Facilitation Funds participation could be used to feed into, perhaps even co-produce, AES by addressing the barriers to action identified by participants. This form of collaboration, between farmers and policy makers/scheme designers/advisors, could be potentially be as significant for unlocking large-scale environmental change as collaboration between farmers (Toderi *et al.*, 2017).

As suggested in Chapter 3 (section 3.1) while the participatory process has been subject to relatively rigorous analysis, participants are less well researched. This research suggests that the participation of both organisations and individuals needs to be closely examined as suggested in Figure 18. Organisations may participate to further their aims, which can impact on their ability to acknowledge and negotiate with other stakeholders, particularly individuals, in the process. Power within the participation needs to be made transparent and acknowledged in order to be addressed. For instance, this research found that organisations, particularly NGOs, play significant and controlling roles in both large-scale environmental projects and Facilitation Funds and did not acknowledge the relative power of farmers, who control land management. Understanding participants' motivation, their relative power, the existing perceptions and relationships between participants is central to an assessment of the effectiveness of the process (Chilvers and Kearnes, 2020).

Existing research also does not generally analyse or describe nature of individuals within participation. This research suggests that individuals engage in participation in a variety of ways. Participants may join a group, not take part, be occasional or regular attenders. They may engage in discussions in groups, form networks with other individuals or do neither of these things. Participation by participants is not uniform but forms a spectrum with individuals at different points upon it. This is illustrated within this research by farmers' attendance at meetings. Analysis and description of the spectrum of participation which could potentially also encompass non participants, would be a useful addition to existing models of participation. In the revised conceptual framework Figure 17 this is included within the theme of participants in the process.

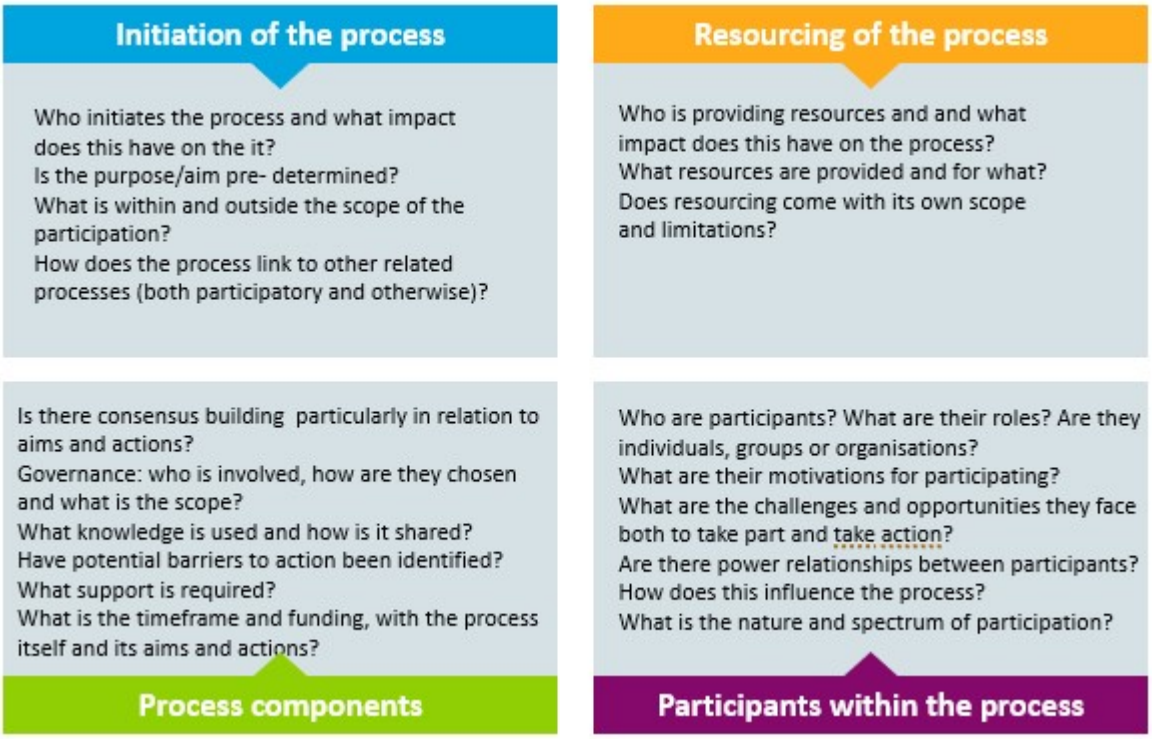


Figure 17 Conceptual framework adapted for future research

10.5 Limitations of study

The strength of this research is that it used a variety of primary and secondary sources, some of which were gathered over a five year period, a relatively long timeframe for academic work. This section focuses on the limitations of the research. As with other doctorate studies, the primary limitations were time and resources, however in this case the Covid pandemic also presented difficulties.

Using pre-existing research data for analysis ensures a more efficient use of time and resources. However, existing data, such as the University of Southampton large-scale environmental project database, may contain bias in, and exclusions from, the data. The database was developed by searching for large-scale environmental projects which had existing information which were discovered through internet searches and surveys of environmental NGOs. Farmer groups were less likely to have a web presence because of their relative informality and therefore may have been discounted. This said, however, there is no existing evidence, in wider research, of English farmers' group formed for environmental purposes other than that cited in Chapter 2 and 3.

The analysis undertaken of large-scale environmental projects focused on project managers, rather than on farmers. This absence of farmers' point of view was partially mitigated by the analysis but is also a suggestion for further research (see section 10.6)

The iterative nature of this research allowed themes to be identified, developed and investigated during the data gathering phase. Some of the quantitative analysis, into facilitator affiliation, was concurrent with the final interviews undertaken. This meant that it was not possible to design a detailed quantitative approach to determine farmers' views of facilitator affiliation. The pilot interviews had included some investigation of this issue but, as described in section 8.5, farmers were sensitive about, and protective of, their facilitators. Farmer views of advisor affiliation are therefore suggested as a topic for further research.

Other research, for instance Prager (2022), attempts to describe and compare some of the variables of the groups such as location and farm types. The variability of the groups, in terms of size of area covered, number of farmers, geographical land type, farm type and individual characteristics of members, made it difficult to draw comparisons. This research sampled a variety of geographical locations from across England. Sampling is described in further detail section 5.4.6. Sampling for quantitative data was further influenced by survey exhaustion as detailed in section 5.4.6.

On reflection, while the primary and secondary data gathered allowed more detailed analysis than, for instance, Jones *et al.* (2020), more observation of group meetings would have added further depth to the analysis. This was prevented, in part, by the Covid pandemic which prevented group meetings in person.

Attempts were made, during the qualitative data gathering phase, to contact farmers from across the spectrum of participation (as described in Table 12). This however, proved difficult because members who seldom or occasionally attended meetings did not volunteer or would not agree to interviews (when asked by facilitators). More detailed analysis to complement and investigate this issue further would be more effectively gathered through the in-depth study of one or several groups, attending meetings and interviewing all members.

Lastly positionality could have influenced the qualitative data gathering; however this may have been balanced by the insight which my experience brought to the analysis. The issue of positionality was addressed partially through the ethical review processes which included scrupulous anonymisation of data as detailed in sections 5.5 and 5.6.

10.6 Suggestions for further research

Resourcing plays an important role in environmental projects but has not been subject to detailed research. How resourcing for environmental objectives, particularly in the form of direct funding, is designed, its influence on the aims and administration of projects, whether it is competitive and how all these factors influence who access it, would be a useful and insightful subject for study. What land management environmental actions are funded would also benefit from further investigation. For instance, does the funding of capital items, such as farm infrastructure like fencing, or water harvesting, deliver long-term environmental benefits and/or behaviour change.

Environmental land management practices are now relatively well established in the UK and have history developed over several decades. The relationships between stakeholders, including government, NGOs, ALBs and farmers, although previously investigated (Klerkx and Proctor, 2013; Phillipson *et al.*, 2016; Whaley and Weatherhead, 2015) require further analysis encompassing all the significant players including land agents, agronomists and levy boards such as AHDB. The issues of organisational affiliation and its impact if any, on how farmers/organisations are viewed and how farmers/organisations view each other could be further investigated to provide insight into participation.

This research suggests that the socio-economic status of farmers may influence their participation in groups and perhaps widen their participation in pro-environmental activity. Investigation of the socio-economic status and other intersectional factors of farmers inside and outside of Facilitation Fund groups and AES could usefully complement existing analysis of, for instance, hard to reach groups (Hurley *et al.*, 2022).

The proposed link between participatory processes and the delivery of environmental action by farmers requires more detailed analysis. Farmer attitudes and behaviour toward environmental action has been relatively well researched (Cullen *et al.*, 2020). Participation in peer-to-peer learning has been proposed as a tool for influencing and changing these (Rose *et al.*, 2018). However, this research, and that of Prager (2022), suggests that participation in peer groups may not necessarily influence either attitudes or necessarily encourage action. Further research on a range of participatory measures ideally undertaken over time, with the establishment of a baseline against which change can be measured, as suggested by Rose *et al.* (2018) could investigate the potential link between participation and action.

Lastly, specific to Facilitation Funds, it would be useful to investigate further the trials and monitoring undertaken by the groups, both as 'bottom up' initiatives and as examples of farmer-led knowledge and practice development.

10.7 Concluding remarks

This research does not argue with the central premise that participation is necessary for the achievement of environmental objectives (Hohl *et al.*, 2015a). The reality of environmental participatory processes, the challenges and opportunities this research has begun to illustrate, requires detailed analysis. Calls for collaboration for environmental action, by for instance Helm (2019) need to be carefully translated into processes in which the needs of all stakeholders are assessed and addressed. At a wider level, this research demonstrates that a single participatory method is unlikely to be effective. A range of approaches is likely to be required. For instance, farmer groups may support pro-environmental action by some farmers, particularly when complemented with one-to-one on farm advice to inform delivery. For farmers outside of groups, other methods and incentives need to be investigated. This research also suggests that reflection, and potentially change, is likely to be required from all stakeholders currently engaged in environmental participation, not just farmers, in order to make the process more equitable and, ultimately effective. A key issue that productive and environmental farming needs to be addressed simultaneously in the process, aspiring to sustainable or regenerative agriculture, through, in one farmer's words "a collaboration of ideas" between government, environmental organisations, researchers and farmers.

11. References

Adams, W. M., Hodge, I. D., Macgregor, N. A. & Sandbrook, L. C. (2016). Creating restoration landscapes partnerships in large-scale conservation in the UK. *Ecology and Society,* **21**(3).

Adams, W. M., Hodge, I. D. & Sandbrook, L. (2014). New spaces for nature: the re-territorialisation of biodiversity conservation under neoliberalism in the UK. *Transactions of the Institute of British Geographers,* **39**(4), 574-588.

ADAS, Fera Science Ltd, and, E. S. L. & CCRI. (2018). *Countryside Stewardship Facilitation Fund Monitoring and Evaluation: Phase 1*.

Agricultural Industries Confederation. (2013). *The Value of Advice Report*.

Ajzen, I. (1991). The theory of planned behavior,. *Organizational Behavior and Human Decision Processes,* (50 (2)), 179-211.

Almas, R., Campbell, H. & Marsden, T. (2012). *Rethinking Agricultural Policy Regimes : Food Security, Climate Change and the Future Resilience of Global Agriculture*. Bingley, UNITED KINGDOM: Emerald Publishing Limited.

Ansell, D., Freudenberger, D., Munro, N. & Gibbons, P. (2016). The cost-effectiveness of agri-environment schemes for biodiversity conservation: A quantitative review. *Agriculture, Ecosystems and Environment,* **225**, 184-191.

Arnott, D., Chadwick, D., Harris, I., Koj, A. & Jones, D. L. (2019). What can management option uptake tell us about ecosystem services delivery through agri-environment schemes? *Land Use Policy,* **81**, 194-208.

Arnott, D., Chadwick, D. R., Wynne-Jones, S., Dandy, N. & Jones, D. L. (2021). Importance of building bridging and linking social capital in adapting to changes in UK agricultural policy. *Journal of Rural Studies,* **83**, 1-10.

Arnstein, S. R. (1969). A Ladder Of Citizen Participation. *Journal of the American Institute of Planners,* **35**(4), 216-224.

Aslam, U., Termansen, M. & Fleskens, L. (2017). Investigating farmers' preferences for alternative PES schemes for carbon sequestration in UK agroecosystems. *Ecosystem Services,* **27**, 103-112.

Bager, T. & Proost, J. (1997). Voluntary regulation and farmers' environmental behaviour in Denmark and The Netherlands. *Sociologia Ruralis,* **37**(1), 79-&.

Barataud, F., Aubry, C., Wezel, A. & Mundler, P. (2014). Management of drinking water catchment areas in cooperation with agriculture and the specific role of organic farming. Experiences from Germany and France. *Land Use Policy,* **36**, 585-594.

Baur, I., Dobricki, M. & Lips, M. (2016). The basic motivational drivers of northern and central European farmers. *Journal of Rural Studies,* **46**, 93-101.

Bell, K. & Reed, M. (2021). The tree of participation: a new model for inclusive decision-making. *Community Development Journal*.

Bentley, T. (1994). Facilitation: Providing Opportunities for Learning. *Journal of European Industrial Training,* **18**(5), 8-22.

Berg, B. L. (2014). *Qualitative research methods for the social sciences*. Harlow, Essex : Pearson.

Berthet, E. T., Segrestin, B. & Hickey, G. M. (2016). Considering agro-ecosystems as ecological funds for collective design: New perspectives for environmental policy. *Environmental Science & Policy,* **61**, 108-115.

Boardman, J., Bateman, S. & Seymour, S. (2017). Understanding the influence of farmer motivations on changes to soil erosion risk on sites of former serious erosion in the South Downs National Park, UK. *Land Use Policy,* **60**(Supplement C), 298-312.

Brassley, P., Segers, Y. & Van Molle, L. (2012). *War, Agriculture, and Food : Rural Europe from the 1930s to The 1950s*. London, UNITED KINGDOM: Taylor & Francis Group.

Breyer, J., Medcalf, K., Nolan, T., Mills, J., Morse, A., Gaskell, P., Underwood, S. & Kaczor, K. (2021). *Phase 3 Facilitation Fund Evaluation and Monitoring*.

Brinkmann, S. & Kvale, S. (2018). *Doing Interviews*. SAGE Publications.
Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative Research,* **6**(1), 97-113.
Burton, R. J. F. (2004). Reconceptualising the 'behavioural approach' in agricultural studies: a socio-psychological perspective. *Journal of Rural Studies,* **20**(3), 359-371.
Burton, R. J. F. (2014). The influence of farmer demographic characteristics on environmental behaviour: A review. *Journal of Environmental Management,* **135**(Supplement C), 19-26.
Burton, R. J. F. & Paragahawewa, U. H. (2011). Creating culturally sustainable agri-environmental schemes. *Journal of Rural Studies,* **27**(1), 95-104.
Campbell, J. T., Koontz, T. M. & Bonnell, J. E. (2011). Does Collaboration Promote Grass-Roots Behavior Change? Farmer Adoption of Best Management Practices in Two Watersheds. *Society & Natural Resources,* **24**(11), 1127-1141.
CEBC. (2022). *Centre for Evidence Based Conservation*. URL: http://cebc.bangor.ac.uk/.
Centre for Ecology and Hydrology & Natural England. (2018). *Natural England Natural Capital Maps*. URL: https://eip.ceh.ac.uk/naturalengland-ncmaps [24 October].
Chambers, R., Pacey, A. & Thrupp, L. A. (1989). *Farmer first : farmer innovation and agricultural research*. London: London : Intermediate Technology.
Championing the Farmed Environment. (2022). *Our History*. URL: https://www.cfeonline.org.uk/about-us/our-history/.
Cherney, D., Kurauchi, K. & McIntosh, A. (2014). The Connecticut River Watershed: Using Adaptive Governance Arenas for Collaboration and Integration. *In:* Clark, S. G., Hohl, A. M., Picard, C. H. & Thomas, E. (eds.) *Large-Scale Conservation in the Common Interest.* Cham, SWITZERLAND: Springer International Publishing AG.
Chilvers, J. & Kearnes, M. (2020). Remaking Participation in Science and Democracy. *Science, Technology, & Human Values,* **45**(3), 347-380.
Claridge, T. (2004). *Designing social capital sensitive participation methodologies*.
Clark, S. G., Hohl, A. M., Picard, C. H. & Thomas, E. (2014). *Large-Scale Conservation in the Common Interest*. Cham, SWITZERLAND: Springer International Publishing AG.
Cleaver, F. (2001). Institutions, Agency and the Limitations of Participatory Approaches to Development. *In:* Cooke, B. a. K., U. (ed.) *Participation: The New Tyranny?* UK: Zed Books.
Clements, J., Lobley, M., Osborne, J. & Wills, J. (2021). How can academic research on UK agri-environment schemes pivot to meet the addition of climate mitigation aims? *Land Use Policy,* **106**, 105441.
Cloutier, C. & Ravasi, D. (2021). Using tables to enhance trustworthiness in qualitative research. *Strategic organization,* **19**(1), 113-133.
Collins, R., Johnson, D., Crilly, D., Rickard, A., Neal, L., Morse, A., Walker, M., Lear, R., Deasy, C., Paling, N., Anderton, S., Ryder, C., Bide, P. & Holt, A. (2020). Collaborative water management across England – An overview of the Catchment Based Approach. *Environmental Science & Policy,* **112**, 117-125.
Colloff, M. J., Gorddard, R., Abel, N., Locatelli, B., Wyborn, C., Butler, J. R. A., Lavorel, S., van Kerkhoff, L., Meharg, S., Múnera-Roldán, C., Bruley, E., Fedele, G., Wise, R. M. & Dunlop, M. (2021). Adapting transformation and transforming adaptation to climate change using a pathways approach. *Environmental Science & Policy,* **124**, 163-174.
Cook, B. R., Satizábal, P. & Curnow, J. (2021). Humanising agricultural extension: A review. *World Development,* **140**, 105337.
Cooke, B. (2001a). The Social Psychological Limits of Participation? *In:* Cooke, B. a. K., U. (ed.) *Participation: The New Tyranny?* UK: Zed Books.
Cooke, B. & Kothari, U. (2001). *Participation: The new tyranny?* : Zed books.
Cooke, B. a. K., U. (2001b). The case for participation as tyranny. *In:* Cooke, B. a. K., U. (ed.) *Participation: The New Tyranny?* London: Zed Books.

Cooreman, H., Debruyne, L., Vandenabeele, J. & Marchand, F. (2021). Power to the facilitated agricultural dialogue: an analysis of on-farm demonstrations as transformative learning spaces. *Journal of Agricultural Education and Extension*.

Cornwall, A. & Coelho, V. S. P. (Year). Spaces For Change? The Politics of Citizen Participation in New Democratic Arenas. *In*, 2006.

Cullen, P., Ryan, M., O'Donoghue, C., Hynes, S., hUallacháin, D. Ó. & Sheridan, H. (2020). Impact of farmer self-identity and attitudes on participation in agri-environment schemes. *Land Use Policy,* **95**, 104660.

Cush, P. & Macken-Walsh, A. (2016). THE POTENTIAL FOR JOINT FARMING VENTURES IN IRISH AGRICULTURE: A SOCIOLOGICAL REVIEW. *European Countryside,* **8**(1), 33-48.

Darragh, H. S. & Emery, S. B. (2017). What Can and Can't Crowding Theories Tell Us about Farmers' 'Environmental' Intentions in Post-Agri-Environment Scheme Contexts? *Sociologia Ruralis*, n/a-n/a.

Davies, B., Blackstock, K., Brown, K. & Shannon, P. (2004). Challenges in creating local agri-environmental cooperation action amongst farmers and other stakeholders. *The Macaulay Institute, Aberdeen*.

Dawson, L., Persson, K., Balfors, B., Mörtberg, U. & Jarsjö, J. (2018). Impacts of the water framework directive on learning and knowledge practices in a Swedish catchment. *Journal of Environmental Management,* **223**, 731-742.

Daxini, A., Ryan, M., O'Donoghue, C., Barnes, A. P. & Buckley, C. (2019). Using a typology to understand farmers' intentions towards following a nutrient management plan. *Resources, Conservation and Recycling,* **146**, 280-290.

de Boon, A., Sandström, C., Arbieu, U., Hansen, I., Lehnen, L., Marino, A., Pohja-Mykrä, M., Risvoll, C., Strand, G.-H. & Rønningen, K. (2021). Governing dual objectives within single policy mixes: an empirical analysis of large carnivore policies in six European countries. *Journal of Environmental Policy & Planning,* **23**(4), 399-413.

Defra. (2011). *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. URL: https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services.

Defra. (2013). *Review of Environmental Advice, Incentives and Partnership Approaches for the Farming Sector in England*.

Defra. (2015a). *Countryside Stewardship: Statements of Priority*. URL: https://www.gov.uk/government/collections/countryside-stewardship-statements-of-priorities [3/11/2021].

Defra (2015b). Monitoring and evaluation of Nature Improvement Areas: Final Report (2012-15). UK Government.

Defra (2015c). Nature Improvement Areas 2012-15: Making Space for Nature on a Landscape Scale. UK: UK Government.

Defra. (2015d). *Statements of priorities: Countryside Stewardship*. URL: https://www.gov.uk/government/collections/countryside-stewardship-statements-of-priorities [21/10/2021].

Defra. (2016). *Agricultural labour in England and the UK: Farm Structure Survey 2016*. URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/771494/FSS2013-labour-statsnotice-17jan19.pdf?msclkid=60db7a25b64d11ec89de0bed6fe09cc8.

Defra. (2017a). *Agriculture in the United Kingdom 2016*.

Defra (2017b). Guide to Countryside Stewardship: Facilitation fund 2. *In:* DEFRA (ed.). UK.

Defra. (2018). *Facilitation fund: successful applications in 2017 national round*. URL: https://www.gov.uk/government/publications/facilitation-fund-successful-applications-in-2017-national-round [18/5/2022].

Defra. (2019). *Farming is changing - here is what you need to know*. URL: https://www.gov.uk/government/publications/future-farming-changes-to-farming-in-england [24 Oct 2019].
Defra. (2021a). *Countryside Stewardship Facilitation Fund: manual for agreements*. URL: https://assets.publishing.service.gov.uk/media/61b87efde90e070449d49f90/CSFF_-_manual_for_agreements_starting_on_1_June_2022_v4.0.pdf.
Defra. (2021b). *Environmental land management: policy discussion*. URL: https://www.gov.uk/government/consultations/environmental-land-management-policy-discussion-document.
Defra. (2021c). *Facilitation Fund: Countryside Stewardship Funding Manual*. URL: https://www.gov.uk/government/collections/countryside-stewardship-facilitation-funding [24 October].
Defra (2021d). New round of government fund for collaborative farming communities.
Defra. (2022). *Government Food Strategy*. URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1082026/government-food-strategy.pdf.
Del Corso, J.-P., Kephaliacos, C. & Plumecocq, G. (2015). Legitimizing farmers' new knowledge, learning and practices through communicative action: Application of an agro-environmental policy. *Ecological Economics,* **117**, 86-96.
Deng, J., Sun, P., Zhao, F., Han, X., Yang, G. & Feng, Y. (2016). Analysis of the ecological conservation behavior of farmers in payment for ecosystem service programs in eco-environmentally fragile areas using social psychology models. *Science of The Total Environment,* **550**(Supplement C), 382-390.
Denzin, N. K. (1970). *The research act: A theoretical introduction to sociological methods*. Routledge.
Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research,* **6**(2), 80-88.
Dicks, L. V., Baude, M., Roberts, S. P. M., Phillips, J., Green, M. & Carvell, C. (2015). How much flower-rich habitat is enough for wild pollinators? Answering a key policy question with incomplete knowledge. *Ecological Entomology,* **40**, 22-35.
Dolinska, A. & d'Aquino, P. (2016). Farmers as agents in innovation systems. Empowering farmers for innovation through communities of practice. *Agricultural Systems,* **142**(Supplement C), 122-130.
Dooley, E. (2020). An Ethnographic Look into Farmer Discussion Groups through the Lens of Social Learning Theory. *Sustainability,* **12**, 7808.
Downing, E. & Coe, S. (2018). Brexit: Future UK Agriculture Policy.
Dupraz, P. & Guyomard, H. (2019). Environment and Climate in the Common Agricultural Policy. *EuroChoices,* **18**(1), 18-25.
Dwyer, J. & Blackstock, K. L. (2007). Understanding and influencing positive behaviour change in farmers and land managers. *In:* Department for Environment, F. a. R. A. (ed.).
Dwyer, J. & Hodge, I. (2016). Governance structures for social-ecological systems: Assessing institutional options against a social residual claimant. *Environmental Science & Policy,* **66**, 1-10.
Dwyer, J., Mills, J., Ingram, J., Taylor, J., Burton, R., Blackstock, K., Slee, B., Brown, K., Schwarz, G., Matthews, K. & Dilley, R. (2007). Understanding and influencing positive behaviour change in farmers and land managers - a project for Defra. Department for Environment, Food and Rural Affairs.
Eigenbrod, F., Adams, W., Hill, C., Macgregor, N., Osborne, P., Clarke, D., Sandbrook, L., Hodge, I., Steyl, L., Thompson, A., Van Dijk, N. & Watmough, G. (2017). *A review of large-scale conservation in England, Scotland and Wales*. Natural England Joint Publication URL: http://publications.naturalengland.org.uk/file/5230964895121408.
Emery, S. B. (2015). Independence and individualism: conflated values in farmer cooperation? *Agriculture and Human Values,* **32**(1), 47-61.

Emery, S. B. & Franks, J. R. (2012). The potential for collaborative agri-environment schemes in England: Can a well-designed collaborative approach address farmers' concerns with current schemes? *Journal of Rural Studies,* **28**(3), 218-231.
Environment Food and Rural Affairs Committee (2021). Environmental Land Management and the agricultural transition: Second Report of Session 2021–22. UK: House of Commons.
European Commission. (2015). *Good Agricultural and Environmental Conditions (GAEC)*. URL: https://marswiki.jrc.ec.europa.eu/wikicap/index.php/Good_Agricultural_and_Environmental_Conditions_(GAEC)#:~:text=Good%20Agricultural%20and%20Environmental%20Conditions%20%28GAEC%29%20%20,%20%20%20%206%20more%20rows%20 [7/03/2022].
Falconer, K. (2000). Farm-level constraints on agri-environmental scheme participation: a transactional perspective. *Journal of Rural Studies,* **16**(3), 379-394.
Farmers Guardian (2011). FWAG appeals for funding support. *Farmers Guardian*, 4.
Franks, J. R. & Emery, S. B. (2013). Incentivising collaborative conservation: Lessons from existing environmental Stewardship Scheme options. *Land Use Policy,* **30**(1), 847-862.
Franks, J. R., Emery, S. B., Whittingham, M. J. & McKenzie, A. J. (2011). *Options for landscape scale collaboration under the UK's Environmental Stewardship Scheme*.
Garforth, C. & Rehman, T. (2006). *Research to Understand and Model the Behaviour and Motivations of Farmers in Responding to Policy Changes (England): Final report and annexesuu*. Research project EPES 0405/17.
Gaston, K. J., Charman, K., Jackson, S. F., Armsworth, P. R., Bonn, A., Briers, R. A., Callaghan, C. S. Q., Catchpole, R., Hopkins, J., Kunin, W. E., Latham, J., Opdam, P., Stoneman, R., Stroud, D. A. & Tratt, R. (2006). The ecological effectiveness of protected areas: The United Kingdom. *Biological Conservation,* **132**(1), 76-87.
Gatto, P., Mozzato, D. & Defrancesco, E. (2019). Analysing the role of factors affecting farmers' decisions to continue with agri-environmental schemes from a temporal perspective. *Environmental Science & Policy,* **92**, 237-244.
Grant, A. (2019). *Doing Excellent Social Research with Documents: Practical Examples and Guidance for Qualitative Researchers*. Milton: Routledge.
Greene, J. C., Caracelli, V. J. & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis,* **11**(3), 255-274.
Guest, G., Namey, E. & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS ONE,* **15**, e0232076.
Häfner, K. & Piorr, A. (2021). Farmers' perception of co-ordinating institutions in agri-environmental measures – The example of peatland management for the provision of public goods on a landscape scale. *Land Use Policy,* **107**, 104947.
Hailemichael, S. & Haug, R. (2020). The use and abuse of the 'model farmer' approach in agricultural extension in Ethiopia. *The Journal of Agricultural Education and Extension,* **26**(5), 465-484.
Hall, J. (2008). *The Role of Social Capital in Farmers' Transitions Towards More Sustainable Land Management.* PhD, University of Essex.
Hall, J. (2019). *Improving Landscape-scale Delivery through Farmer Collaboration: a pilot study exploring how farmer collaboration affects social & environmental outcomes at a landscape scale*.
Hall, J. & Pretty, J. (2008). Then and now: Norfolk farmers' changing relationships and linkages with government agencies during transformations in land management. *Journal of Farm Management,* **13**(6), 393-418.
Hardy, S. D. (2022). Power to the people: Collaborative watershed management in the Cuyahoga River Area of Concern (AOC). *Environmental Science & Policy,* **129**, 79-86.
Harvey, G., Loftus-Hills, A., Rycroft-Malone, J., Titchen, A., Kitson, A., McCormack, B. & Seers, K. (2002). Getting evidence into practice: the role and function of facilitation. *Journal of Advanced Nursing,* **37**(6), 577-588.

Head, B. W., Ross, H. & Bellamy, J. (2016). Managing wicked natural resource problems: The collaborative challenge at regional scales in Australia. *Landscape and Urban Planning,* **154**, 81-92.

Hejnowicz, A. P., Rudd, M. A. & White, P. C. L. (2016). A survey exploring private farm advisor perspectives of agri-environment schemes: The case of England's Environmental Stewardship programme. *Land Use Policy,* **55**, 240-256.

Helm, D. (2019). *Green and prosperous land: a blueprint for rescuing the British Countryside*. William Collins.

Hildyard, N., Hegde, P., Wolvekamp, P. and Reddy, S (2001). Pluralism, Participation and Power: Joint Forest Management in India. *In:* Cooke, B. a. K., U. (ed.) *Participation: The New Tyranny.* UK: Zed Books.

Hohl, A. M., Hohl, A. M., Picard, C. H., Clark, S. G. & Middleton, A. (2015a). Large-Scale Conservation in the Common Interest Approaches to Large-Scale Conservation: A Survey. *Large-Scale Conservation in the Common Interest*, 29-51.

Hohl, A. M., Picard, C. H., Clark, S. G. & Middleton, A. (2015b). *Approaches to Large-Scale Conservation: A Survey*. Springer International Publishing.

Holstead, K. L., Kenyon, W., Rouillard, J. J., Hopkins, J. & Galan-Diaz, C. (2017). Natural flood management from the farmer's perspective: criteria that affect uptake. *Journal of Flood Risk Management,* **10**(2), 205-218.

Howley, P., Buckley, C., O. Donoghue, C. & Ryan, M. (2015). *Explaining the economic 'irrationality' of farmers' land use behaviour: The role of productivist attitudes and non-pecuniary benefits*.

Hunter, S. C., Young, J. A., Lawless, M. T., Kitson, A. L. & Feo, R. (2020). Introducing an interactional approach to exploring facilitation as an implementation intervention: examining the utility of Conversation Analysis. *Implementation Science Communications,* **1**(1), 98.

Hurley, P., Lyon, J., Hall, J., Little, R., Tsouvalis, J., White, V. & Rose, D. C. (2022). Co-designing the environmental land management scheme in England: The why, who and how of engaging 'harder to reach' stakeholders. *People and Nature,* **n/a**(n/a).

Ingram, J., Dwyer, J., Gaskell, P., Mills, J. & Wolf, P. d. (2018). Reconceptualising translation in agricultural innovation: A co-translation approach to bring research knowledge and practice closer together. *Land Use Policy,* **70**, 38-51.

Ingram, J., Gaskell, P., Mills, J. & Short, C. (2013). Incorporating agri-environment schemes into farm development pathways: A temporal analysis of farmer motivations. *Land Use Policy,* **31**(Supplement C), 267-279.

Inman, A., Winter, M., Wheeler, R., Vrain, E., Lovett, A., Collins, A., Jones, I., Johnes, P. & Cleasby, W. (2018). An exploration of individual, social and material factors influencing water pollution mitigation behaviours within the farming community. *Land Use Policy,* **70**(Supplement C), 16-26.

Jack, C., Adenuga, A., Ashfield, A. & Wallace, M. (2020). Investigating the Drivers of Farmers' Engagement in a Participatory Extension Programme: The Case of Northern Ireland Business Development Groups. *Sustainability,* **12**, 4510.

Jarrett, C., Morris, C., Wheeler, R. & Winter, M. (2015). *Literature Review on Farming Collaboration. Report for Defra Project LM0302 Sustainable Intensificaton Research Platform Project 2: Opportunties and Risks for Farming and the Environment at Landscape Scales*.

Joint Nature Conservation Committee. (1994). *The UK Biodiversity Action Plan (UK BAP) 1992–2012*.

Joint Nature Conservation Committee. (2019). *UK Biodiversity Action Plan Priority Habitats*. URL: https://jncc.gov.uk/our-work/uk-bap-priority-habitats/ [20/10/2012].

Joint Nature Conservation Committee. (2020). *Area of land in agri-environment schemes*. URL: https://jncc.gov.uk/our-work/ukbi-b1a-agri-environment-schemes/.

Jones, N., Cao, Y., Adamson, H., Lewis-Reddy, L., Crowe, A. & Hockridge, B. (2020). *Facilitation Fund Phase 2 Evaluation*.

King, B., Fielke, S., Bayne, K., Klerkx, L. & Nettle, R. (2019). Navigating shades of social capital and trust to leverage opportunities for rural innovation. *Journal of Rural Studies,* **68**, 123-134.

Klerkx, L. & Proctor, A. (2013). Beyond fragmentation and disconnect: Networks for knowledge exchange in the English land management advisory system. *Land Use Policy,* **30**(1), 13-24.
Kollmuss, A. & Agyeman, J. (2002). Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research,* **8**(3), 239-260.
Kothari, U. (2001). Power, Knowledge and Social Control in Participatory Development. *In:* cooke, B. a. K., U (ed.) *Participation: The New Tryanny?* UK: Zed Books.
Krämer, J. E. & Wätzold, F. (2018). The Agglomeration Bonus in Practice—An Exploratory Assessment of the Swiss Network Bonus. *Journal for Nature Conservation*.
Kuhfuss, L., Preget, R., Thoyer, S., Hanley, N., Le Coent, P. & Desole, M. (2016). Nudges, Social Norms, and Permanence in Agri-environmental Schemes. *Land Economics,* **92**(4), 641-655.
Landreman, L. M. (2013). *The Art of Effective Facilitation : Reflections from Social Justice Educators*. Herndon, UNITED STATES: Stylus Publishing, LLC.
Langhammer, M., Grimm, V., Pütz, S. & Topping, C. J. (2017). A modelling approach to evaluating the effectiveness of Ecological Focus Areas: The case of the European brown hare. *Land Use Policy,* **61**(Supplement C), 63-79.
Lawrence, A. (2006). 'No Personal Motive?' Volunteers, Biodiversity, and the False Dichotomies of Participation. *Ethics, Place & Environment,* **9**(3), 279-298.
Leventon, J., Schaal, T., Velten, S., Dänhardt, J., Fischer, J., Abson, D. J. & Newig, J. (2017). Collaboration or fragmentation? Biodiversity management through the common agricultural policy. *Land Use Policy,* **64**(Supplement C), 1-12.
Lewis, J. & McNaughton Nichols, C. (2014). Design Issues. *In:* Ritchie, J., Lewis, J., McNaughton Nichols, C. & Ormston, R. (eds.) *Qualitative Research Practice.* United Kingdon: Sage.
Lewis, J., Ritchie, J., Ormston, R. & Morrell, G. (2014). Generalising from qualitative research. *In:* Ritchie, J., Lewis, J., McNaughton Nichols, C. & Ormston, R. (eds.) *Qualitative Reseach Practice: a guide for socal science students and researchers.* United Kingdom: Sage.
Lobley, M., Saratsi, E., Winter, M. & Bullock, J. M. (2013). *Training farmers in agri-environmental management: the case of Environmental Stewardship in lowland England*.
Lobley, M., Winter, M. & Wheeler, R. (2018). *The Changing World of Farming in Brexit UK*. UK: Routledge.
MacMillan, T. & Cusworth, G. (2019). Farmer co-operation in the UK Opportunities for the industry.
Marchand, F., Chiswell, H., Ingram, J., Pappa, E., Alexopoulos, Y., Koutsouris, A., Cooreman, H., Hubeau, M. & Debruyne, L. (2017). *Best practice for on-farm demonstration activities, programmes and organisations: an analysis of the interplay between key characteristics*.
McCarthy, J., Meredith, D. & Bonnin, C. (2021). Actor motivations to engage with collaborative agri-environmental policy: An assemblage based exploration. *Journal of Rural Studies,* **87**, 88-98.
McCracken, M. E., Woodcock, B. A., Lobley, M., Pywell, R. F., Saratsi, E., Swetnam, R. D., Mortimer, S. R., Harris, S. J., Winter, M., Hinsley, S. & Bullock, J. M. (2015). Social and ecological drivers of success in agri-environment schemes: the roles of farmers and environmental context. *Journal of Applied Ecology,* **52**(3), 696-705.
Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis: an expanded sourcement*. UK: Sage.
Mills, J. (2012). Exploring the social benefits of agri-environment schemes in England. *Journal of Rural Studies,* **28**(4), 612-621.
Mills, J., Gaskell, P., Ingram, J. & Chaplin, S. (2018). Understanding farmers' motivations for providing unsubsidised environmental benefits. *Land Use Policy*.
Mills, J., Gibbon, D., Ingram, J., Reed, M., Short, C. & Dwyer, J. (2011). Organising Collective Action for Effective Environmental Management and Social Learning in Wales. *The Journal of Agricultural Education and Extension,* **17**(1), 69-83.
Mohan, G. (2001). Beyond Participation: Strategies for Deeper Empowerment. *In:* Cooke, B. a. K., U (ed.) *Participation: The New Tyranny?* UK: Zed Books.

Montes de Oca Munguia, O., Pannell, D. J., Llewellyn, R. & Stahlmann-Brown, P. (2021). Adoption pathway analysis: Representing the dynamics and diversity of adoption for agricultural practices. *Agricultural Systems,* **191**, 103173.

Morgans, L. C., Bolt, S., Bruno-McClung, E., van Dijk, L., Escobar, M. P., Buller, H. J., Main, D. C. J. & Reyher, K. K. (2021). A participatory, farmer-led approach to changing practices around antimicrobial use on UK farms. *Journal of Dairy Science,* **104**(2), 2212-2230.

Morris, C. & Potter, C. (1995). Recruiting the new conservationists: Farmers' adoption of agri-environmental schemes in the U.K. *Journal of Rural Studies,* **11**(1), 51-63.

Mosse, D. (2001). 'People's knowledge, Participation and Patronage: Operations and Respresentations in Rural Development. *In:* Cooke, B. a. K., U. (ed.) *Participation: The New Tyranny?* UK: Zed Books.

Musacchio, A., Re, V., Mas-Pla, J. & Sacchi, E. (2020). EU Nitrates Directive, from theory to practice: Environmental effectiveness and influence of regional governance on its performance. *Ambio,* **49**(2), 504-516.

Natural England (2013). Monitoring the Impacts of Entry Level Stewardship. UK: Natural England.

Natural England. (2014). *Assessing the importance of spatial location of agri environment options within the landscape to butterflies*. URL: http://publications.naturalengland.org.uk/publication/5487886094827520.

Natural England. (2020). *Nature Networks Evidence Handbook*. URL: http://publications.naturalengland.org.uk/publication/6105140258144256.

Nye, C. (2017). *Forgotten Farm Workers: Contemporary Farm Labour and Sustainability in the South West of England.* PhD, University of Exeter.

Nye, C. (2018). *Report on Landscape-Scale Farmer Groups*.

Ockendon, N., Thomas, D. H. L., Cortina, J., Adams, W. M., Aykroyd, T., Barov, B., Boitani, L., Bonn, A., Branquinho, C., Brombacher, M., Burrell, C., Carver, S., Crick, H. Q. P., Duguy, B., Everett, S., Fokkens, B., Fuller, R. J., Gibbons, D. W., Gokhelashvili, R., Griffin, C., Halley, D. J., Hotham, P., Hughes, F. M. R., Karamanlidis, A. A., McOwen, C. J., Miles, L., Mitchell, R., Rands, M. R. W., Roberts, J., Sandom, C. J., Spencer, J. W., ten Broeke, E., Tew, E. R., Thomas, C. D., Timoshyna, A., Unsworth, R. K. F., Warrington, S. & Sutherland, W. J. (2018). One hundred priority questions for landscape restoration in Europe. *Biological Conservation,* **221**, 198-208.

Oldfield, T. E. E., Smith, R. J., Harrop, S. R. & Leader-Williams, N. (2004). A gap analysis of terrestrial protected areas in England and its implications for conservation policy. *Biological Conservation,* **120**(3), 303-309.

Oreszczyn, S., Lane, A. & Carr, S. (2010). The role of networks of practice and webs of influencers on farmers' engagement with and learning about agricultural innovations. *Journal of Rural Studies,* **26**(4), 404-417.

Phillipson, J., Proctor, A., Emery, S. B. & Lowe, P. (2016). Performing inter-professional expertise in rural advisory networks. *Land Use Policy,* **54**, 321-330.

Pike, N. (2008). Understanding behaviours in a farming context: bringing theoretical and applied evidence together from across Defra and highlighting policy relevance and implications for future research. UK.

Porter, J., Jogata, L., Brookes, J., Mahony, P., Howard, B., Waters, R. & Hunt, D. (2014). *Ecosystem approach handbook: Ideas and advice for your project or partnership.* . United Kingdom.

Prager, K. (2015a). Agri-environmental collaboratives as bridging organisations in landscape management. *Journal of Environmental Management,* **161**, 375-384.

Prager, K. (2015b). Agri-environmental collaboratives for landscape management in Europe. *Current Opinion in Environmental Sustainability,* **12**, 59-66.

Prager, K. (2022). Implementing policy interventions to support farmer cooperation for environmental benefits. *Land Use Policy,* **119**, 106182.

Prager, K. & Creaney, R. (2017). Achieving on-farm practice change through facilitated group learning: Evaluating the effectiveness of monitor farms and discussion groups. *Journal of Rural Studies,* **56**, 1-11.

Prager, K., Creaney, R. & Lorenzo-Arribas, A. (2017). Criteria for a system level evaluation of farm advisory services. *Land Use Policy,* **61**, 86-98.

Prager, K., Labarthe, P., Caggiano, M. & Lorenzo-Arribas, A. (2016). How does commercialisation impact on the provision of farm advisory services? Evidence from Belgium, Italy, Ireland and the UK. *Land Use Policy,* **52**, 329-344.

Prager, K., Reed, M. & Scott, A. (2012). Encouraging collaboration for the provision of ecosystem services at a landscape scale—Rethinking agri-environmental payments. *Land Use Policy,* **29**(1), 244-249.

Prager, K. & Thomson, K. (2014). AKIS and advisory services in the UK. Report for the AKIS inventory (WP3) of the PRO AKIS project.

Pretty, J., Attwood, S., Bawden, R., van den Berg, H., Bharucha, Z. P., Dixon, J., Flora, C. B., Gallagher, K., Genskow, K., Hartley, S. E., Ketelaar, J. W., Kiara, J. K., Kumar, V., Lu, Y., MacMillan, T., Maréchal, A., Morales-Abubakar, A. L., Noble, A., Prasad, P. V. V., Rametsteiner, E., Reganold, J., Ricks, J. I., Rockström, J., Saito, O., Thorne, P., Wang, S., Wittman, H., Winter, M. & Yang, P. (2020). Assessment of the growth in social groups for sustainable agriculture and land management. *Global Sustainability,* **3**, e23.

Quimby, B. & Levine, A. (2018). Participation, Power, and Equity: Examining Three Key Social Dimensions of Fisheries Comanagement. *Sustainability,* **10**(9), 3324.

Raymond, C. M. & Robinson, G. M. (2013). Factors affecting rural landholders' adaptation to climate change: Insights from formal institutions and communities of practice. *Global Environmental Change-Human and Policy Dimensions,* **23**(1), 103-114.

Reed, M. S. (2008). Stakeholder participation for environmental management: A literature review. *Biological Conservation,* **141**(10), 2417-2431.

Reed, M. S., Vella, S., Challies, E., de Vente, J., Frewer, L., Hohenwallner-Ries, D., Huber, T., Neumann, R. K., Oughton, E. A., Sidoli del Ceno, J. & van Delden, H. (2018). A theory of participation: what makes stakeholder and public engagement in environmental management work? *Restoration Ecology,* **26**(S1), S7-S17.

Rehbinder, E. & Stewart, R. (2020). *Environmental Protection Policy: Legal Integration in the United States and the European Community*. De Gruyter.

Ritchie, J. & Ormston, R. (2014). The applications of qualitative methods to social research. *In:* Ritchie, J., Lewis, J., McNaughton Nichols, C. & R, O. (eds.) *Qualitative research practice : a guide for social science students and researchers.* Second edition ed. UK: Sage.

Roberts, R. M., Jones, K. W., Cottrell, S. & Duke, E. (2020). Examining motivations influencing watershed partnership participation in the Intermountain Western United States. *Environmental Science & Policy,* **107**, 114-122.

Rogers, E. M. (1995). Diffusion of Innovation. New York: The Free Press.

Rose, D. C., Keating, C. & Morris, C. (2018). *Understand how to influence farmers' decision-making behaviour: a social science literature review*.

Rose, D. C., Sutherland, W. J., Barnes, A. P., Borthwick, F., Ffoulkes, C., Hall, C., Moorby, J. M., Nicholas-Davies, P., Twining, S. & Dicks, L. V. (2019). Integrated farm management for sustainable agriculture: Lessons for knowledge exchange and policy. *Land Use Policy,* **81**, 834-842.

Royal, T. (2021). Private land conservation policy in Australia: Minimising social-ecological trade-offs raised by market-based policy instruments. *Land Use Policy,* **109**, 105473.

Runhaar, H. & Polman, N. (2018). Partnering for nature conservation: NGO-farmer collaboration for meadow bird protection in the Netherlands. *Land Use Policy,* **73**, 11-19.

Rust, N. A., Stankovics, P., Jarvis, R. M., Morris-Trainor, Z., de Vries, J. R., Ingram, J., Mills, J., Glikman, J. A., Parkinson, J., Toth, Z., Hansda, R., McMorran, R., Glass, J. & Reed, M. S. (2021). Have farmers had enough of experts? *Environmental Management*.

Schroeder, L. A., Chaplin, S. & Isselstein, J. (2015). What influences farmers' acceptance of agri-environment schemes? An ex-post application of the 'Theory of Planned Behaviour. *Landbauforsch,* **65**, 15-128.

Scoones, I. & Thompson, J. (2009). *Farmer first revisited : innovation for agricultural research and development*. Rugby, UK : Practical Action Pub.
Sheail, J. (2002). *An Environmental History of Twentieth Century Britain*. UK: Palgrave.
Shrubsole, G. (2019). *Who Owns England? How we Lost our Green and Pleasant Land and How to Take it Back* London: Harpercollins.
Shwartz, A., Davies, Z. G., Macgregor, N. A., Crick, H. Q. P., Clarke, D., Eigenbrod, F., Gonner, C., Hill, C. T., Knight, A. T., Metcalfe, K., Osborne, P. E., Phalan, B. & Smith, R. J. (2017). Scaling up from protected areas in England: The value of establishing large conservation areas. *Biological Conservation,* **212**, 279-287.
Silverman, D. (2011). *Interpreting qualitative data*. London: London : SAGE.
Skaalsveen, K., Ingram, J. & Urquhart, J. (2020). The role of farmers' social networks in the implementation of no-till farming practices. *Agricultural Systems,* **181**, 102824.
Smalley, R. (2021). *"Keeping on top of it": how livestock farmers manage their workloads and the demands of farm assurance* PhD, University of Reading.
Smith, H. F. & Sullivan, C. A. (2014). Ecosystem services within agricultural landscapes—Farmers' perceptions. *Ecological Economics,* **98**(Supplement C), 72-80.
South Downs National Park. (2016). *South Downs National Park Ecosystem Services Map*. URL: https://www.southdowns.gov.uk/planning/south-downs-local-plan_2019/policies-map/ecosystems-services-map/.
South Downs National Park. (2022). *Farm Clusters, overview*. URL: https://www.southdowns.gov.uk/custodians/farming/farm-clusters/ [16/5/2022].
Stallman, H. R. (2011). Ecosystem services in agriculture: Determining suitability for provision by collective management. *Ecological Economics,* **71**(Supplement C), 131-139.
Starnes, T., Beresford, A. E., Buchanan, G. M., Lewis, M., Hughes, A. & Gregory, R. D. (2021). The extent and effectiveness of protected areas in the UK. *Global Ecology and Conservation,* **30**, e01745.
Stephens, J. (2019). *Participation vs engagement: here is the difference*. URL: https://cele.sog.unc.edu/participation-vs-engagement-here-is-the-difference/ [31/1/2022].
Šūmane, S., Kunda, I., Knickel, K., Strauss, A., Tisenkopfs, T., Rios, I. d. I., Rivera, M., Chebach, T. & Ashkenazy, A. (2018). Local and farmers' knowledge matters! How integrating informal and formal knowledge enhances sustainable and resilient agriculture. *Journal of Rural Studies,* **59**, 232-241.
Sutherland, L.-A., Burton, R. J. F., Ingram, J., Blackstock, K., Slee, B. & Gotts, N. (2012). Triggering change: Towards a conceptualisation of major change processes in farm decision-making. *Journal of Environmental Management,* **104**, 142-151.
Sutherland, L.-A., Mills, J., Ingram, J., Burton, R. J. F., Dwyer, J. & Blackstock, K. (2013). Considering the source: Commercialisation and trust in agri-environmental information and advisory services in England. *Journal of Environmental Management,* **118**, 96-105.
Thompson, P., Dent, T. & Watt, S. (2015). The Game and Wildlife Conservation Trust Farmer Cluster Pilot Project Final Report. Uk: Game and Wildlife Trust.
Timans, R., Wouters, P. & Heilbron, J. (2019). Mixed methods research: what it is and what it could be. *Theory and Society,* **48**(2), 193-216.
Toderi, M., Francioni, M., Seddaiu, G., Roggero, P. P., Trozzo, L. & D'Ottavio, P. (2017). Bottom-up design process of agri-environmental measures at a landscape scale: Evidence from case studies on biodiversity conservation and water protection. *Land Use Policy,* **68**, 295-305.
Tsouvali, J. & Little, R. (2019). *Factors Influencing Farmer Participation In Agri-Environment Schemes (AES) – Evidence From The Social Sciences*.
UK Parliament. (2021). *Environment Bill*. URL: https://bills.parliament.uk/bills/2593 [21/10/2021].
van Dijk, W. F. A., Lokhorst, A. M., Berendse, F. & de Snoo, G. R. (2015). Collective agri-environment schemes: How can regional environmental cooperatives enhance farmers' intentions for agri-environment schemes? *Land Use Policy,* **42**(Supplement C), 759-766.

van Dijk, W. F. A., Lokhorst, A. M., Berendse, F. & de Snoo, G. R. (2016). Factors underlying farmers' intentions to perform unsubsidised agri-environmental measures. *Land Use Policy,* **59**(Supplement C), 207-216.

Vrain, E. & Lovett, A. (2016). The roles of farm advisors in the uptake of measures for the mitigation of diffuse water pollution. *Land Use Policy,* **54**, 413-422.

Westerink, J., Jongeneel, R., Polman, N., Prager, K., Franks, J., Dupraz, P. & Mettepenningen, E. (2017). Collaborative governance arrangements to deliver spatially coordinated agri-environmental management. *Land Use Policy,* **69**(Supplement C), 176-192.

Whaley, L. (2014). Agriculture and water: emerging perspectives on farmer cooperation and adaptive co-management. *Outlook on Agriculture,* **43**(4), 229-233.

Whaley, L. & Weatherhead, E. K. (2015). Power-Sharing in the English Lowlands? The Political Economy of Farmer Participation and Cooperation in Water Governance. *Water Alternatives-an Interdisciplinary Journal on Water Politics and Development,* **8**(1), 820-843.

Wheeler, R., Ingram, J., Nye, C., Gaskell, P., Mills, J., Lewis, N., Wilkinson, T. & Lobley, M. (2021). *Collaboration and Incentives - Achieving environmental benefits at large spatial scales through Environmental Land Management*. URL: http://socialsciences.exeter.ac.uk/media/universityofexeter/research/microsites/centreforruralpolicyresearch/pdfs/researchreports/15094_Collaborative_mechanisms_REA.pdf.

White, V. H., Paul; Hall, Jilly; Lyon, Jessica; Tsouvalis, Judith; Rose, David Christian. (2021). *Engaging 'harder to reach' farmers: the roles and needs of skilled intermediaries. Research Summary*.

Wildlife Trusts (2020). *Nature Recovery Network Handbook*. UK: Wildlife Trusts.

Wilkinson, M. (2012). *The Secrets of Facilitation : The SMART Guide to Getting Results with Groups*. Hoboken, UNITED STATES: John Wiley & Sons, Incorporated.

Wilson, G. A. (2004). The Australian Landcare movement: towards 'post-productivist' rural governance? *Journal of Rural Studies,* **20**(4), 461-484.

Winter, M. (1996). Landwise or land foolish? Free conservation advice for farmers in the wider english countryside. *Landscape Research,* **21**(3), 243-263.

Winter, M., Lobley, M., Collins, A., Anthony, S., Emmett, B., Morris, C., Jarratt, S., Boatman, N. D., Campbell, C. & Hodge, I. (2017). *Final scoping study SIP Project 2: Opportunities and Risks for Farming and the Environment at Landscape Scales*. SIP Project 2: Opportunities and Risks for Farming and the Environment at Landscape Scales.

Wratten, S., Sandhu, H., Cullen, R., Costanza, R. & Costanza, R. (2013). *Ecosystem Services in Agricultural and Urban Landscapes*. Chicester, UNITED KINGDOM: John Wiley & Sons, Incorporated.

Wynne-Jones, S. (2017). Understanding farmer co-operation: Exploring practices of social relatedness and emergent affects. *Journal of Rural Studies,* **53**, 259-268.

Wynne-Jones, S., Hyland, J., Williams, P. & Chadwick, D. (2020). Collaboration for Sustainable Intensification: The Underpinning Role of Social Sustainability. *Sociologia Ruralis,* **60**(1), 58-82.

Young, J. C., Rose, D. C., Mumby, H. S., Benitez-Capistros, F., Derrick, C. J., Finch, T., Garcia, C., Home, C., Marwaha, E., Morgans, C., Parkinson, S., Shah, J., Wilson, K. A. & Mukherjee, N. (2018). A methodological guide to using and reporting on interviews in conservation science research. *Methods in Ecology and Evolution,* **9**(1), 10-19.

Appendix 1. Interview questions

Large-scale environmental project manager semi-structured interview questions (not changed after pilot)

- How much land was/is in your project area and who controls the land?
- If you have private landowners/farmers within your project area how have/are they involved in the project?
- What are your reflections about working with private landowners?

Pilot study

Facilitator questions

- Could you talk about how you have ended up being a facilitator – what was your previous experience?
- How did you get to know the farmers in your group?
- What do you think your role is?
- Do you think your role has changed over time?
- How would you characterise the farmers in your group?
- How do different farmers participate in the group?
- Can you describe for me how the group works? Is there a leader, steering group for instance?
- What do you think the aims of the group are? Are they fixed or do they change?

Farmer questions

- Tell me about your farm, how you came to farm here and how you farm now?
- Why did you decide to join the farmer group?
- What do you think the farmer group is trying to do?
- What do you think the group has achieved?
- What are the best things about it from your point of view?
- Have you changed the way you farm or manage the land since you joined the group?
- What do you think the role of your facilitator is? What makes a good facilitator?
- What do you think the group could do in the long-term?

Main study: Facilitation Funds

Facilitator questions

- How is your group organised? Who decides on what the activities of the group are?
- Where acquiring new skills/knowledge is the aim – who do you think farmers are learning from?
- What kind of discussion do you have during events?
- What kind of events have you found that farmers prefer?

- For the RPA's purposes, your members are defined by a named individual attached to an SBI – how would you define your membership?
- Are all your members equally engaged?
- How do you engage with your 'difficult to reach' members, ie people who are signed up but don't seem to take an active part in the group?
- How do you encourage cross holding delivery ? (cite a specific example).

Questions for Farmers

- Tell me about your farm business, what you do on the farm, diversification, the different roles of people on the farm?
- How did you get involved in the group?
- What do you think about group?
- How many meetings does your group have a year?
- How many do you go to?
- How did / do you decide who from within the farm should attend the events? How many people from the farm attend?
- What kind of meetings to you like to go to and why?
- When you have not attended an event, what were the reasons?
- After an event, do you discuss it with anyone else on the farm?
- Has being a member of the group changed your approach to your farm?
- Has it changed your relationship with your neighbouring farmers? If yes how? – socially or by joining up action across your combined holdings or by learning from each other

Appendix 2. Data sampling

Table 32 Details of primary and secondary samples drawn from the 2015-16 cohort of successful Facilitation Funds

Group code	Year	Application form	Event register: Engagement analysis	Event register: On and off farm engagement analysis	Evaluation analysis	Progress report analysis	Pilot study qualitative observation and interviews	Main study qualitative interviews
1	2015	Yes	Yes					
2	2015	Yes						
3	2015	Yes	Yes	Yes				
4	2015	Yes						
5	2015	Yes						
6	2015	Yes	Yes	Yes		Yes		Yes
7	2015	Yes	Yes	Yes	Yes	Yes		
8	2015	Yes						Yes
9	2015	Yes	Yes			Yes		
10	2015	Yes	Yes	Yes	Yes	Yes		
11	2015	Yes						Yes
12	2015	Yes	Yes	Yes	Yes	Yes		
13	2015	Yes						
14	2015	Yes				Yes		
15	2015	Yes	Yes	Yes		Yes		
16	2016	Yes				Yes		
17	2015	Yes						
18	2015	Yes	Yes	Yes	Yes	Yes		
19	2015	Yes				Yes	Yes	
20	2016	Yes						
21	2016	Yes				Yes		
22	2016	Yes				Yes		
23	2016	Yes						
24	2016	Yes						
25	2016	Yes	Yes	Yes		Yes		
26	2016	Yes	Yes	Yes	Yes	Yes		
27	2016	Yes				Yes		Yes
28	2016	Yes						Yes
29	2016	Yes						
30	2015	Yes				Yes		
31	2016	Yes						
32	2016	Yes						

Group code	Year	Application form	Event register: Engagement analysis	Event register: On and off farm engagement analysis	Evaluation analysis	Progress report analysis	Pilot study qualitative observation and interviews	Main study qualitative interviews
33	2016	Yes				Yes		
34	2016	Yes						Yes
35	2016	Yes						
36	2016	Yes						
37	2016	Yes						
38	2016	Yes	Yes	Yes	Yes	Yes		
39	2016	Yes						
40	2016	Yes						
41	2016	Yes						
42	2016	Yes						
43	2016	Yes						
44	2016	Yes						
45	2016	Yes					Yes	
46	2016	Yes						
47	2016	Yes						
48	2016	Yes						
49	2016	Yes						
Total		**49 groups**	**12 groups**	**10 groups**	**6 groups**	**18 groups**	**2 groups**	**6 groups**

Appendix 3. Thematic analysis tables

Table 33 Summary of themes from progress reports 2015- 2019

GROUP/THEME	6	7	9	10	12	14	15	16	18	19	21	22	25	26	27	30	33	38	Total
Steering group	Yes	Yes			Yes		Yes		Yes	Yes			Yes		Yes	Yes	Yes		10
Group consulted on planning/directions	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	18
Discussion during events	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes		Yes		Yes		12
Cross holding cooperation		Yes			Yes	Yes	Yes	Yes		Yes		Yes					Yes		8
Voluntary actions	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes		Yes		14
Trial plots/projects	Yes	Yes	Yes		Yes	Yes			Yes	Yes	Yes		Yes				Yes		10
One to one advice given	Yes	Yes				Yes		Yes		Yes		Yes			Yes	Yes	Yes		10
Links to other organisations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	18
Organisations mentioned (see key below*)	Uni NE EA WC WT LA	NGO NE, Uni WC	FWAG NE SG WC	EA NFU NGO NE	EA FC GWCT NE RT	RSPB WT LP	CLA GWCT	WT AONB LP	WC, LA NE RT	WT GWCT, NP, NFU	NE, Uni EA AHDB, WT Vet	AHDB RT Vet NE	NE NP	NE NT LP RSPB WC	WC WT EA Uni	EA WT LP	WT RT, GWCT EA	LP RSPB	
Other bids developed by group	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes		Yes		Yes			Yes	12
Community engagement	Yes	Yes		Yes		Yes	Yes			Yes		Yes			Yes	Yes	Yes	Yes	11
Farm advisor events organised by group		Yes	Yes		Yes						Yes			Yes					5

*Uni = University, NE = Natural England, WC = Water company, WT = Wildlife Trust, LA = Local authority, EA = Environment Agency, SG = species groups, NFU = National Farmers Union, GWCT = Game Wildlife Conservancy Trust, LP = local partnership, Vet = Vetinery surgery, RSPB = Royal Society for the Protection of Birds, RT = Rivers Trust, AHDB = Agriculture and Horticulture Development Board

Notes demonstrating how themes above were identified.

Theme	How was theme presence was confirmed by data
Steering group	Where a steering group was mentioned.

Theme	How was theme presence was confirmed by data
Group consulted on planning/directions	Whole group discussion of group planning and/or direction mentioned.
Discussion during events	Where discussion was mentioned explicitly as taking place in a meeting. Examples: “there was good debate and much interest from attendees”, “very lively discussion took place with members each detailing successes and struggles of their scheme options”
Cross holding cooperation	Where an account was given of work which aimed to join-up environmental objectives across holdings. Examples: “organised a small group session between three adjoining farms. This was to allow for discussions of specific/local ‘on the ground’ problems and opportunities to work together”, “individuals have also shared details of their Stewardship options , allowing a larger map to be developed showing how their options relate to each other geographically”
Voluntary actions	Where an account was given of environmental work undertaken outside of AES. Example, a farmer was recorded as finding the Woodland Grant Scheme overly prescriptive and bureaucratic but decided to carry out the management plan they had commissioned for the scheme without applying for the scheme, another farmer was not in AES but positioned buffer strips to mitigate water quality issues.
Trial plots/projects	Projects which the group is undertaking themselves to test land management practices. Examples were wildflower plots and cover crops.
One to one advice given	One to one advice was recorded as being given by the facilitator or facilitating organisation
Links to other organisations	Where meetings with organisations were undertaken. Where possible the organisation was recorded.
Other bids developed by group	Accounts of groups applying for funding sources other than AES, e.g. for water company funding
Community engagement	Events which promoted the group’s or farmers’ work to the public or local community
Farm advisor events organised by group	Events which aimed to bring together farm advisors, e.g land agents, agronomists, in the group area were recorded.

Table 34 Summary of facilitator experience from successful group applications 2015-2016

Group	Farm experience (practical)	Farm experience (family)	Farming Education, eg agricultural college	Farm advice experience (production)	Formal farm advice qualifications, eg FACT, BASIS	Environmental organisation work experience	Farm advice experience (environment)
1						Yes	Yes
2	Yes	Yes	Yes		Yes	Yes	Yes
3	Yes	YEs	Yes	Yes		Yes	Yes,
4	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5						Yes	Yes
6	Yes		Yes		Yes	Yes	Yes
7	Yes	Yes	YEs	Yes	Yes	Yes	YEs
8	Yes		Yes			Yes	Yes
9	Yes		YEs		Yes	Yes	Yes
10	Yes		YEs	Yes	YEs	Yes	YEs
11	Yes		Yes	Yes	Yes	Yes	Yes
12	Yes	Yes	Yes	Yes	Yes		
13							Yes
14					Yes	Yes	Yes
15					Yes	Yes	Yes
16						Yes	Yes
17						Yes	Yes
18						Yes	Yes
19	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20	Yes	Yes					Yes
21			Yes	Yes	Yes	Yes	Yes
22	Yes	Yes				Yes	Yes
23				Yes			Yes
24			YEs			Yes	Yes
25	Yes			Yes	Yes	Yes	Yes
26					Yes	Yes	Yes
27						Yes	Yes
28	Yes			Yes	Yes		Yes
29	Yes			Yes	Yes		Yes
30	VOID	VOID	VOID	VOID	VOID	VOID	VOID
31	Yes		YEs		YEs	Yes	Yes
32					Yes	Yes	Yes
33			Yes	Yes			Yes
34				Yes	Yes	Yes	Yes
35	Yes	Yes	Yes	Yes	Yes		
36	Yes	Yes	Yes	Yes	Yes		
37							Yes
38	Yes			Yes		Yes	Yes
39	Yes			Yes		Yes	Yes
40			Yes	Yes	Yes		Yes
41						Yes	Yes
42				Yes	Yes		Yes
43	Yes	Yes	Yes		Yes	Yes	Yes
44						Yes	Yes
45	Yes	Yes		Yes	Yes	YEs	Yes
46						Yes	Yes
47						Yes	Yes
48	Yes	Yes	Yes	Yes	Yes	Yes	Yes
49	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes demonstrating how themes above were identified.

Theme	How was theme presence was confirmed by data
Farm experience (practical)	Evidence provided of working on a farm
Farm experience (family) Farming	Evidence provided of growing up on a farm or being associated with a farm through a relative
Education, eg agricultural college	Evidence provided of farm related qualifications, for example through agricultural college
Farm advice experience (production)	Evidence of providing farm advice related to farm productivity, for example agronomy or basic payment scheme administration
Formal farm advice qualifications, eg FACT, BASIS	Evidence of FACT or BASIS qualifications
Environmental organisation work experience	Evidence of having worked for an environmental organisations, for example NGO in some capacity, for instance as a ranger.
Farm advice experience (environment)	Evidence of providing environmental advice to farmers, for example as a catchment sensitive farming officer or other scheme or project.

Relevant sections of application form:
Are you applying in partnership with others? If yes, give details of your partnership and the roles the other partners.
Do you work for a larger organisation?
What experience do you have of bringing people together to act cooperatively? How did you do this and what were the outcomes?
What expertise do you have in agriculture, forestry, water management and/or ecology?
What experience do you have of the objectives covered by Countryside Stewardship?

Table 35 Themes drawn from successful application forms 2015-2016

Group	Knowledge from farmers	Involvement of farmers in choosing aims	Farming practice acknowledged	Coordination across holdings	Sharing of specialist machinery	Social aims	Monitoring	Public engagement
1	Yes	Yes		yes			yes	yes
2		Yes	Yes		Yes		Yes	
3	Yes	Yes	Yes	Yes	Yes		Yes	
4	Yes	Yes		Yes				
5	Yes	Yes	Yes		Yes		Yes	
6	Yes	Yes	Yes	Yes			Yes	
7	Yes	Yes		Yes			Yes	Yes
8				Yes				
9	Yes	Yes	Yes	Yes		Yes	yes	
10	Yes	Yes		yes	Yes			
11	Yes	Yes	Yes	Yes	Yes		Yes	Yes
12	Yes	Yes		Yes			Yes	
13	YEs	Yes		Yes		Yes		
14	Yes	Yes		Yes			Yes	
15	Yes	Yes		Yes		Yes	Yes	Yes
16	Yes		Yes	Yes	Yes		Yes	
17	Yes			Yes				
18	Yes					Yes		
19	Yes	Yes	Yes	Yes		Yes		Yes
20	YEs			Yes				
21			Yes	Yes		Yes		
22				Yes				
23	Yes		Yes	Yes	Yes		Yes	
24	Yes	Yes		Yes	Yes		Yes	
25	Yes	Yes		Yes	Yes		Yes	
26	Yes						Yes	
27			Yes	Yes				
28	Yes	Yes	yes	Yes			yes	
29	Yes	Yes	Yes	Yes			Yes	
30	VOID	VOID			VOID	VOID	VOID	VOID
31	Yes	YEs		Yes			Yes	
32	Yes	Yes		Yes				YEs
33	Yes	Yes		yes	Yes		Yes	
34	Yes	Yes		Yes	Yes		YEs	
35	Yes	Yes		Yes			YEs	
36	Yes	Yes		Yes			YEs	
37	YEs	Yes		Yes		Yes		
38	Yes	Yes		yes			yes	
39	Yes	Yes		yes			yes	
40	Yes	Yes		yes				
41		Yes		Yes			Yes	
42	Yes	YEs	Yes	Yes				
43	yes			Yes	Yes			
44				Yes			Yes	
45	Yes	Yes	YEs	Yes			Yes	Yes
46				Yes				
47				Yes	Yes			
48	Yes	Yes		Yes	Yes		Yes	
49	Yes	Yes		Yes	Yes		Yes	Yes
TOTAL	**39**	**34**	**15**	**44**	**15**	**7**	**30**	**8**

Notes demonstrating how themes above were identified.

Theme	How was theme presence was confirmed by data
Knowledge from farmers	Knowledge transfer was explicitly discussed as coming from farmers . Examples include "farmers in the group will be better placed to assist each other", "The group will be able to share equipment, knowledge and expertise."
Involvement of farmers in choosing aims	Where discussion or meetings with farmers were mentioned in the application form this was confirmed.

Theme	How was theme presence was confirmed by data
Farming practice/business acknowledged	Where farming practice and business was acknowledged within the application. Examples include considerations of business resilience, agronomic expertise , "the productivity and profitability of their land management"
Coordination across holdings	Where cross-holding delivery was explicitly discussed. Example "the group are starting to look at the issues in the area at a landscape scale rather than just on their own land and can see how working together to create linkages and connectivity can greatly enhance the overall benefits and outcomes of the priority statement."
Sharing of specialist machinery	Machinery rings and sharing mentioned
Social aims	Where explicitly social aims are mentioned. Examples, "relationships will be built between group members by incorporating a social element", "greater cohesion and support in the local farming community"
Monitoring of outcomes	Where a monitoring programme was stated as being part of the groups' intended activities.
Public engagement	Where engagement with the public was stated as one of the objectives of the group.

Relevant section from application form from which themes were drawn
How will you and the group take ownership and work together to develop the cooperation required to achieve their objectives – what roles will the members of the group have?
What new activities do your group members plan to undertake as a result of acting cooperatively?
What potential outcomes, wider benefits and added value will your group aspire to achieve by 2021/2 as a result of collaboration?
What services will you provide for your group and what do you seek to achieve?
The transfer of knowledge and expertise on a one-to-many basis to secure better practice is likely to be a core element of these activities. Please provide a plan detailing the training and advice and how you will deliver these.
Will you be relying upon a sub-contractor to provide training to fulfil any of the knowledge and expertise needs?
What do you expect your group members will do differently as a result of the new knowledge and expertise that they will receive?

Table 36 Analysis and categorisation of event evaluation comments made by farmers into those focusing on discussion/transmission

Group	Comments mentioning discussion	Percentage of discussion comments	Comments mentioning transmission	Percentage of content comments	Total events	Total no evaluation comments
Group 10	42	61.76	26	38.24	36	68
Group 26	29	65.91	15	34.09	23	44
Group 7	14	73.68	5	26.32	12	19
Group 12	9	24.32	28	75.68	23	37
Group 38	13	27.08	35	72.92	27	48
Group 18	77	59.23	53	40.77	73	130
					n =	346

Audit trail demonstrating how categories above were identified.

Discussion: comments which mentioned talking, discussion and networking with other farmers.
Tranmission: comments which mentioned what was learned or shown or comments on the expert speaker and presentation.

Figure 18. Percentage comparisons of two categories of comments: discussion and transmission by group

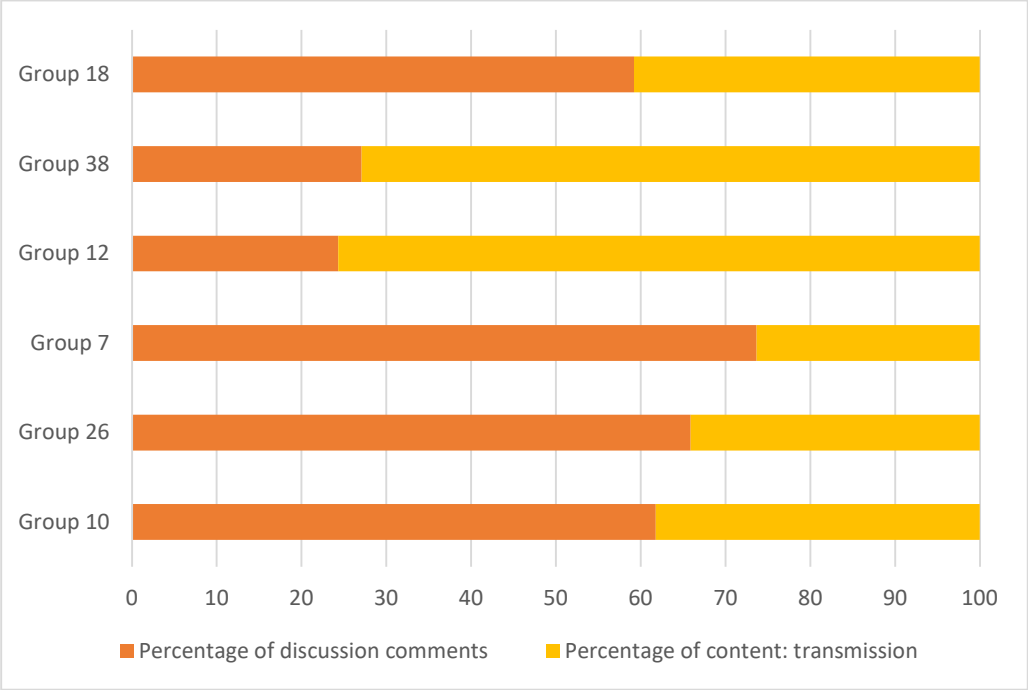


Table 37 Number of members and events for 12 groups. Count and percentage of members from 12 groups attending a percentile of events. No of groups = 12, No of members = 371, No of events = 385

Group	No of events	No of members	Number of members attending 0 events	Number of members attending 1-25% of events	Number of members attending 26-50% of events	Number of members attending 51 -75% of events	Number of members attending 76-100 events	Percentage of members attending 0 events	Percentage of members attending 1-25% of events	Percentage of members attending 26-50% of events	Percentage of members attending 51 -75% of events	Percentage of members attending 76-100 events
1	46	27	5	19	2	0	0	19	70	7	0	0
3	39	35	3	25	7	0	0	9	71	20	0	0
6	9	16	1	3	7	3	2	6	19	44	13	12
7	24	27	8	17	0	2	0	30	63	0	0	8
9	24	28	8	18	1	1	0	29	64	4	0	0
10	23	19	0	8	10	1	0	0	42	53	0	0
12	19	19	2	13	3	0	1	11	68	16	5	5
15	59	47	7	34	5	1	0	15	72	11	0	0
18	64	72	21	48	3	0	0	29	67	4	0	0
25	32	43	8	28	1	6	0	19	65	2	0	0
26	23	19	5	10	2	1	1	26	53	11	5	5
38	23	19	2	6	8	2	1	11	32	42	5	5
Total	385	371	70	229	49	17	5					

Appendix 4: CSFF Application Form

Countryside Stewardship facilitation fund

The European Agricultural Fund for Rural Development: Europe investing in rural areas

NATURAL ENGLAND

Application Form

Before completing this form you must read the guide to Countryside Stewardship facilitation funding and satisfy yourself that you are eligible to apply.

For the application to be eligible for funding you must be able to **answer yes to all** of the eligibility criteria. See Annex 1 of the guide to Countryside Stewardship Facilitation Funding.

You should also register as an applicant on Rural Payments before submitting this application form.

When to submit your application

You must submit your application by **13 May 2015**

How to submit your application

Please send your completed application form and any supporting information by email to CSFacilitationFund@naturalengland.org.uk

Get help with your application

Contact Natural England if you need more help with the application process by emailing CSFacilitationFund@naturalengland.org.uk or calling RPA Rural Payments on 0300 020 0301 and selecting option 2 for Natural England enquiries.

Section 1: About you

1. Your details

Name

Address

Town

County

Postcode

Phone number

Email address

Website address (if you have one)

2. Are you applying in partnership with others? Yes No

If yes, give details of your partnership and the roles the other partners will play:

3. **Do you work for a larger organisation?** Yes ☐ No ☐

If yes, give details of your organisation:

4. **Has your organisation formally agreed to you applying for this funding?** Yes ☐ No ☐

5. **Do you have any particular communication needs? eg. text phone, sign language, large print, audiotape or Braille.** Yes ☐ No ☐

If yes, please specify

Section 2: Your experience

6. **What experience do you have of bringing people together to act cooperatively?**

How did you do this and what were the outcomes? Please provide two references (max 300 words)

7. **What expertise do you have in agriculture, forestry, water management and/or ecology?**

Detail any qualifications, work you have done, practical experience and how much experience you have. Please provide two references (max 600 words)

8. **What is your experience of managing land or providing advice to deliver environmental objectives?**

What experience do you have of the objectives covered by Countryside Stewardship (Check .Gov for the latest information). Please provide two references (max 300 words)

Section 3: Your group

Your application will only be considered if:

- your group members manage[1] land that is sufficient in size to deliver the Countryside Stewardship priorities in the statements of priorities and covers a minimum of 2,000ha (unless the area fits a smaller obvious environmental boundary); and
- the land of your group members is spread across a minimum of four adjoining or largely adjoining holdings[2],[3], managed by different people, unless it can be demonstrated that cooperation is required across more dispersed holdings to deliver the Countryside Stewardship priorities from the statements of priorities.

You will also need to get the farmers, foresters and other land managers identified below to sign in the appropriate box to show that they have seen your application and support it. You should also copy your group into the email that you use to submit your application to us.

9. **When was your group established?**

We will support newly established groups and existing ones as long as their members are undertaking activities new to them.

Month Year

[1] i.e. members must be eligible to enter into management agreements under Countryside Stewardship or its predecessors.

[2] A holding is all the land managed by an applicant in England for agricultural and/or woodland activities. Where that holding or property is made up of geographically dispersed production or management units across England these can be entered separately.

[3] A common is treated as one holding for the purpose of this funding and can adjoin or largely adjoin non-common holdings for the land area.

10. **How many members will be included in your group?**

11. **Who are the farmers, foresters and/or other land managers that have agreed to receive your facilitation support?** Copy page 5 to create additional sheets if you wish to add more member details. (Please add your name and the date to each additional sheet)

How many additional sheets have you used?

Member name | Signature

Phone number

Email address

Member SBI | SBI of land if different

Existing agri-env agreement refs

Agreement expiry dates[4]

Member name | Signature

Phone number

Email address

Member SBI | SBI of land if different

Existing agri-env agreement refs

Agreement expiry dates[4]

Member name | Signature

Phone number

Email address

Member SBI | SBI of land if different

Existing agri-env agreement refs

Agreement expiry dates[4]

Member name | Signature

Phone number

Email address

Member SBI | SBI of land if different

Existing agri-env agreement refs

Agreement expiry dates[4]

If you are using this page as an additional sheet please add your name and the date completed.

Name of facilitator | Date of completion

[4] Agreements that run beyond 2020 will be eligible to count towards the minimum land and holdings thresholds in the eligibility criteria.

12. **How will you and the group work together to develop the cooperation – what roles will the members of the group have? (max 300 words)**

13. **Does your group already have an agreement in place to cover how it operates and deals with disputes etc?** Yes ☐ No ☐

If **yes**, please include a copy of the agreement with your application.

If **no**, please prepare an agreement with your group members and submit it with your application.

You will need to have created this agreement and send it to us before funding can begin.

Section 4: Countryside Stewardship priorities and areas of activity

14. **What is the total area of the holdings covered by the group?**

Please provide clearly annotated map/s, such as an Ordnance Survey, google electronic map or equivalent map of the land area with

- grid references that the group covers;
- who manages what land; and
- the size of their individual holding.

If the boundary of your holdings is smaller than 2,000ha, please describe its environmental boundary and why it is appropriate for the Countryside Stewardship priorities in the statements of priorities.

15. **Do ALL members of the group have management control of the land for the length of this agreement?** Yes ☐ No ☐

If No, the relevant landlord must be made aware of this application and landlords consent must be obtained by way of a consent letter which must be submitted with this application.

16. **Which Countryside Stewardship priorities from the CS statements of priorities will your members deliver?** (Max 300 words)

17. **What new activities do your group members plan to undertake as a result of acting cooperatively?**

Provide an outline of how this will differ from current activities (max 300 words)

18. **How will the cooperation amongst your group help to deliver better environmental outcomes than if individuals were acting independently and what do you expect those improvements to be?** (Max 300 words)

Section 5: Your proposed service

19. Project dates

When would you like your plan to begin? (Year)

How long will your plan last? (Years)

20. What services will you provide for your group and what do you seek to achieve?

The transfer of knowledge and expertise on a one-to-many basis to secure better practice is likely to be a core element of these activities. Please provide a training plan. You must specify how this knowledge and expertise is directly required for the Group's delivery of the Countryside Stewardship priorities in the statements of priorities (max 500 words)

21. **Will you be relying upon a sub-contractor to provide training to fulfil any of the knowledge and expertise needs? (If you do this you must comply with the requirements as set out in Annex 3 of the guide)** Yes ☑ No ☐

22. **What do you expect your group members will do differently as a result of the new knowledge and expertise that they will receive?**

List the added benefits to the delivery of the Countryside Stewardship priorities in the statements of priorities. (max 300 words)

23. **How will you establish and nurture cooperation amongst your group and why do you believe that you'll be successful?** (max 500 words)

24. **What do you plan to spend over the period you seek funding for? Please provide an outline budget.** (max 500 words)

25. **What engagement have you had with other initiatives (e.g. catchment partnerships, Nature Improvement Areas) and groups in your local area that are delivering Countryside Stewardship priorities from the statements of priorities?**

What steps will you take to ensure that there's coherence with the activities of the other groups' activities on delivering the priorities from the statements of priorities? (max 300 words)

26. **Is your group receiving any other funding, or are you planning to signpost your group members to funding sources outside of Countryside Stewardship that support delivery of your group's Countryside Stewardship priorities in the statements of priorities?** Yes ☐ No ☐

If **yes**, what are those sources and how will this be used to help deliver the group's Countryside Stewardship priorities (max 300 words)

27. Do your group wish you to broaden its membership?

Mention who you're likely to approach and how they could contribute to the delivery of the Countryside Stewardship priorities in the statements of priorities. (max 300 words)

Section 7: Project financial information

28. Estimate the revenue costs of your entire project, and the amount of grant you are applying for

(please note the ceilings from "how much could successful applicants receive").

Summary	2016 £	2017 £	2018 £	2019 £	2020 £	Grand total £ 2016 - 2020
A. Running costs of facilitating the cooperation within your group, including your salary costs						
B. Direct costs associated with the project set out in a detailed plan, including the transfer of knowledge and expertise where this is directly required for the Group's delivery of the Countryside Stewardship priorities in the statements of priorities						
C. Total of funding applied for (A and B)						

Check that all totals are correct.

Note that quarterly progress reports and evidence of expenditure are required to support claims.

29. Are you able to reclaim VAT costs from HM Revenue and Customs?

No – no costs

Yes – all costs

what is your VAT registration number?

Partially – what VAT can you reclaim and on what items?

- It is up to you to determine what VAT you are able to reclaim, if any.
- We will not fund reclaimable VAT.
- If you cannot reclaim VAT from HM Revenue and Customs all costs should include VAT.

Statutory authority funding

We cannot fund any expenditure that is incurred prior to the agreement being signed and can only fund projects which go beyond existing legal or statutory duties. This funding is only available to fund non-statutory duties (i.e. not for work or services that would normally be provided by a statutory authority, such as a local authority.)

30. Are you applying for funding that goes beyond existing legal or statutory duties? Yes ☐ No ☐

Section 8 - Finishing your application

I declare that:

- The information given on this application form and in any other documentation that supports this application is accurate;
- I/my organisation have read the Applicant's guidance and understand that the guidance, including the scheme requirements, terms and conditions set out therein, will form part of any agreement with Natural England that arises from this application;
- I understand that, if I/we make any materially misleading statements (whether deliberate or accidental) at any stage during the application process, or if I/we withhold any serious information, Natural England could judge that this grant application is invalid and I/we will be liable to repay any grant money that I/we have received;
- I have/My organisation has the power to accept a grant subject to conditions, and to repay the grant if Natural England decides that I/we have not met the grant conditions;
- The original wording and structure of this application form as it was originally provided has not been altered, deleted or added to in any way;
- I/My organisation will take all reasonable precautions to ensure that grant money I/we have received will not be misused or misappropriated in any way. I understand that Natural England will take legal action to recover any misappropriated funds;
- I/ My organisation will comply with all relevant legislation, such as health and safety regulations and have appropriate public liability and other insurances to undertake this role;
- I/my organisation confirm that I/we will provide information about the group's activities and the difference this is making on the ground to help Defra and Natural England monitor the success of Countryside Stewardship;
- To comply with the provisions of the Data Protection Act 1998, I/my organisation will inform members and those wishing to become members of the group that I/we are providing monitoring and evaluation to Natural England;
- I/My organisation have not/are not receiving any other funding, other than that declared in the application form, to support the project and if this changes, I/we will notify Natural England immediately;
- If any information in the application form changes, I/my organisation will notify Natural England in writing immediately.

☐ **Tick this box to confirm that you are authorised by the group/partnership to sign the declaration and send this application to us and that you understand our obligations under the Data Protection Act 1998, Environmental Information Regulations 2004 and Freedom of Information Act 2000.**

Signature		Date	
Title		First name	Surname
Position Held			

Please confirm below what supporting documents you are including with your application submission

Supporting document	Number included
Additional group member sheets (Q11 Page 5)	
Maps (Q14)	
Landlords consent letter(s), if required (Q15)	
Other documents - Please specify below	

Using and sharing your information

The data controller is Natural England, Foss House, Kings Pool, 1-2 Peasholme Green, York, YO1 7PX.

Your information will be stored and processed in accordance with the Data Protection Act 1998. This Act gives you, as an individual, the right to know what data we hold on you, how we use it, with whom we share it and for it to be accurate.

Information that you provide will be circulated and discussed in confidence with any person or organisation helping Natural England to assess and monitor this application. Some information will be shared with Government Departments to enable the detection of fraudulent applications and to co-ordinate the processing of complementary applications. As participation in this grant scheme involves expenditure of public money and there is public interest in how this money is spent, Natural England may make information publicly available about your application and any other information received during the lifetime of the grant.

Natural England or its appointed agents may use the name, address and other details on your application form to contact you in connection with occasional customer research aimed at improving the services that Natural England provides to you.

We will respect personal privacy, while complying with access to information requests to the extent necessary to enable Natural England to comply with its statutory obligations under the Environmental Information Regulations 2004, and the Freedom of Information Act 2000.