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ORIGINAL ARTICLE

Incentivising public goods delivery in the UK through the lens of Theories of Practice and Theory of Capital

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Abstract

Agri-environmental policies in England stand on the threshold of significant change, with a new suite of Environmental Land Management schemes set to embody more of the 'public money for public goods' principle. In addition, two tranches of these schemes appear heading towards a more collaborative approch towards delivering these public goods—suggesting that landholder collaborations would be a vital key to achieving this goal on such a scale. Running in parallel with this policy change is a countryside that has been undergoing a transition over the past several decades. This has seen a growing diversification in landholder types - prompting a re-examination not only with regards to the range of landholders who should be recruited into public goods delivery but the incentivisation strategies needed to recruit them as well. In this article, we examine the limitations of the behavioural approach utilised by past agri-environmental schemes to incentivise farmer uptake. We then propose the use of a Theories of Practice and Theory of Capital framework that shifts the approach towards a more targeted pattern of incentivisation, one which enables the recruitment of a much broader set of public goods providers into landholder

collaboration. To demonstrate how this framework can be applied, we present a case study around a range of collaboration models. Our findings suggest that in order for collaborations to be sustained in the long term, policymakers will need to think more directly with regard to the different aspects of collaboration that different landholders place value in. This would ensure opportunities for various forms of capital to be generated or for the recrafting of practices through intervention points. We conclude that the recrafting of the collaborative conservation practice not only can be accomplished through its constituent elements but by changing its practitioners as well—as exemplified by the different configurations of landholders that make up each of our five models of collaboration.

KEYWORDS
agri-environmental schemes, incentivisation strategies, landholder collaboration, public goods, Theory of Capital, Theory of Practice

INTRODUCTION

Agri-environmental policies in England stand on the threshold of significant change. As with the post-war period, the post-Brexit era presents another major opportunity to determine how rural lands in this country will be used and the policies that will shape it. The UK's departure from the EU marks a shift away from the productivist-centred policies that defined the post-war period (Argent, 2002; Hodge, 2001; Ward, 1993; Wilson, 2001), towards rural policies focused more on delivering environmental benefits, as reflected by the 'Public Money for Public Goods' principle governing the Environmental Land Management schemes (ELMs; DEFRA, 2020). This focus towards public goods provisioning in the coming years—with particular interest of doing so on a landscape scale-–requires major considerations on policy design. This is not only with regards to how farmers can be properly incentivised and supported under these new schemes but equally importantly how these policies can effectively recruit a much broader set of public good providers, than at present, in order to fully realise the scale of these conservation objectives. This stems from prior agri-environmental schemes viewing main occupation farmers as public goods providers of first resort in the countryside (Gorman et al., 2001; Lowe et al., 1993). However, the shifting policy ethos towards public goods delivery, paired with a countryside undergoing significant restructuring over the past decades (Baldock et al., 2001; Cloke & Goodwin, 1992; Kam & Potter, 2024; Marsden, 1999), prompts a re-examination into the strategies required if an increasingly diverse range of landholders and managers are to be effectively recruited into future schemes.

Traditional strategies, and thus measures of success, of past schemes have revolved around the maximisation of uptake by individual farmers (Morris & Potter, 1995), running under the

assumption that the collective actions of individual farms will result in landscape-scale outcomes. One reason for such an approach is due to the transaction cost of engaging landholders, with main occupation farmers generally having larger areas of land (e.g., Shucksmith & Herrmann, 2002) as compared to other types of landholders. This has lowered transaction cost for policies by engaging with larger-scale landholders in order to achieve their environmental targets—as opposed to engaging with numerous smaller-scale landholders (Pannell & Wilkinson, 2009; Pannell et al., 2006; Meadows et al., 2014). The focus on maximising enrolment has also driven the research agenda in farm studies from the 1980′s to the early 2000′s (Burton, 2004). The limited success of prior policies, such as the Farm Woodland Scheme and Farm Diversification Grant Scheme, with regard to ushering the desired changes on a large scale within the agriculture sector, has spurred the need for a better understanding of how farmers and actors respond to policy measures (Burton, 2004). This led the way for the increased use of behavioural approach to understand decision-making in agri-environmental policies, with numerous research being undertaken with the purpose of exploring farmers' motivations to take on environmental management practices on their land and find ways to encourage behaviour that will offset the environmental harms of agriculture intensification (Mills et al., 2017).

The growing emphasis on public goods delivery on a landscape scale means, however, that the policy and research approach will require a strategy shift if it is to meet the demands of a changing countryside. For one, the individualistic model of recruitment ignores the risk of misaligned and uncoordinated conservation efforts between farms, which could potentially negate any beneficial impacts to the environment on a large scale (Häfner & Piorr, 2021). It also runs counter to the growing scientific consensus that biodiversity restoration and enhancement on a larger scale of management will yield more effective results than the single-farm management style (Gill et al., 2010; Mills et al., 2017; Prager et al., 2012). These suggest a need for greater collaborations between landholders for outcomes on this scale to be realised. Running in parallel with this is evidence of a diversifying landholder demographic in the English countryside—with a growing segment of landholders whose land use goals are not centred around agricultural production, nor do they derive their main source of income from the farm (Groth et al., 2017). Previous research by this article's author (Kam, 2023; Kam & Potter, 2024) sheds new insights into the emergence of these new land managers in rural communities, which is likely to bring with it a wide variety of motivations for wanting to engage in conservation and public goods provisioning. Ultimately, what this translates to is a widening of public goods providers available in the countryside, which will require a new set of policy instruments specifically tailored to their specific motivations and values for owning and managing land in order to successfully recruit them into ELMs. To achieve this would require an expansion of the patterns of incentivisation strategies employed by policymakers to enable a more precise targeting of these unique motivations. This will lead towards a much broader engagement of landholders into public goods delivery.

With this in mind, this article examines the incentivisation strategies utilised by previous agri-environmental schemes, analysing the limitations of this approach and the challenges that a changing policy landscape and countryside would pose in further employing this approach. Following that, we present the case for the use of Practice Theories and Theory of Capital as frameworks to enable for a broadening of engagement strategies that target more diverse motivations for participation in future schemes. This article then proceeds to use a case study to explore the applicability of this framework on landholder collaborations. Findings from this case study are then presented.

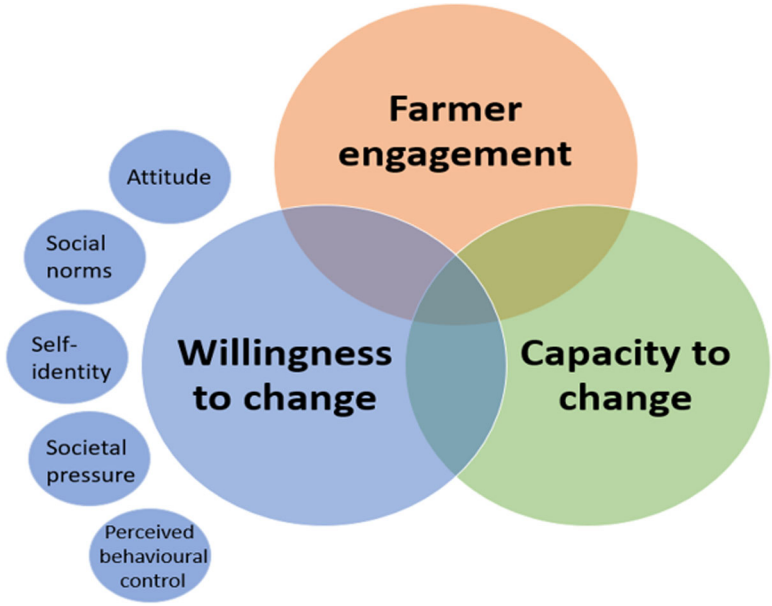

FIGURE 1 The current framework in understanding the factors that influence a farmer's decision-making (*Source*: modified from Mills et al., 2017).

The conventional incentive strategies for agri-environment scheme participation

The need to reconsider the design of engagement strategies of future schemes is attributed to the limited success of agri-environmental schemes of the past. Evidence of the limited success is reflected by the mixed results these schemes has produced in multiple fronts. First, in examining the ecological effects of such schemes, studies have found that it has been poor in its efforts to protect biodiversity—be it in general or specific species (Burton & Schwarz, 2013; Kleijn et al., 2001, 2006). The limited success is also due to its inability to successfully foster long-term cultural or attitudinal changes towards the environment, as some researchers argue it should (Burton & Paragahawewa, 2011; Burton et al., 2008; Herzele, et al., 2013; Lowe et al., 1999; Sutherland & Darnhofer, 2012). This result is especially notable when considering the duration these schemes have been in existence for, and how widely they have been participated in.

Reasons for this limited success point to the strategies utilised to incentivise participation into these schemes. A closer examination of these schemes' reveals incentive strategies centred around modifying behaviour—placing the motives, values, and attitudes of a farmers' decision-making process as the main emphasis of examination (Morris & Potter, 1995). Hence, numerous studies have been undertaken over the past several decades to explore farmers' motivations for adopting environmental management practices on their land and find ways to encourage behaviour that will offset the environmental harms of agriculture intensification (Mills et al., 2017). Much attention has therefore been placed on establishing models of human behaviour (as seen in Figure 1). This model shows that along with assessing the capacity to change, the willingness to change through a behavioural theory approach is very much how current policies perceive farmer's decision-making process when it comes to environmental matters (Ingram et al., 2013; Mills et al., 2017). This consists of exploring the determinants of behaviour, particularly values,

beliefs and attitudes (widely seen as predictors of behaviour), and how they could be manipulated and changed towards more pro-environmental actions (Hargreaves, 2011). This approach views individuals as sovereign agents, with the solution based upon the understanding that these choices can be influenced, and individuals can be persuaded (Evans et al., 2012). Therefore, studies that seek to gain insight into farmers' pro-environmental behaviour are often times grounded in the Theory of Reasoned Action or Theory of Planned Behaviour (Marr & Howley, 2019). Both theories are guided by the assumption that behavioural intentions are the primary precursors to behaviour, and these intentions are guided by attitude (De Groot & Steg, 2007; Falconer, 2000).

The limited success of prior schemes could therefore be attributed to the constraints of the very incentive strategy it utilises—or the way in which prior studies and polices have understood and applied them. For instance, the failure to account for other factors that might influence behaviour, in addition to the common focus on attitudes by previous research (Lokhorst et al., 2011). It has been widely acknowledged that a strong grasp of the 'internal factors and external context', along with the complex interplay between them, are necessary in order to fully understand the behaviours and actions of farmers given the unique context in which different farmers operate in (Falconer, 2000; Mills et al., 2017). This complexity has been observed in prior studies, which have shown that while financial rewards are a significant motivator for farmers to partake in conservation practice (Wilson & Hart, 2000), it might not be the sole determining factor. Even profit maximization has been recognised by studies as not the singular driving force behind the behaviours of farmers (e.g., Willock et al., 1999), with their behaviours being influenced by a variety of socioeconomic and psychological variables (Lokhorst et al., 2011). This is further evident in other studies (e.g., Goodale et al., 2015; Marr & Howley, 2019), which have pointed out that the heterogenous and diverse nature of farmers' motivations to act, especially with regards to undertaking conversation activities, stem not only from economic motives but are also driven by their attitudes and values, which are shaped by factors such as economic status of the individual, educational background and past experiences (Pannell et al., 2006). Hence, the recognition that farmers are not solely motivated by economic and financial reasons means that schemes based around monetary incentives may prove to not be as effective as hoped, even more so if farmers do not feel that the compensation of these schemes, relative to the work needed to produce desired results, is fair (Hanley et al., 1998; Sutherland & Darnhofer, 2012). Prior studies have also suggested that farmer's non-profit-maximising behaviour could be attributed to intrinsic rewards such as independence, lifestyle and doing work that they enjoy (Burton et al., 2008). This is demonstrated by Gasson's (1988) study, which found farmers to be motivated by intrinsic values of farming more than anything else.

Intrinsic motivations play a huge factor when it comes to environmental behaviour, as they are seen to be more long term and durable (De Young, 1985). This is in contrast to extrinsic motivations, such as regulatory approach and financial incentives. While such extrinsic motivations have shown success in ushering in some behavioural change towards environmental management amongst farmers, this success should only be seen as 'transient drivers' (Mills et al., 2017) and not the long-term cultural changes much sought after. This is because such environmental results require continuous payments or compliance checks, with the risk being that such benefits will disappear when these payments and checks are gone (Mills et al., 2017). Moreover, such monetary incentives might lead to a negative impact as these incentives might discourage the continuation of the practice if the initial motivation for adoption for farmers is attributed to intrinsic moral values or social pressure (De Snoo et al., 2013; Goodale et al., 2015). Hence, the persistent provision of such incentives is then needed in order to ensure such conservation practices are continued

(Goodale et al., 2015). This suggests that there is little evidence of any permanent behavioural change occurring as a result of participation when such an approach is utilised.

Widening the incentive strategy approach

Given the limited success of prior strategies to incentivise the uptake of previous schemes, and a focus on enrolling main occupation farmers, there is a need to consider alternative strategies in order to ensure future agri-environmental schemes are effective in engaging with a countryside that has seen a growing diversification of landholder types, and thus increasing range of land use values and motivation (Baldock et al., 2001; Cloke & Goodwin, 1992; Marsden, 1999; Kam & Potter, 2024). New land managers will require a whole suite of measures to accommodate for their diverse land use aspirations in order to be incentivised to participate. Some, such as lifestyle landholders,[1] bring a new perspective on land use but lack the experience and knowledge to achieve desired conservation goals on their land (Mendham & Curtis, 2010; Milburn, 2011), given their general lack of farming background, purchased their land more for aesthetic and recreational purposes and tend to have owned their land for a shorter length of time than farmers (Kam & Potter, 2024). Others, such as conservation organisations, would need a better understanding of their role and contributions, especially in landscape-scale collaborations. Ultimately, what these new land managers share in common is how different they are from main occupation farmers when it comes to their motivations for land use (Gill et al., 2010; Munton et al., 1992). This stands to reason that the ways to incentivise them would be different than main occupation farmers. Even for main occupation farmers, the shift towards a 'public money for public goods' approach under the new ELMs means a greater necessity for adopting conservation-focused land management practices in order to receive payment. This would require more than simply understanding their attitudes or motivations. A greater emphasis on understanding how farmers can undertake both conservation and production practices on their farms would be needed.

The current gap in knowledge surrounding these new land managers and their practices also serves to add further challenges to policymakers, given that the success of said policies often hinges on sufficient information on likely behavioural responses and attitudinal characteristics of potential participants (Falconer, 2000). Main occupation farmers themselves are found to be heterogenous and vary in their decision-making with regards to their land (Busck, 2002; Siebert et al., 2006) and have diverse attitudes and motivations towards environmental behaviours (Dwyer et al., 2007; Mills et al., 2013, 2017). Thus, increasing heterogeneity of the rural land management community, manifesting in a more diverse land use values and motivations, would further add to this widening heterogeneity of perceptions and responses to these schemes. This could lead to policy schemes that fail to provide the appropriate diversity in incentives or address certain barriers to participation, which might exclude certain sections of the landholder group from participating.

Compounding this issue further is that even a complete understanding of the attitudes and responses of all types of landholders might not always guarantee the success of a scheme owing to the value–action gap, which is the misalignment of attitudes and action (Shove, 2010; Spurling, et al., 2013). This means that even a favourable perception to a scheme might not translate to actual participation. This was demonstrated by Petrzelka et al. (2009), who found that in spite of high interest from absentee landholders for conservation programs, actual participation was low. These challenges would likely be detrimental towards the increasing efforts to deliver public

goods on a landscape scale—in which a variety of landholders over a large area would need to be engaged to ensure the efficacy of delivery.

Incentive strategy centred on Theory of Capital and Practice Theories

A framework consisting of the Theory of Capital and Theories of Practice could provide a more expansive incentive strategy for future agri-environmental schemes, and thereby address the aforementioned challenges. The use of the Theory of Capital in particular would augment the options available in order to drive forward participation in said schemes—enabling strategies to not be fixed solely on financial or economic incentives. This is not to say that economic capital would not prove useful to foster the uptake of ELMs by main occupation farmers, given their need to maintain their farm business viability, and thus their livelihood. However, the argument being made here is that it may not always be appropriate to see financial incentives as the sole, or even most important, driver for participation in schemes for main occupation farmers, especially since it is known to potentially disregard other motivations for participation (a phenomenon recognised as the 'crowding out effect'[2]; Cortés-Capano et al., 2021).

What is equally important to consider is that for the growing diversity of public goods providers, much consideration should also be placed on other forms of capital, social and cultural, in order to understand what motivates them to undertake pro-environmental management (Tsouvalis & Little, 2019). This harkens back to the earlier observations that participation in schemes is motivated by a multitude of factors (Goodale et al., 2015; Lokhorst, et al., 2011; Marr & Howley, 2019). Thus, opportunities for landholders to generate capital in other various forms, and place value in non-economic rewards, must also be established. This is due to non-monetary incentives, such as training, playing a role as an essential intervention to enhance the competency of practices. This is in addition to being able to promote a landholders' 'autonomy and competence, enhancing their intrinsic motivations and stewardship in the long-term' (Cortés-Capano et al., 2021, p. 3). This could also initiate a long-term shift in farming culture and reshaping the idea of what good farming should look like—around public goods delivery and delivering them through landholder collaborations. Moreover, with regard to landholder collaborations, non-monetary incentives can enhance other important facets of collaboration—and in effect improve the efficacy of these schemes (Cetas & Yasué, 2017; Selinske et al., 2017; Cortés-Capano et al., 2020).

A better grasp of other forms of capital would thus be vital. Social capital is defined as the investment in relationships with the expectation of returns/reciprocity (Lin, 1999). This then creates 'durable obligations' through a sense of gratitude, respect or friendship, which are continuously exchanged through relationships thereby creating social capital (Bourdieu, 2018; Sutherland & Burton, 2011). Cultural capital on the other hand provides individuals with a way to showcase their prestige and can be demonstrated in various forms (Bourdieu, 2018; Burton, 2008). This means that cultural capital can be displayed through institutionalised forms such as awards and recognition, which are 'consistent and comparable across a range of agents' (Burton, 2008), or through objectified forms that are symbols of skills and competency such as the latest or most expensive farming equipment (Bourdieu, 2018; Burton, 2012; Throsby, 1999). In the case of farmers, a significant amount of cultural capital is placed towards the physical appearance of their crops. This is one of the main attributes on how farmers are being judged as a 'good farmer' or a bad one given their understanding of the skills needed to achieve these results (Burton, 2004; Burton et al., 2008). Therefore, farmers pride themselves at being able to showcase tidy farming practices, especially to neighbouring farmers and peers (Burns, 2021).

An important task for future schemes then, in order to nurture permanent changes in land management practice, is to cultivate the ability for farmers and new land managers to be able to recognise good conservation work and understand the necessary skills that are involved to achieve such an outcome. The 'payment by results' format that ELMs appear to adopt provides suitable opportunities to experiment with the process of delivering these environmental public goods, and thus understand the skills and resources needed to achieve conservation results. This thereby creates symbols of good farming practices based around conservation. Moreover, participants in a collaboration will undergo similar processes of learning and experimenting, which will facilitate opportunities to exchange advice and learn from each other—enabling the generation of social capital amongst collaborators. Additionally, this will enable them to collectively understand the effort and skill needed to achieve these conservation outcomes, thereby reinforcing common symbols of good conservation work and hence leading them to place cultural capital in these common symbols. This would only grow stronger through the increasing emphasis on collaboration—given that such forms of capital are only valuable if enough people recognise it as such, and thus increases or diminishes depending on the amount of people who recognise it (Burns, 2021). The opportunity to experiment and innovate will also enable farmers to develop their own 'indigenous' knowledge (Burton et al., 2008)—further establishing and cementing what good farming centred around conservation would look like. Additionally, allowing farmers to achieve the requisite results on their own could tap into, and enhance, their intrinsic motivations for conservation. This is because the nurturing and enhancement of such intrinsic motivations for conservation are vital towards creating more durableness and permanence in fostering changes in land management culture (De Young, 1985; Mills et al., 2018, 2017).

Theories of practice

Through a Theories of Practice lens, practitioners would be able to produce these desired forms of capital by recrafting the relevant practices as required and provide appropriate interventions to invoke changes where necessary. A practice approach focuses on the practice that an individual undertakes and the elements (meaning, materials and competency) that constitute it (Evans et al., 2012; Reckwitz, 2002; Welch & Warde, 2015). Given this, it is the interdependence between constituent elements of a practice that creates the conditions in which the practice exists and is sustained over time only through the cumulative moment of performance (Reckwitz, 2002; Watson, 2012). Drawing on prior studies for using similar theories, Sutherland and Huttunen (2018) provide an apt illustration of how a Theories of Practice approach can be applied in policy action. In their article, they explain that financial incentives can be viewed as the *materials* element of the practice, the provision of advisory services or information/education to be the *competency* element, with *meaning* element being viewed as the support given to practice as desirable or undesirable.

How a practice is conducted is dictated by the arrangement of these elements—meaning that change can occur through the re-ordering of elements. Hence, alterations in the ordering of practice as entities bring about changes in the way that practices are performed (Evans et al., 2012). Interventions might also come in the form of substituting or recrafting a specific element of the practice, substituting an existing practice for an entirely new practice or a variant of the existing practice, or even changing the way an individual carries out the practice (Spurling et al., 2013; Welch, 2017). Furthermore, by taking a holistic approach to identifying how practices are linked to one another and how their interactions can be altered could cause a 'ripple through

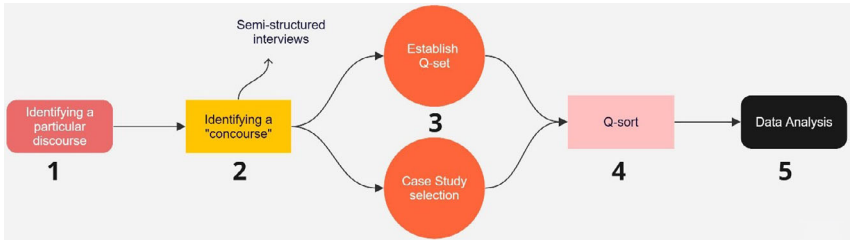

FIGURE 2 The five stages of the Q-methodology.

interconnected practices' (Spurling et al., 2013; Watson, 2012). Given that individuals undertake many practices, the elements of one practice are frequently involved in another (Sutherland & Huttunan, 2018), enabling change in a broad range of practices. Therefore, identifying how particular practices interact and are linked, be it materially, spatially, temporally or even institutionally (Spurling et al., 2013), provides many avenues to institute change. This means a practice approach is also better suited to landscape-scale collaborations—given that it provides insights into how prevalent certain conservation practices are, how different they are undertaken by various landholders and institutions, but also how these conservation practices can be linked together for more effective collaborations. Moreover, these moments of innovation are crucial, as mentioned earlier, as they provide opportunities for landholders to engage with the process and understand the skills needed to achieve certain outputs—thereby generating cultural capital towards symbols of conservation-based good farming. The importance is reflected by observations of past agri-environmental schemes, which often used payments by actions. This gave farmers no motivation to pursue more than the baseline requirements for the schemes because they were not incentivised to (Burton et al., 2008; Herzele et al., 2013).

To demonstrate how these two theories can work in tandem, this article provides a case study in which Q-methodology was utilised to examine the perceptions around landscape-scale collaboration, and how the theories employed could provide potential intervention points to lower barriers and increase incentivisation of practices around collaborative conservation. The key hypothesis for this study is that economic capital will be the main driver for collaborations consisting majorly of main occupation farmers (with social and cultural capital playing a role in a lower capacity), while collaborations with a wider assortment of landholders, especially lifestyle landholders and conservation organisations, will be incentivised largely by social and cultural capital.

The following section details the methodology employed for this case study before the findings of the study are presented.

METHODS

Q-methodology seeks to gain an insight into a person's perspective and opinion (Previte et al., 2007), providing a way in which to 'analyse subjectivity in a structurally and statistically interpretable form' (Barry & Proops, 1999, p. 338). It is for these reasons that Q-methodology was used for this study. This method contains five stages as shown in Figure 2. Landholder collaborations for landscape-scale delivery of public goods was the particular discourse under examination for this study (Stage 1). As for Stage 2, semi-structured interviews with a wide range of stakeholders (participant profiles and codes can be found in Supporting Information Table S1) were conducted to

ascertain the range of perspectives around the discourse. Stakeholders recruited for Stage 2 of the interviews included various types of landholders (main occupation farmers, lifestyle/non-farming landholders, smallholders, estates and conservation organisations). Interview participants must have been, or are currently, involved in landscape-scale collaborations. This is to ensure that the perspectives sought around landscape-scale collaboration during this stage were based entirely on practical experience. Interviews were conducted online and lasted an average of 45 min. Data collected during the interviews were then subsequently transcribed and analysed thematically using ATLAS.ti. Themes were coded according to research objectives, and the interview protocol (the process is explained further in the section below, with the interview protocol found in Supporting Information Table S2). The analysis then informed the statements that were extracted and used to the Q-set in Stage 3 (further details about this process are described in the following section).

Applying theories into Q-set

Three themes were established for the Q-set (Supporting Information Table S3). The first theme sought to explore the role and contributions that various stakeholders (farmers, lifestyle landholders and conservation organisations, etc.,) would have in a collaboration. The second theme examined the perception participants held towards collaboration itself. This was to gain a deeper understanding of how the practices of conservation and collaboration[3] are perceived, and how they can be broken down into their composite elements (i.e., meaning, material and competency). Equally important, it also provided a better sense of the interventions that could reshape or reskill these practices and formed the foundation for the third theme, which was to investigate how stakeholders perceived success and the types of capital (cultural, social or economic) being produced from these collaborations. As mentioned previously, this was to identify not only the incentivisation needed for the uptake of practices centred around collaborative conservation but also how these can be sustained long term as well. The importance of the latter has been emphasised in prior studies, which argue that the effectiveness of conservation schemes should be measured by their ability to invoke long-term changes in conservation attitudes (Coleman et al., 1992; Morris & Potter, 1995). As such, it will be crucial to understand how the various aspects of collaboration can create opportunities to generate social, economic and cultural capital. Therefore, understanding how these forms of capital can be generated through collaboration can provide the foundation for long-term collaboration to be sustained.

Forty-eight statements were eventually selected from a pool of 124 statements extracted from the semi-structured interviews conducted in Stage 2 (final 48 statements can be found in Supporting Information Table S4). Q-sorts (Stage 4) were conducted online via the Q-Method Testing and Inquiry Platform shown below in Figure 3. With 48 statements, participants would rank these statements ranging from −6 (least agreed) to +6 (most agreed), depending on the degree in which these participants agreed with these statements. Statements in which participants were neutral about were ranked closer to the middle (0). Moreover, limits are imposed as to how many statements can be placed in each position. Only two statements were allowed to be placed in −6 and +6 positions, with an increasing number of statements being placed as it moved towards the middle (i.e., three statements were placed in the −5/+5 position, four in the −4/+4 position…with eight statements placed in the very centre).

With regards to the participants of this case study, five groups[4] were selected (profiles of each group are found in the Supporting Information Figure S1 and Tables S5–S9). Two criteria were established for selecting the appropriate case study groups. First, the presence of different

FIGURE 3 Screenshot of a sample Q-sort done on the Q-Method Testing and Inquiry Platform.

landholder/stakeholder types in most of the case study groups selected in various combinations was crucial given that a key objective of this study was to understand how collaborations consisting of a variety of landholders and stakeholders can be achieved. This is due to the recognition that different parts of England have experienced the transition to multifunctionality at varying rates and precipitated in diverse combinations of landholders (Marsden, 1999). Therefore, it is pertinent to understand the different models of collaborations that could exist in England, and what is needed for them to succeed. To facilitate this examination would require participants who currently are, or have previously, participated in collaborative projects; the second criterion for this case study selection. As such, these case study groups consisted of different configurations of stakeholders with experience in collaborations. A total of 36 participants, from the five case study groups, took part in this research study.

Data analysis

PQMethod software was used to analyse the data collected from the Q-sorts. Both Centroid and Principal Component Analysis (PCA) factor analysis were used, with the purpose of these analyses to explore how correlated each Q-sort is from one another and grouped according. Each 'facto' thus consists of Q-sorts, which are highly correlated to each other (Brown, 1993). Five factors were selected as they satisfied several criteria, such as the eigenvalue test and level of variance. Moreover, given that there were five case study groups, it stands to reason that five factors emerging from the analysis would be a logical outcome. Following this, Varimax rotation was then used to increase each Q-sort association to one particular factor (Webler et al., 2009). Factor arrays were then produced (e.g., see Table 1), in which statements for each of the five factors (or 'groups') were segmented into four different categories: items given the highest in ranking for that particular factor (in this case, a score of +5), items ranked higher in that factor than in any other factor, items ranked lower in factor X than in any other factor and item given the lowest ranking in this factor (−5). Factor arrays for all five factors (or 'Models of Collaboration') are found in Supporting Information Tables S10–14.

The five models of collaboration established during the data analysis are presented in Table 2.

TABLE 1 Statements in categorised into four groups for Factor 1. This process was done for each factor.

Items ranked at +5	**Ranking**
Statement 15, Statement 18	*5*
Items ranked higher in Factor 1 array than in other factor arrays	
Statement 24	*4*
Statement 30	*3*
Statement 19, Statement 20	*2*
Statement 16, Statement 33, Statement 38	*1*
Statement 25, Statement 34, Statement 39	*0*
Items ranked lower in Factor 1 array than in other factor arrays	
Statement 35	*0*
Statement 4	*−1*
Statement 13, Statement 42	*−2*
Statement 21, Statement 22, Statement 46	*−3*
Statement 14, Statement 45	*−4*
Items ranked at −5	
Statement 41, Statement 47	*−5*

These models are named 'Traditional Famer group', 'Social Farmer group', 'Hybrid Collaboration group', 'Pragmatic Collaborators group' and 'Modern Collaborators group'. A description of each group is detailed in Table 2.

FINDINGS

Practices of conservation and collaboration by Traditional Farmer group

Economic capital appears to be the biggest driver for collaboration in this group, with financial incentives (statement 26: +5)[5] and how conservation plan aligns with long-term business plans (statement 32: +4) being key drivers (Supporting Information Figure S2). This is especially applicable to main occupation farmers who need to justify such practices in their business. However, this is not only for the purpose of maintaining viability but also for the recognised effort and time needed to undertake such practices. Therefore, adequate financial compensation could shape the meaning of these practices and would need to be more aligned with the goals and financial needs of farmers. Furthermore, the recognised economies of scale to be gotten from collaboration are recognised by this group (Statement 34: 0), enhancing the importance of economic capital as a driver and reinforcing the idea of collaboration to be beneficial to their farm business and land. Last, collaborations are seen to be best led by farmers themselves—given their knowledge of their landscape (Statement 9: +5). This creates cultural capital as it provides opportunities for farmers to showcase their skills and knowledge through leading these collaborative conservation projects.

The presence of a facilitator/advisor and increased advisory services provides a couple of intervention points. With regards to the former, their presence alleviates the idea that grant application is complicated and bureaucratic—and therefore increasing the opportunities for further financial incentives—while also being able to commit resources such as time and effort into maintaining

TABLE 2 The five models of collaboration.

Traditional Farmer	Social Farmer	Hybrid Collaboration	Pragmatic Collaborators	Modern Collaborators
Two main occupation farmers (Participants 15 and 19)	Four main occupation farmers (Participants 1, 7, 8 and 30)	AONB(development officer (Participant 4)	DEFRA Policy Advisor (Participant 2)	Three main occupation farmers (Participants 12, 17 and 32)
Tenant farmer (Participant 24)	Farm cluster lead (Participant 11)	Estate director (Participant 13)	Two academics (Participants 3 and 34)	Two lifestyle landholders (Participants 14 and 21)
Part-time farmer (Participant 27)		Lifestyle/non-farming land landholder (Participant 16)	Hobby farmer (Participant 18)	Head of Environment and Sustainability (Participant 20)
AONB nature recovery lead (Participant 31)		Hobby farmer (Participant 23)	Two main occupation farmers (Participants 26 and 35)	Wildlife Trust nature recovery director (Participant 6)
		Farming business manager (Participant 5)		

Abbreviations: AONB, Area of Natural Beauty; DEFRA, Department for Environment, Food and Rural Affairs.

collaboration that landholders might not be able to. Future schemes would also need to be more flexible—while also incorporating the familiarity that landholders have of their land (Statement 9: +5). These were also seen as important for this group, and will serve to reshape the idea that conservation practices are constrained by the inflexibility of previous schemes, and that landholders might not be in the right area or rewarded adequately. In terms of advisory service, the consensus amongst this group is that the quality of advisory service, particularly from conservation organisations, needs to improve—especially for future schemes. Previous studies have found that the lack of proper advice, or even the absence of communication between the parties, can lead to land management strategies not being adopted in the right manner (Kam et al., 2020). Therefore, an increased accessibility and quality of advisory service in the future could provide an avenue for members of this group to enhance the competency of their practice around collaborative conservation, with farmers acknowledging that their conservation endeavours could be constrained by their existing knowledge (Statement 7: +4). Moreover, improvement of advisory service could lead to nurturing better relationship and trust between conservation organisation and landholders. This would lead to the generation of social capital, as stronger social networks between these two parties are forged and obligation of reciprocity is established—with landholders willing to trust conservation organisations more in terms of conservation work, and conservation organisations recognising that the need to build stronger trust would require more effort in terms of advice.

Practices of conservation and collaboration of Social Farmer group

As far as members of the Social Farmer group are concerned, better knowledge exchange and improved communication between farmers and conservation organisations will become increasingly important drivers of land management in the future countryside. (Statement 11: +5; Statement 18: +5). Creating opportunities for generating social capital through these exchanges will be essential (Supporting Information Figure S3). The same applies for lifestyle/non-farming landholders, who require more guidance to increase their competency in undertaking practice of conservation. The increased engagement and seeking of guidance from conservation organisation sees further chances of generating social capital (as depicted in Supporting Information Figure S3)—especially since they currently are not seen as willing to engage much with conservation organisations (Statement 3: −2). Moreover, as discussed above, the presence (and further generation) of social capital could be from the exchanging of knowledge and learning from other members in the group.

The ability to see the results of their conservation work (Statement 30: +3) appears to be crucial as well in getting other landholders onboard in collaboration—particularly neighbouring farmers (Statement 23: +4; Statement 35: +3)—regardless of how much land they have. Hence, more emphasis should be placed on creating opportunities for landholders to be able to recognise how their conservation efforts is linked to a particular environmental outcome; with one such example being demonstration farms where they can understand what is needed to produce specific conservation results.

This will not only enhance the continuation of the practices of conservation for the individual but also foster greater opportunities for undertaking practices of collaboration within landholders if they can also recognise these conservation results—thereby increasing the value of cultural capital when more people recognise similar outcomes as good conservation work. This will also lead to more social capital created as collaborations between landholders increase, given that the exchanging of experiences and knowledge within a group is valued.

Practices of conservation and collaboration undertaken by Hybrid Collaboration group

As the name suggests, the Hybrid Collaboration group presents a composite of the previous two collaboration groups. Much like the Traditional Farmer group, this group places huge importance is given to the idea that collaboration should be led by farmers (Statement 15: +5), with this being attributed to the competencies of farmers who possess deep knowledge of their land and is also recognised and valued by other stakeholders (Statement 9: +3)—providing the opportunity for farmers to generate further cultural capital within the group (Supporting Information Figure S4). Thus, future interventions should be focused on providing support for farmers to lead these collaborations. Moreover, being able to observe the outcomes of their conservation work (Statement 30: +3) remains important for sustaining the practice of conservation, with the cultural capital generated potentially playing a role in shaping what it means to be skilled in producing successful conservation outcomes especially if enough landholders recognise and put value in the same outcomes.

With regards to the creation of various forms of capital, there appears to be multiple avenues for generating social capital through these practices, with the trust and long-term relationship with conservation organisations and other land managers (Statement 18: +5 and Supporting Information Figure S3) paramount to this. This will be required not only for the durability for conservation efforts but also for the effectiveness of working together to connect habitats. However, farmers tend to be less trusting of conservation organisations when it comes to conservation matters, and as discussed, this could be due to the unease farmers have of conservation organisation because of potential differences in agendas, with some participants noting from past experiences that advisory services might not always have their (farmers) best interest at heart. Therefore, more effort from conservation organisations to build trust through a better understanding of the needs/objectives of farmers could prove to be an effective intervention point. The exchange of experience and knowledge in a collaboration, enhanced by the different knowledge bases and perspectives of its members, provides other avenues for further social capital to be generated.

For main occupation farmers especially, finance will remain key for the undertaking of the practice of conservation (Statement 26: +4). With that said, the generation of economic capital, through the additional funding and economies of scale attained through the practice of collaboration (Statement 34: 0; Statement 33: +1, respectively) is of lesser, but notable, importance.

Practices of conservation and collaboration undertaken by Pragmatic Collaborators group

The practice of collaboration is valued more for intrinsic reasons by this group than for the financial gains that may generated (Statement 28). Thus, given that financial gains are of lesser importance, emphasis should be on generating other forms of capital. One avenue is enhancing the ability to recognise the indicators of good conservation work (thereby enhancing the *meaning* element of the practice of collaboration) since Pragmatic Collaborators appreciate the greater benefits that a landscape-scale approach brings (Statement 36: +4). Moreover, they see the demonstration of good conservation work to be key in recruiting new members to such collaborations. Thus, increasing the ways members of this group are able to not only recognise but also display

good conservation work will be key in creating larger social networks and further generating social capital (Supporting Information Figure S5). This could also lead to further generation of cultural capital, as it provides opportunities for members to present their examples of good conservation work to others in the group, increasing their standing, especially farmers', as skilled in delivering conservation outcomes. This could also explain why monitoring and evaluation are seen as crucial as well, with this group stating that the government would need to invest more into monitoring for these upcoming schemes (Statement 48: +1). Another reason for the increased importance of monitoring in the future owes to the fact that the success of previous schemes was measured by levels of expenditure or volume of enrolment rather than the actual outcomes being achieved (Reed et al., 2014). The increased focus on public goods delivery in the future means ELMs more attention would need to be paid on how these conservation outputs are measured and evaluated. The advantage of collaboration means that there are cost-effective methods of monitoring and gathering data as a group (Prager et al., 2012). In addition, the collective gathering and evaluation of their conservation work would enable collaboration groups to identify and recognise similar indicators of success, thus increasing the cultural and symbolic capital of these indicators.

In order to sustain collaborations in the long run for this group, there is recognition that a gatekeeper may need to be retained in some way to help facilitate funding applications and coordination of members (Statement 44: +3). These are seen as crucial elements for success in any schemes focused on collaboration (Prager et al., 2012), and this has been recognised as important here, especially for main occupation farmers given that farming is a time-intensive occupation that does not leave much spare time for any other responsibilities and tasks. Therefore, the presence of a facilitator appears to alleviate this and fulfil the tasks needed to sustain a group. The presence of a facilitator could also serve to reshape the impression (or *meaning*) that the effort needed to complete an application is not worth the potential returns, overcoming the challenge this might bear in undertaking collaboration work.

Practices of conservation and collaboration undertaken by Modern Collaborators group

The significant meanings and ideas around the practice of conservation and collaboration that the Modern Collaboration group holds are most clearly articulated in relation to the role of lifestyle/non-farming landholders. Members of this group expressed a view that these actors (lifestyle/non-farming landholders) are likely to be more willing to undertake radical changes to their land and invest more in conservation than farmers (Statement 5: +5; Statement 27: +5). However, lifestyle/non-farming landholders have a lack of practical experience and generally less well-developed skill sets in relation to land management. This means that, as an intervention point, conservation organisations and other professionals may need to step in to offer them support and training in order to enhance the *competency* element of the practice (Supporting Information Figure S6).

With regards to conservation organisations, there would need to be a better co-ordination of advice between the different organisations and advisory services if their engagement with lifestyle/non-farming landholders is to be effective. Moreover, good collaborative practices hinge on the idea that conservation organisations should be steering these collaborations and guiding farmers (Statement 14: +3). This lies in the fact that their high level of knowledge and expertise are recognised and valued (Statement 13: +3), making the need to co-ordinate and align advice from different conservation organisations pertinent. Moreover, as shown in Supporting

Information Figure S5, the need to build greater trust between landholders and conservation organisations (Statement 25: 0) appears to be an important concern of many interviewees. It also seems to play a critical role in determining the effectiveness of collaborations between farmers and conservation organisations to achieve better landscape connectivity (Statement 11: +4). This means more effort is needed by conservation organisations to foster stronger connections in both instances, both of which will provide further opportunities to generate social capital through the investment into the relationship, with further social capital being created through these 'durable obligations'.

Last, less importance is placed on the benefits of collaborating on a landscape scale (Statement 36:0; Statement 37: −3), suggesting that this group might require more incentives to undertake such collaborations. A possible intervention, as illustrated in Supporting Information Figure S6, is financial incentives, especially for main occupation farmers. This is in addition to the need for further emphasis on generating social capital through the various ideas around the practice of collaboration.

DISCUSSION

The five models of collaboration described above present an increasing number of ways to collaborate in the coming years. As we observe in these models of collaboration (Table 2), the varying configurations in the type of collaborators that make up these different groups points to the recognition that, in addition to elements of a practice, the substitution of practitioners presents another avenue for recrafting a practice. This is evident as we move along the spectrum of the five groups, we see a shift in both the composition of collaborators in each group and the perspective around collaboration. As such, this provides opportunities for expanding the network of public good providers in the UK countryside.

With regards to the practices themselves, we see multiple avenues for intervention to recraft the said practices and generate opportunities for creating various forms of capital. In bringing our hypotheses back to the discussion, while we do see the Traditional Farmer group being incentivised heavily by economic capital, the Social Farmer group—the other group that consisted mainly of farmers—were driven strongly by social capital. The other hypothesis, that other groups consisting more of new land managers will be motivated by other forms of capital aside from economic, mostly holds true although there are instances where economic capital could play a key intervention point in recrafting the practice.

One point for further consideration in future research is the distinction between recrafting a practice and maintaining a practice, together with the potentially different interventions required to achieve both. This article mainly focuses on recrafting of a practice within the context of UK's policy transition towards more conservation-based land management practices. The gradual adoption of such practices by the rural land management community in the future would eventually necessitate an exploration into specific intervention and incentives for maintaining said practices—which might be wholly different to those required to recraft the practice in the first place.

Another point of observation derived from this case study is that these practices of conservation and collaboration are often interlinked. This is illustrated by elements of the practices of collaboration being frequently intertwined with elements of conservation. The evolving linkage between conservation and collaboration is seemingly reflected by the growing shift in policy focus from not only delivering public goods but achieving it on a landscape scale as well, with

the second and third tranches of ELMs (Countryside Stewardship and Landscape Recovery) expressing this growing desire for delivering goods on this scale. In effect, the increasing push for collaboration has driven the shift from anatomical/individual undertaking of conservation towards a focus on collaboration—thus explaining why these aforementioned practices are becoming more intertwined. However, policymakers should be careful in prescribing blanket outcomes or advice, which could face resistance—as opposed to policies with wider freedom that give scheme participants the flexibility to take it on board as it aligns with their ideals or disregard it (Huttunen & Peltomaa, 2016). This applies especially to the idea of good conservation practices. When looking at the concept of good farming itself, it can be seen as an idea that is in continuous change, shaped by local context and the different farming styles and landholders that apply it (Huttunen & Peltomaa, 2016). However, once normalised into culture, it will persist in spite of any policy reform or cessation.

Nonetheless, the intervention points presented above for each group reflect measures with greater immediacy of change to the practices of collaboration and conservation, providing the crucial first steps in understanding how conservation and collaboration can be undertaken by a broad range of stakeholders and enhanced through intervention points and the various avenues that can be used to generate various forms of capital. With regards to the generation of capital through these practices, it will be crucial not to neglect how social and cultural capital can be generated given the recognised value in them. Not only will it provide a broad set of incentivisation tools for a diverse set of public good providers, but it can also provide avenues to improve the social network of participants, along with raising their competency of these practices undertaken, further enhancing their intrinsic motivation enacting for conservation practices in the long terms. Understanding how other theoretical frameworks and processes can be applied to this topic would also prove beneficial. Processes such as relational organisation, which seeks to mobilise people of similar values and goals to enact social change (Divakaran & Nerbonne, 2017), could further drive landscape-scale collaborations amongst different stakeholders. This presents another avenue for future research to explore.

CONCLUSION

Agri-environmental policies in the UK are headed for change, with a new suite of schemes embodying the 'Public Money for Public Goods' principle. With two of three tranches of ELMs heading towards the direction of public goods delivery on a landscape scale, landholder collaborations will become an important factor in achieving this aim. Running in parallel with this policy change is the growing diversification in the land management community over the past several decades, which prompts a re-examination not only in terms of the range of landholders that should be recruited into public goods delivery in the future but also how they should be incentivised into doing so. The latter points to the little evidence available to show that conventional frameworks used to incentivise behavioural change have been effective, especially in the long term. This has been particularly attributed to the complexity of individual's decision-making process and the factors influencing it. Therefore, the limited success of past schemes to evoke long-term attitudinal changes in the land management community suggests a need to rethink how future agri-environmental policies can address this.

In this article, we argue that farmer-centred enrolment strategies of the past would need to transition towards a much more targeted pattern of incentivisation for enrolment. As such, we propose an incentivisation framework underpinned by concepts of the Theory of Capital and the

Theories of Practice. Such a framework moves away from the decision-making process of an individual and focuses on the actions that the individual carries out instead while broadening the avenues of incentivisation to include other forms of capital. As exemplified by our case study, this framework provides a lens to recraft the collaborative conservation practices through intervention points targeted at specific elements of the practice and provides insights into the opportunities that can generate further forms of capital that specific practitioners place importance on. This will be crucial to sustain these collaborations in the long term. Moreover, as we observe in the different configurations of landholders that make up the various five models of collaboration, the changing of practitioners provides another avenue for recrafting the practice.

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CONFLICT OF INTEREST STATEMENT

The author declares no conflicts of interest.

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DATA AVAILABILITY STATEMENT

The author has provided the required Data Availability Statement, and if applicable, included functional and accurate links to said data therein.

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ENDNOTES

[1] For the purpose of this article, Lifestyle Landholder, and more broadly New Land Managers, is defined as a landholder who does not derive their main source of income from agriculture and have land use values more aligned with conservation and/or recreation.

[2] Crowding out effect—when intrinsic motivations are diminished by external interventions (Frey, 1997).

[3] In this article, practices of conservation are defined as those undertaken on an individual farm level, while practices of collaboration are seen as conservation practices that involve cross-property co-operations between landholders (Baumber et al., 2018) in contiguous/near contiguous area to deliver public goods.

[4] While four of the case study groups (Cotswold AONB, Life, Land and Livelihood, North Shropshire and Breckland) consisted of stakeholders located in close proximity of each other, be members of a same farmer group or participate in a similar collaboration project, the fifth group consisted of a mix of policymakers, academics and other organisations.

[5] Scores and statements are from Factor Array of each group that can be found in the Supporting Information.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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