

# EFFECT Stakeholder Engagement: Activity 1 Results

## Case Study #5: Biodiversity Offsetting

Report prepared by Katherine Simpson (University of Glasgow), Nick Hanley (University of Glasgow) and Amy Proctor (Newcastle University)



## Executive Summary

**The UK is in the process of establishing new policies and rules for biodiversity, environment, and agriculture as part of the 25-year Environment Plan and Agriculture Act.** Three new agri-environment schemes (AES) will reward farmers and other land managers for delivering environmental management following the “public money for public goods approach”. The agreements will pay farmers for delivering clean and plentiful water, clean air, thriving plants and wildlife, protection from environmental hazards, reduction of and adaptation to climate change and beauty, heritage, and engagement with the environment (HM Government 2021). In addition, the Environment Bill (expected to receive Royal Assent in 2021) will make biodiversity net gain mandatory for the majority of new housing and infrastructure developments. Following the mitigation hierarchy, developers will first need to avoid, minimise and offset impacts on site. Where on-site compensation cannot be delivered, developers will be able to meet their net gain requirement by purchasing biodiversity credits from landowners who have undertaken restoration actions to deliver new supporting habitats. This creates a market for biodiversity offsets.

**This paper has been prepared as part of EFFECT UK Case Study #5 Biodiversity Offsetting to explore farmers, land managers and environmental advisors’ perspectives on various aspects of the Environment Bill and associated 25 Year Environment Plan.** We undertook an online survey to assess:

- The strengths and weaknesses of the current AES
- The new AES proposed under the Environment Plan
- Perspectives on biodiversity net gain
- The design and implementation of biodiversity offset markets

**Farmers and advisors see existing AES as offering opportunities for real environmental gains in the agricultural setting but the top-down inflexible approach to delivery limits the potential benefits.** Farmers and advisors listed the strengths of current AES in broad-brush terms: farmers comments centred on the financial rewards for managing unproductive land for environmental benefits. For advisors, the library of options available to farmers under the current design was a real positive, as was the collaboration between the advisor and farmer. However, farmers and advisors provided much more detail on the weaknesses of the current AES. Both groups cited the inflexibility in management options as a real problem with the scheme. Farmers and advisors wanted more time dedicated to management planning at the farm gate through shared knowledge between farmer and advisor.

**Farmers, land managers and advisors are in broad agreement that the new proposed Environmental Land Management schemes can deliver positive conservation outcomes.** Both groups wanted to see more collaboration between farmers, as well as between the regulatory agencies and conservation NGOs. Farmers repeatedly called for less prescription, less bureaucracy, and more flexibility within the new ELM schemes.

**Farmers are interested in creating habitat banks.** However, the processes around farmers’ obligations, expected costs and benefits of undertaken actions and monitoring and outcomes need to be clearly identified.

**Private-sector funding offers new opportunities to farmers and land managers, especially in the context of habitat banks and biodiversity offsetting.** Farmers and land managers expressed a wish to work with private sector financing to deliver environmental gains related to habitat banking and offsetting. Several responses believed that private sector financing offered more opportunities for financial and environmental success and allowed a shift in mindset to





**On-site delivery of compensation hinders the creation of habitat banks.** Developers can deliver compensation more cheaply onsite than purchasing offset credits which limits the numbers of farmers willing or able to given the suggested lack of opportunities arising to convert land to offsetting. Several responses also highlighted that on-site net gain is rarely delivered to the levels promised in site plans but there is a lack of enforcement to ensure that the final compensation meets the promised specification.

**Advisors felt the current biodiversity net gain target of 10% is too low to deliver the ambitions of the 25 Year Environment Plan.** Several responses felt a minimum 20% gain was needed to mitigate the risks associated with climate change and the uncertainty around restoration success.



## Section 1: Background on Innovation Case, RMAAB and workshop participants

### Background

EFFECT Case Study #5 Biodiversity Offsetting focuses on contractual arrangements to deliver no net loss in the context of habitats and related wading bird species. It also assesses how biodiversity net gain can be delivered in the context of markets for biodiversity offsets. Contracts are arranged between the offset supplier (farmers) and the offset bank (the regulator). The offset bank then sells these offset credits to developers who are required to purchase credits to offset their development impacts. Farmers can set the minimum price they wish to receive for their offset. Developers will have a (variable) maximum demand price for an offset at any given location. Offsets will then exchange at an “exchange rate” set by the regulator, based on the ratio of ecological quality at the supply site to the demand site. The case study focuses on cross-sector interactions (farmers, property developers, the government), and payments based on predicted results of habitat restoration for biodiversity. The test of the performance of these alternative schemes is based on simulation models of biodiversity offset markets in two case study catchments. The case study is motivated by biodiversity offset pilots implemented by the UK government from 2012 until 2014, which were generally viewed as ill-performing. It also follows the UK Government’s pledge to deliver a 10% increase in biodiversity over and above current requirements for new development projects which are being introduced as part of the 25 Year Environment Plan (Defra 2020).

### RMAAB

We have no formal RMAAB for the case study, instead, we are members of existing advisory boards on biodiversity offsets and make our findings available to them. Katherine Simpson is a member of the CIEEM Biodiversity Offsets working group which meet quarterly. This group includes representatives from the civil service (Defra and Natural England); ecologists (CIEEM); other public bodies (Water Companies and Port Authorities) and private industry (Environment Bank). Outputs so far include “Good practice guidance for Biodiversity Offsets”<sup>1</sup>. We will use this group as the basis for our second round of stakeholder workshops. In addition, Des Thompson (Nature Scotland) and Charlie Palmer (London School of Economics) are ongoing advisory board members for our case study work.

### Survey Overview

Due to the impacts of Covid-19, we chose to run our first stakeholder activity online. We undertook two, broadly similar surveys to gauge current perceptions of AES in the UK and attitudes towards biodiversity net gain and habitat banking. One survey was targeted towards policy advisors and other stakeholders who had the experience of AES and biodiversity net gain (known as the advisor survey). The second survey was targeted towards farmers and land managers (known as the farmer survey). The questions were broadly similar for both surveys:

Section A: Experience of Agri-Environment Schemes: this included the questions on the respondent's role in their organisation or farm business. For the farmer survey, this section also asked about the farm business type and location, any AES they had participated in; motivations

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<sup>1</sup> <https://cieem.net/resource/cieem-good-practice-requirements-for-delivering-biodiversity-net-gain-on-and-off-site-july-2021/>



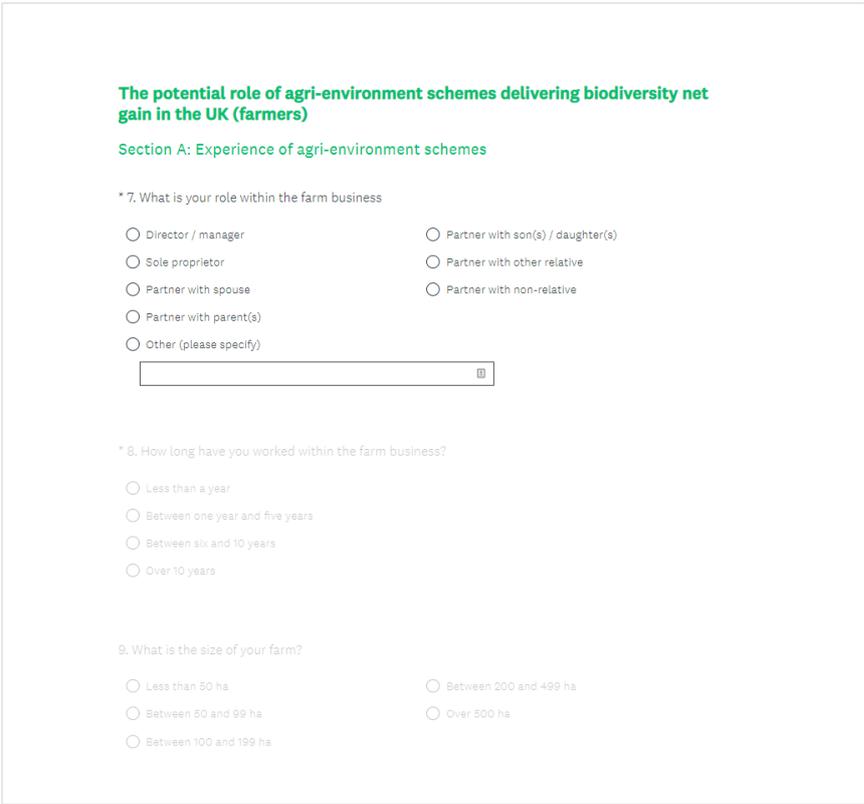
for participating in AES and cooperation with other farmers. The advisor survey asked about which AES they had advised on and their opinions on the strengths and weaknesses of these.

Section B: The New Environmental Land Management Scheme: this section was set in the context of the forthcoming ELM scheme and background information was provided to the participants. Both surveys included Likert scale questions on the role farmers should play in conservation and whether AES are an appropriate tool for biodiversity conservation. In addition, the farmer survey included further Likert scale questions on the role of AES in conservation and farming.

Section C: Biodiversity Net Gain: Participants were provided with background information on biodiversity net gain and habitat banking. For the farmer survey, questions focus on their understanding of habitat banking, and whether they would be willing to engage in the process. For the advisor survey, this section gathered information on attitudes towards the net gain policy, location of habitat banks and how to create an offset market. Both surveys included questions on how habitat banking should be managed and the payment for credits set.

Copies of both surveys are included in the appendix (a screenshot of the online survey is provided in Figure 2).

The surveys were written by the research team at the University of Glasgow and reviewed by the team at Newcastle. The survey was also piloted to ensure the questions were understood correctly and that the information was relevant. The survey was also reviewed and approved by the University of Glasgow Research Ethics Committee. Both surveys were designed and completed online using the platform SurveyMonkey. The EFFECT participant information sheet was included at the start of the survey and all participants completed this.



**The potential role of agri-environment schemes delivering biodiversity net gain in the UK (farmers)**

Section A: Experience of agri-environment schemes

\* 7. What is your role within the farm business

Director / manager
  Partner with son(s) / daughter(s)

Sole proprietor
  Partner with other relative

Partner with spouse
  Partner with non-relative

Partner with parent(s)

Other (please specify)

\* 8. How long have you worked within the farm business?

Less than a year

Between one year and five years

Between six and 10 years

Over 10 years

9. What is the size of your farm?

Less than 50 ha
  Between 200 and 499 ha

Between 50 and 99 ha
  Over 500 ha

Between 100 and 199 ha

**Figure 2: Screenshot of the farmers' survey**



### Survey Participants

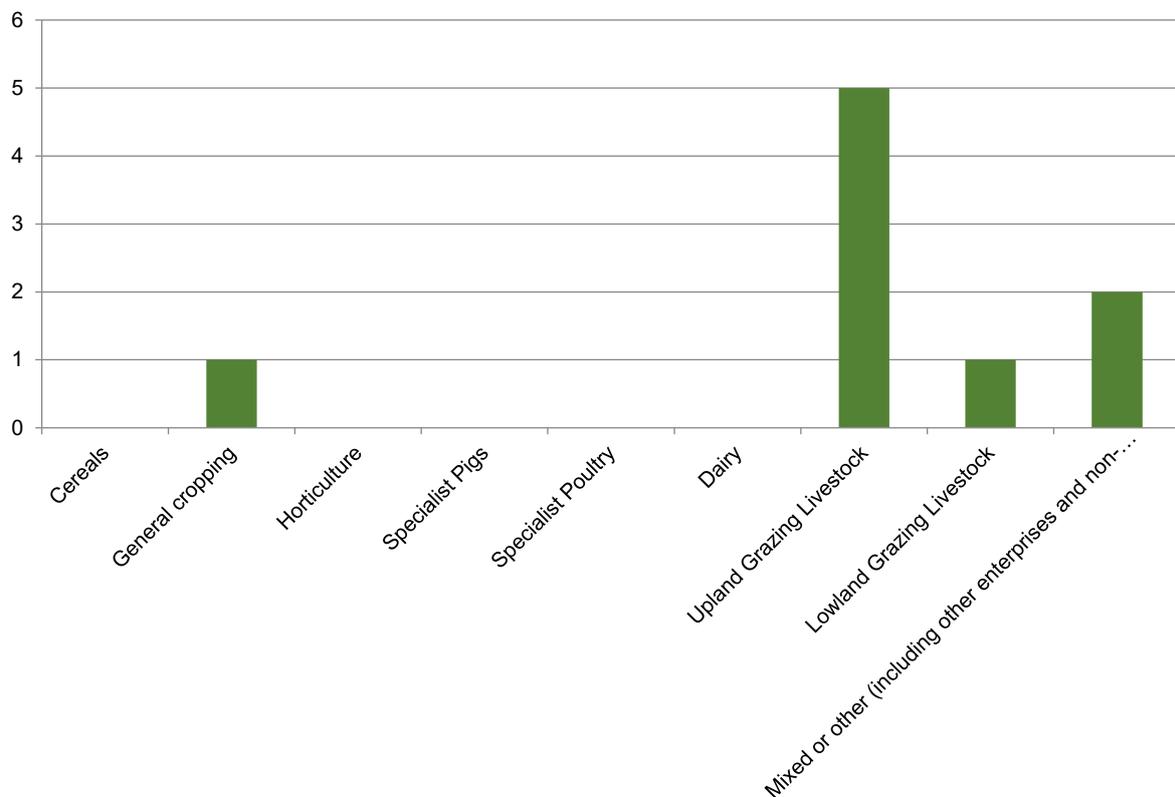
The advisor survey was open from June 2021 through to September 2021. Thirty personal email invites were sent out to members of the CIEEM biodiversity offsets working group and other advisor partners the research team had contact with. A reminder email was sent out after two weeks. We received 20 responses to the advisor survey: a response rate of 60%. Of these, six individuals were conservation/land advisors within either Natural England, Nature Scotland or Natural Resources Wales; three were publicly funded ecologists working in local authorities and two were private farm advisors (Figure 3). As part of “other”, there were 3 academics, two Investment Advisors, a UK Government net gain advisor, a landowner and one individual who works for an environmental NGO as well as being a farmer themselves. 14 of respondents had worked within the field for more than five years, 5% had worked in the field for between 3 and 5 years and one had worked in the field for less than a year.



**Figure 3: Respondent’s role. Farmer survey responses in green (n=9). Advisor survey responses in orange (n=20)**



The farmer survey was open from September 2021 through to October 2021. 17 farmers and farm managers were invited directly via email from the Newcastle University Research team. Social media was also used to publicise the survey to a wider audience. We received nine responses (Figure 3). Three respondents were tenant farmers, five were owner-occupiers and one responded that they were a tenant farmer and owner-occupier. Respondents' roles within the farm business were mixed: varying from Directors / Managers, Partners with spouses or other families, as well as farm employees. Six respondents had worked in the area for over 10 years, one between six and 10 years and two between one and five years. The farm size varied from between 200 and 499 ha (four respondents) and over 500 ha (five respondents). The majority of farms in the survey were upland grazing livestock (5 respondents) (Figure 4). Eight respondents were from the North-East of England and one was from the South-East of England.

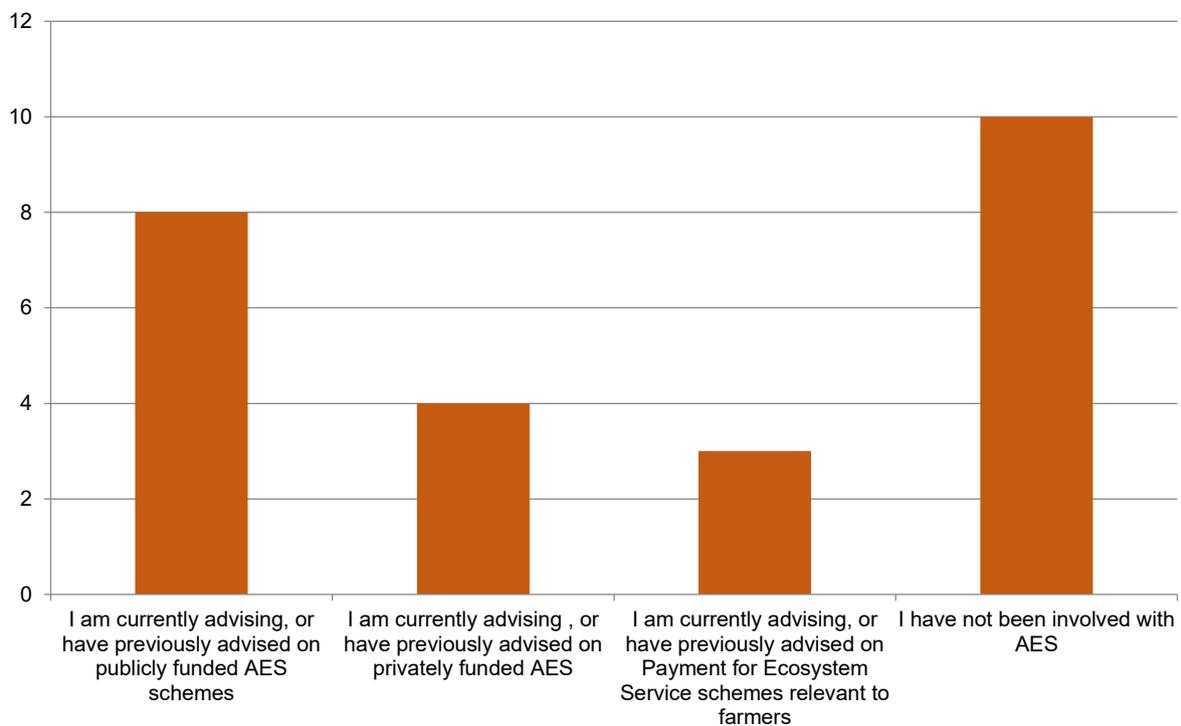


**Figure 4: Respondents farm business type**



### Experience of existing AES: Advisor’s survey

For the advisor survey, 10 respondents had not been directly involved with (AES). These respondents were redirected to the second half of the survey (The New Environmental Land Management Scheme). Of those who had worked on AES, eight were currently, or had previously advised on public-funded AES, four had advised or were currently advising on privately funded AES and three had advised or were currently advising on payment for ecosystem service schemes (Figure 55). Three individuals had worked in the area for more than 5 years, four between 1 and 5 years and two individuals less than 1 year. Two individuals were advising on AES from the Biodiversity Net Gain perspective; one advised on AES at the landscape scale; one advised on AES in the context of arable land options (including species-rich grass restoration, species-rich grass and fen management and the historic environment). Two individuals worked on AES from the upland grouse moor management perspective. Five of the agreements involved formal cooperation between groups of farmers.

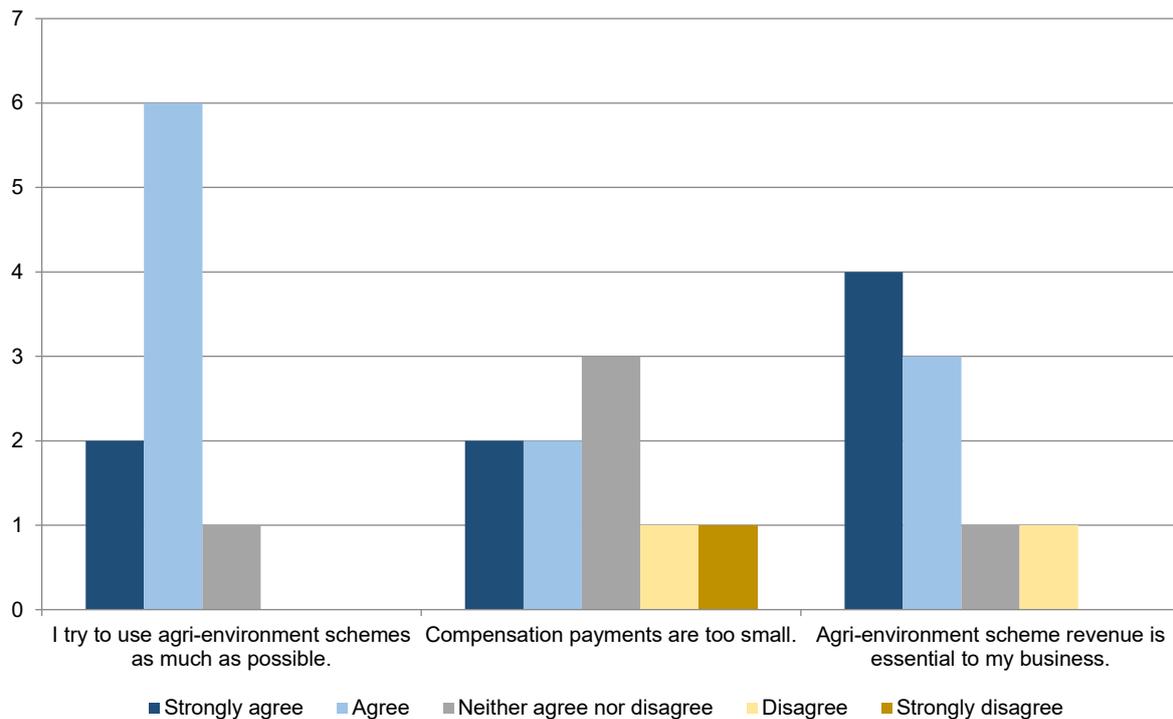


**Figure 5: Advisor’s experience of working on AES projects**



### Experience of existing AES: Farmer’s survey

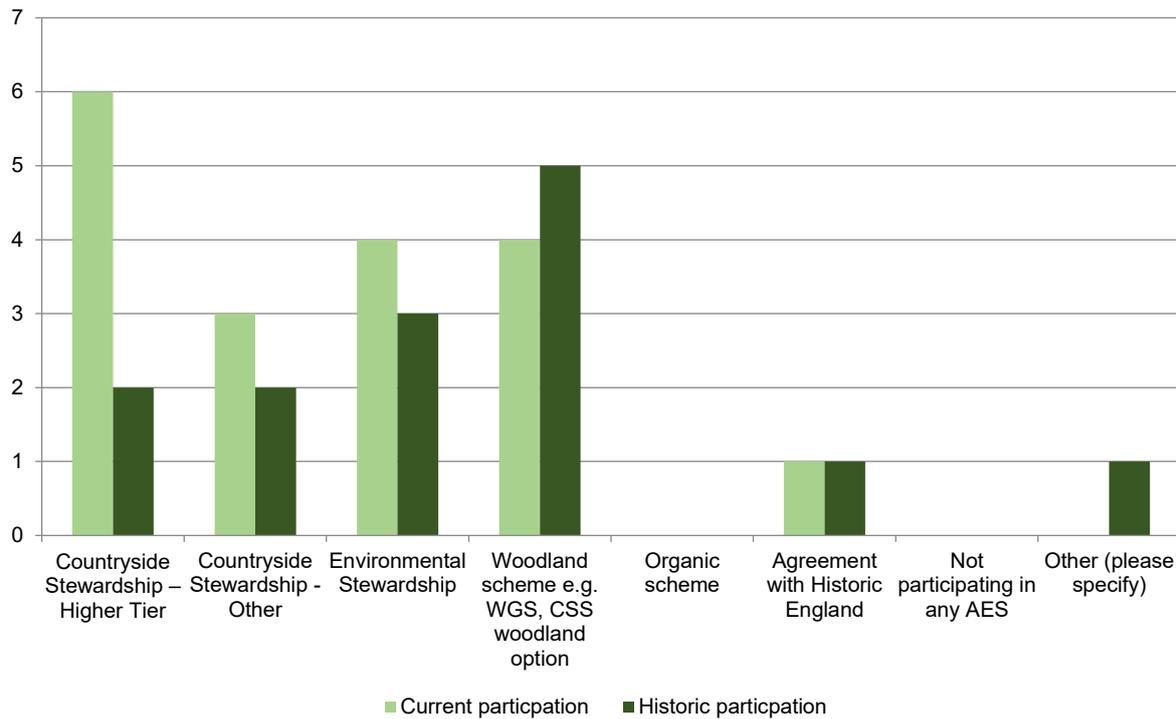
All nine respondents to the farmer's survey are currently or had previously participated in AES. We asked three broad statements related to the use of AES and its role in the farm business, using a Likert scale ranging from Strongly disagree to strongly agree. Responses are provided in Figure 6. The majority of farmers aimed to use AES as much as possible, with one neutral response to the question. There was a mixed response on the financial aspect of AES: four farmers felt the compensation payments were too small and two disagreed or strongly disagreed with this. Seven respondents stated that the AES revenue is essential to the business.



**Figure 6: Responses to the statement questions relating to the role of AES in the farm business**

At present, the majority of respondents are participating in Countryside Stewardship (higher tier), as well as Environmental Stewardship and Woodland Schemes (Figure 7). Farmers had also previously been enrolled in Woodland Schemes and Environmental Stewardship. Farmers were also asked whether any of these agreements involved formal corporation with farmers: only one respondent had cooperated with another farmer.





**Figure 7: Farmer’s current and historic AES scheme participation**

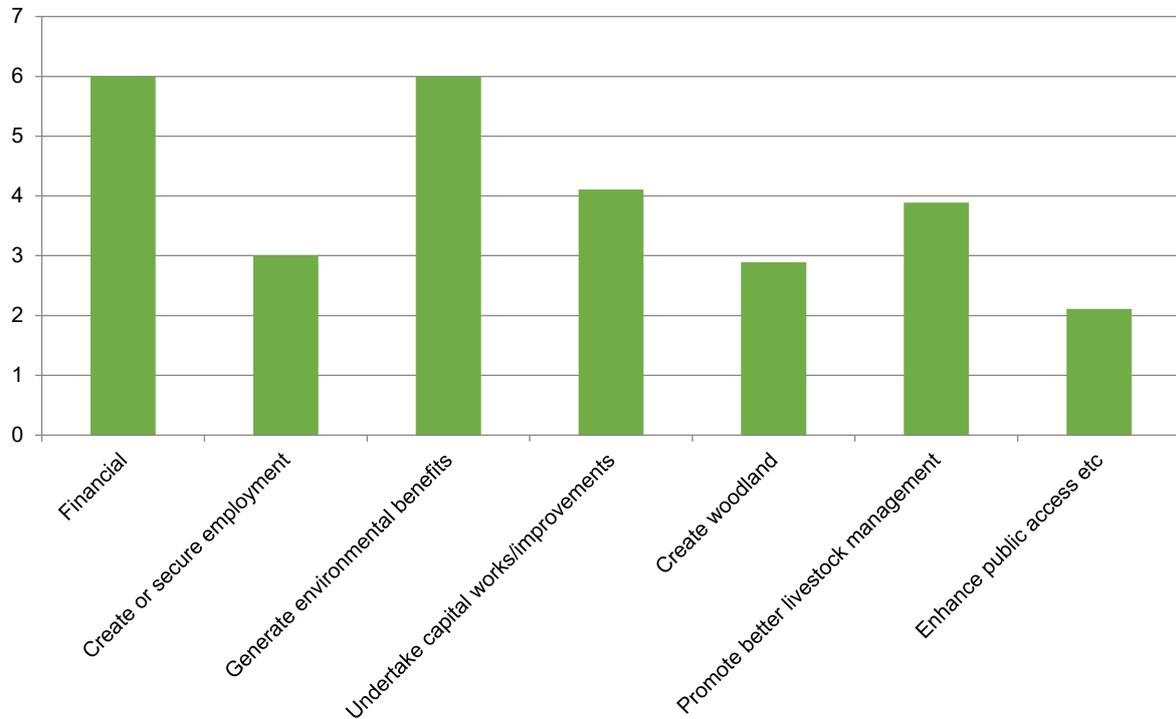
A summary of the main management activities undertaken by farmers is provided in Table 1. The main activities were related to biodiversity improvements including managing land for the benefit of local wildlife and supporting local priority habitats.

**Table 1: Summary of the main management activities farmers are currently, or have previously undertaken as part of AES**

Main management actions were undertaken as part of the AES	Responses
Manage land for benefit of local wildlife (provide sources of nectar and pollen for insect pollinators, provision of winter food and nesting habitats for birds; protect vulnerable or threatened species)	9
Support local priority habitats (species-rich grasslands; wetlands/rivers/ponds/ditches; hedges/orchards/wood pastures and parklands; heathland and moorland; coastal habitats)	8
Manage and maintain landscape features/character (e.g. traditional farm buildings, archaeological features, SSSIs, scheduled monuments)	7
Manage hedgerows, dry-stone walls, stock fencing and gates	7
Woodland improvement	3
Manage flood risk/flood management	2
Climate change adaptation and mitigation	1
Convert and manage land to organic certification standards	0
Educational access	0
Other (please specify)	0



Farmers were asked to rank their main motivations for participating in AES (Figure 8). Financial motivations and the generation of environmental benefits were the two main motivations for participating in AES, followed by undertaking capital work improvements. The high ranking for financial motivation corroborates the statement question response which found that the majority of farmers relied on AES income as part of their farm business.



**Figure 8: Farmers motivations for participating in AES**



## Section 2: The pros of current agri-environment approaches

Respondents to both surveys were asked to outline what they believed were the main strengths of current AES in the UK. Responses were considered to be environmental (improvements in biodiversity and the environment), financial (economic benefits) and implementation based (how easy AES is to implement and manage). Responses to both the advisors and farmers surveys are presented in Table 2.

From the farmers perspective, responses concentrated on the financial strengths of AES, in particular the advantages of receiving a guaranteed payment for undertaking work to benefit the environment which would have otherwise not been paid for. Four respondents cited the environmental strengths of the AES, although the majority of comments were in broad terms, for example, “improving biodiversity and soil health”. However, one farmer was very positive about environmental stewardship:

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*I am an enthusiast for environmental stewardship and so entered Higher Level Stewardship with money not being my main driver - so the scheme works for me.*

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The strengths of the scheme in terms of the environment were also shared by the advisors. There were several comments related to the positive aspects of working with farmers motivated to restore biodiversity. As shown above there were farmers involved in our survey who demonstrated this. The diverse nature of AES was also seen as a positive, with advisors and also farmers commenting that the range of options was a true strength of AES as illustrated by this advisor:

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*Having a library of options can support productive conversations with farmers. Used well, the options can support sustainable farm businesses.*

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**Table 2: Main strengths of AES identified by respondents. These are free text responses from all those who completed the additional text boxes**

Response	Perspective
<b>Farmers:</b>	
I am an enthusiast for environmental stewardship and so entered Higher Level Stewardship with money not being my main driver - so the scheme works for me.	Environmental
Improving biodiversity and soil health	Environmental
A new, biodiverse habitat has been created	Environmental
The ability to remove unproductive areas from production and get paid for doing so plus being able to get a return from areas that aren't used productively in the first place.	Financial
I don't feel that the current scheme delivers on our holding other than providing financial benefits to us. The overly prescriptive nature of the current scheme hampers potential environmental gains	Financial
Payment/acknowledgement for works that would have otherwise been undertaken with no financial reward - some options fit into farming/land management strategy with relative ease	Financial
Guaranteed annual income, especially if commodity prices are low	Financial
Fair provision for capital works. Have improved some habitats e.g., hay meadow restoration.	Financial, environmental
Simple to implement. Prompt payment	Financial, implementation
<b>Advisors:</b>	
Working with farmers truly motivated and interested in restoring biodiversity	Environmental
Potential to deliver real environmental management	Environmental
Opportunity to create new habitat. Collaboration between farmers to deliver landscape-scale through facilitation fund. Support farmland birds and pollinators	Environmental
Lots of options to choose from	Environmental, implementation
Having a library of options can support productive conversations with farmers. Used well, the options can support sustainable farm businesses.	Environmental, implementation, financial
The strategic location of habitat sites, the certainty of delivery of benefit, credibility in the market through the involvement of environmental NGOs	Environmental, implementation
Relatively simple to deliver	Implementation

### Section 3: The cons of current agri-environment approaches

Respondents to both surveys were asked to outline what they believed were the main weaknesses of AES in the UK. Responses were grouped into three main categories: the inflexibility of AES in management approaches, the lack of expertise within the organisations that support farmers to deliver the management options and financial weaknesses. Full responses are presented in Table 3.

From the farmers and advisors survey, the overwhelming weakness in the current AES is the lack of flexibility in applying the scheme and considering site features. All but one farmer cited this inflexibility as a major drawback with four giving detailed examples of where they had encountered problems on their farms:

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*Inflexibility for individual holdings e.g., we have fields in a scheme for wading birds however the waders nest up on the hill area, but this area was ineligible and so limited improvements to that habitat (farmer)*

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This view was also shared by nine of the advisors. Several commented that the administrative structure prevented them from providing the appropriate options to farmers based on their expertise as advisors and learning from the farmers. This prevented them from advising the best course of action for biodiversity improvements, as well as the benefits to the farmer.

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*The computer says no, no ability of advisers who know the farm and area to discern the best options because the computer says no (advisor)*

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Related to this, two farmers highlighted a lack of expertise in the advisors they were working with. Although, from the advisor's perspective it is unclear whether they have a lack of expertise or are simply hindered by the overly prescriptive administrative process.

From a financial perspective, farmers and advisors cited some uncertainties related to the length of the scheme and problems with payments administered by the Rural Payments Agency.

One participant did note that whilst the scheme delivers for them financially, he does not believe it truly provides environmental gains:

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*I don't feel that the current scheme delivers on our holding other than providing financial benefits to us. The overly prescriptive nature of the current scheme hamstrings potential environmental gains (farmer)*

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**Table 3: Main weaknesses of AES identified by the respondents. These are free text responses from all those who completed the additional text boxes**

Response	Perspective
<b>Farmers</b>	
In-flexibility for delivery-areas of options makes scheme management very difficult	Scheme management
Not flexible- difficult to make adjustments as effects become clear. Focused solely on prescription giving a one size fits all approach. Lack of expertise/understanding from staff creating schemes- tend to work to a template and/or points structure that doesn't allow for natures quirks.	Inflexible, lack of expertise
Inflexibility for individual holdings e.g., we have fields in a scheme for wading birds however the waders nest up on the hill area, but this area was ineligible and so limited improvements to that habitat	Inflexible
Inflexible	Inflexible
Can be too restrictive/prescriptive	Inflexible
Very prescriptive	Inflexible
No option to add options in subsequent years of schemes. High financial and risk burden placed on tenant farmers. Options cannot be adjusted, even when outcomes are poor. Payments are annual and feel ad hoc, rather than fixed, monthly and reliable. Poor choice of options; perhaps the most beneficial types of work are not available for funding.	Financial, inflexible
Lack of advice more could be done if we could target our particular needs and opportunities better	Inflexible, Lack of expertise
Delayed payments	Financial
<b>Advisors</b>	
Lack of certainty around the future financial options for farmers and how the BNG schemes that we can offer compare.	Financial
The Rural Payments Agency are a real blocker, late payments, clunky systems and unhelpful	Financial
The policy remains uncertain; BNG credit pricing unknown; developer focus on onsite BNG delivery may limit opportunities for supporting local nature recovery network strategies	Financial, inflexible
The computer says no, no ability of advisers who know the farm and area to discern the best options because the computer says no	Inflexible, lack of expertise
Inability to have discern appropriate options i.e., one field may have slopes at risk of soil erosion and flat areas suitable from lapwing plots, but the presence of soil erosion precludes the plots from a suitable location. Another example is the blanket wide ban of certain options on SHINE features, without discerning what those features are, where they are and will actually be damaged	Inflexible
Not allowing capital items in fields already in mid-tier option, circumstances change but this is not reflected in the scheme	Inflexible

<p>The lack of integration between woodland grants and Mid-tier, having to remove small patches of land to allow for woodland planting for flooding or water quality makes the whole thing unattractive to farmers, we need to be able to offer 3D buffer strips as part of Mid-Tier</p>	Inflexible
<p>With the lack of recognition and payment for species-rich grassland, it is more attractive to plough out grassland and plants non-local provenance AB1 [nectar flower mix] or AB8 [flower rich margins] in its place</p>	Inflexible
<p>The inability to recognise naturally occurring species-rich margin as AB8 [flower rich margins] when next to an SSSI yet they could plough out these species-rich margins and put in AB1 [nectar flower mix], why can't the system acknowledge the resource that is there.</p>	Inflexible
<p>AES are too limiting, and the process too often hits issues due to administrative limitations</p>	Inflexible
<p>Bureaucracy, penalties, insufficient NE resource to support agreement holders across holding (emphasis in Priority Habitat). A little time built in to discuss wider issues whilst up the farm drive would help.</p>	Inflexible
<p>Compliance and aftercare</p>	Scheme management

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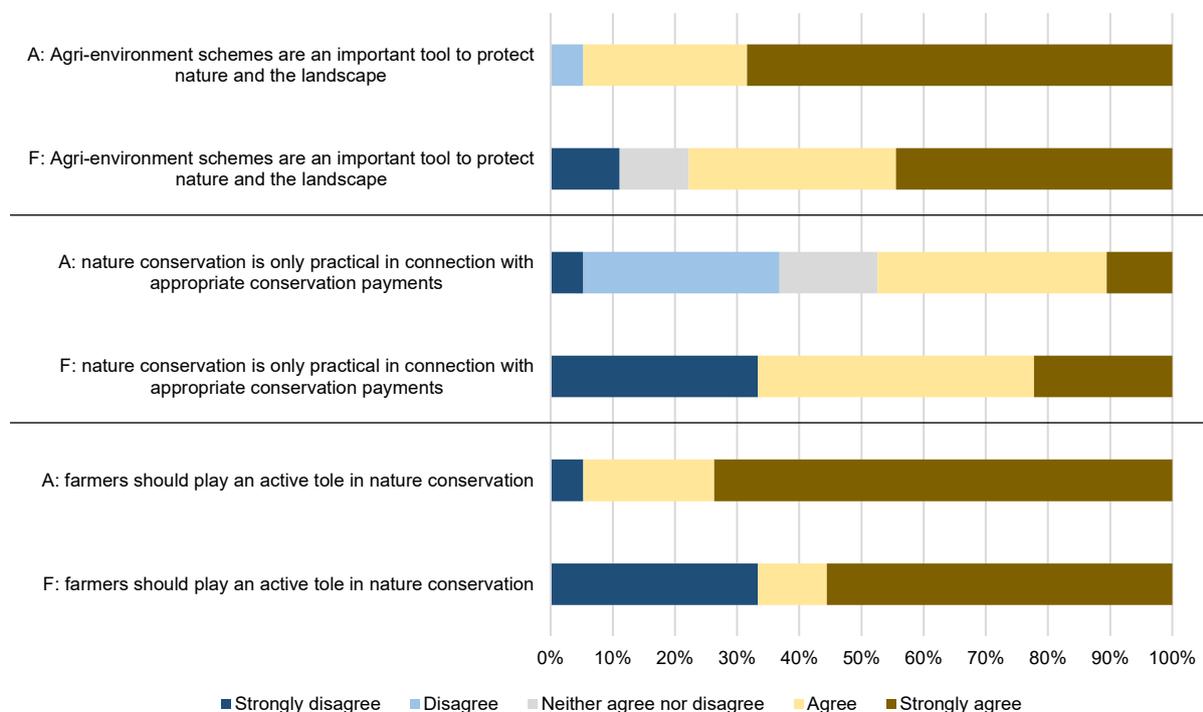


## Section 4: Opportunities

### Perspectives on AES and its role in conservation

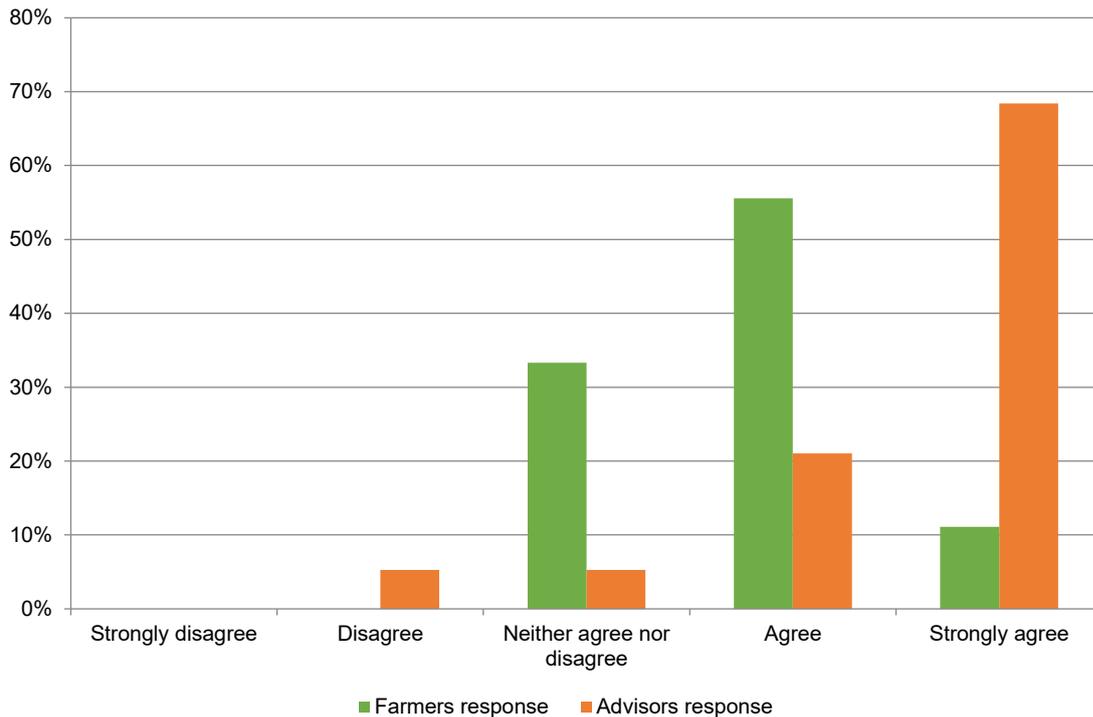
As part of the survey, we asked both advisors and farmers their thoughts on the role farmers have to play in nature conservation more broadly. We asked farmers and advisors to respond to a series of broad statements related to AES and nature conservation using a Likert scale ranging from Strongly disagree to strongly agree. A comparison of the responses from the two surveys is provided in Figure 9.

Overall responses to the three statement questions were broadly similar. 94% of advisors and 77% of farmers agreed or strongly agreed that AES are an important tool in protecting nature and the landscape. As anticipated, farmers were more likely to agree or strongly agree that nature conservation is only practical in connection with conservation payments compared to advisors (66% of farmers compared to 46% of advisors). Overwhelming 94% of advisors also agreed or strongly agreed that farmers should be playing an active role in nature conservation compared to 66% of farmers. Indeed 33% of farmers strongly disagreed with this statement.



**Figure 9: A comparison of farmer and advisor responses to the broad AES and conservation management statements. “A” denotes an advisor response. “F” denotes a farmer response.**

We also asked farmers and advisors their opinion on the new “public money for public goods” approach being introduced by Defra as part of the new Environmental Land Management scheme in England (Figure 10). There were differences between the two groups responses: 33% of farmers had no opinion on the approach, whilst 55% agreed with the approach. In contrast, 68% of advisors strongly agreed with the approach. Although one individual disagreed with the approach.



**Figure 10: A comparison of the farmer and advisor responses to the question “Do you agree or disagree with the “public money for public goods” approach in the new Environmental Land Management Scheme?”**

### Opportunities identified by farmers

Farmers were asked to detail the improvements that they would like to see to AES in the UK context. The responses are presented in Table 4. Comments were grouped into three main themes: collaboration, flexibility in scheme design, and finance. As identified by farmers and advisors in previous questions, one of the main drawbacks with the current AES is the lack of flexibility farmers and advisors have within the management options. It was no surprise that within improvements to AES, farmers repeatedly called for less prescription, less bureaucracy and more flexibility within AES going forward. As part of this farmers wanted to build a collaborative approach with Defra, Natural England and other conservation bodies going forward. This echoes one advisor’s comment on AES which is that they wished to spend more time with the farmer at their farm, discussing options together, rather than relying on a computerised tool.

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*Defra/ Natural England/ conservation bodies need to work with farmers to improve the quantity and quality of biodiversity on their land rather than trying to enforce a one size fits all policy based on office-based mapping/classification (farmer)*

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Two respondents also suggested that AES need to reward “active” management of farms, rather than focus on “not farming” areas. It was felt that many of the current approaches are viewed negatively by farmers who prefer to actively manage their land. Instead, AES that funds beneficial environmental farming practices would be welcomed by the community. It was also felt this could offer better environmental outcomes and better value for money for the taxpayer.



Related to this was the payment structure related to conservation management on the farm. One respondent had identified a conservation priority on his land but did not have the capital funds to undertake this. The scheme that could be applied would fund the work retrospectively over five years, and this was not a possible financial undertaking for the farmer. There is a need for finance not just to compensate farmers, but to assist in making biodiversity outcomes profitable for farmers.

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*Funding the types of farming (agroforestry, organic, regenerative etc), which benefit ecosystems would improve (farmer) attitudes towards schemes, probably represent better value for taxpayers and deliver better outcomes (farmer)*

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Also related to finance, one farmer also suggested looking beyond the public funding of AES and moving towards private investment. None of our survey respondents had received private sector funding to secure environmental management. For the EFFECT case study, the need to go beyond compensation and the consideration of private funding is a fundamental area of discussion in creating biodiversity offset markets (this is discussed in more detail in later sections of this report). Finally, several respondents identified potential opportunities arising from collaboration between farmers to undertake joint conservation actions.



**Table 4: Farmer’s responses to changes that they wish to see to AES in the UK. These are free text responses from all those who completed the additional text boxes**

Going forward, what changes would you like to see within the AES in the UK e.g., what could be improved or modified from existing approaches, what new approaches should be developed?	Perspective
<p>Cooperating with neighbours to join schemes together so each individual isn't creating an 'island' amongst others.</p> <p>Defra/Natural England/conservation bodies need to work with farmers to improve the quantity and quality of biodiversity on their land rather than trying to enforce a one size fits all policy based on office-based mapping/classification.</p>	Collaboration
<p>A collaborative approach is needed to build trust rather than the current punitive approach.</p>	Collaboration , improving flexibility
<p>Nobody can put the environment first when their core business is making a loss, biodiversity/environmental outcomes need to be PROFITABLE not just compensated.</p>	Collaboration , improving flexibility
<p>Increased farmer collaboration. Less prescriptive. Less bureaucratic</p>	Collaboration , improving flexibility
<p>Often, AES pay farmers to 'not farm' areas of the land under their management, i.e., field margins, fencing off areas for woodland etc. This approach has a negative psychological impact on farmers' attitudes to AES, offers poor value for taxpayers and greatly constrains outcomes.</p>	Collaboration , motivations
<p>Funding the types of farming (agroforestry, organic, regenerative etc), which benefit ecosystems would improve (farmer) attitudes towards schemes, probably represent better value for taxpayers and deliver better outcomes.</p>	Finance
<p>Do AES agreements have to rely upon government finance, why not consider non-government interventions?</p>	Finance
<p>Greater incentives for removing unproductive land</p>	Finance
<p>Monthly payments. Simplify rules. Prioritise less-favoured areas.</p>	Finance, improving flexibility
<p>We have had a huge interest in nature recovery in the last few years however we are very limited in what we can achieve due to financial limitations, i.e., we don't have spare capital lying around to invest in the conservation work we WANT to carry out.</p>	Finance, improving flexibility
<p>I would not only like to see schemes more flexible to individual holdings or geographical area needs but how it is funded needs to change. E.g., we are looking to plant 17 hectares of trees to create habitat for neighbouring red squirrel and pine martin however the current system requires me to pay fencing and tree planting upfront then receive 80% back retrospectively with the remaining 20% in five years. Under this system, we are simply unable to financially afford to do this.</p>	Finance, improving flexibility
<p>Improved flexibility of options</p>	Flexibility
<p>Less prescriptive options, fewer inspections</p>	Flexibility

### Farmers perspectives on habitat banking



Farmers were provided with information on the creation of habitat banks as part of ELM, how these could be potentially funded (public and private funding) and the role they as farmers could play in this. As previously identified, farmers are willing to explore alternative management properties within AES to achieve environmental and financial gains. One option we are interested in as part of EFFECT is the role farmers could have in developing habitat banks. We asked two broad questions to gauge farmers thoughts on AES and habitat banking more generally. Eight farmers felt that AES could have a major role in restoring and/or creating habitats for the purposes of *conserving* biodiversity and six farmers felt AES could play a role in incentivising farmers to restore or create habitats. Farmers were also invited to comment on these questions (Table 5). Overall, the response was positive from farmers, with two commenting that this offers farmers, alongside Defra and Natural England a real possibility to be leaders on 'nature-friendly farming'. Furthermore, several respondents raised the issue of considering alternative finance measures from the private sector and the incentives this could offer farmers.

**Table 5: Farmers comments on the role AES could play in habitat banking. These are free text responses from all those who completed the additional text boxes**

Most of the UK land area is managed by farmers and going forward farming can and should work alongside wildlife and their habitats

There is a great will within the farming sector to improve biodiversity and going forward there is a great opportunity for Defra and Natural England etc to cash in on this and improve the industries credentials on biodiversity and lead the world on 'nature-friendly farming'

Many farmers will not need to be incentivised at all if the tools are there via a usable scheme. Some will need the financial mechanism of the scheme to work a lot better. What is vital to both groups is for scheme advisors from Natural England etc are all on the same page and don't use their individual perceptions of rules and provisions.

We need a clear steer as to what needs to be done at a local level

If it can be de-coupled to the government's finance routes.

If AES agreements are based upon non-government finance, they could have a greater chance of success.

I think there are external opportunities such as biodiversity offsetting that might be more attractive to farmers. It might be more a case of becoming "price makers" as opposed to "price takers".

Financial incentives should go to the land manager, not the landowner

We also asked farmers a series of statement questions regarding the design of the scheme to provide habitat banks. All farmers would consider creating a habitat bank "if the process was really clear e.g., around farmers' obligations, expected costs and benefits of undertaken actions, around monitoring and outcomes". This echoes responses to earlier questions within the survey regarding the strengths and weaknesses of the current AES. The strength of the existing AES is the range of management options available to farmers, but this is hindered by the bureaucratic process and lack of time and /or expertise provided to them by the supporting agencies. Furthermore, all farmers responded strongly agree or agree to the statement "I would create a habitat bank depending on the economic incentives." This shows there is a need to provide farmers with the appropriate level of compensation (and potentially opportunity to profit, given responses to previous questions) for farmers to come forward and support habitat banking. These responses show there is an interest, and willingness within the farming community to consider habitat banking, however, there has been a lack of support and drive in making this

happen (as evidenced by the Defra pilots from 2012-2014 where no landowner came forward to provide a habitat bank). Two farmers were sceptical of the process of habitat banks offsetting development

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*I feel it's letting developers "off the hook", relieving them of their environmental responsibilities (farmer)*

*Not sure ecologically it really works to destroy habitat A but promise to improve habitat B, however more likely to be effective if conducted locally (farmer)*

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### The design of habitat bank and offset markets

Farmers and advisors were also asked a similar series of questions regarding the design and administration of habitat banks and offset markets. The questions covered location, the contract length (how long a habitat bank should remain as a habitat bank for), credit pricing and administration. These issues are highly contentious within the academic and policy communities (see Needham et al 2018 for a review).

#### Location

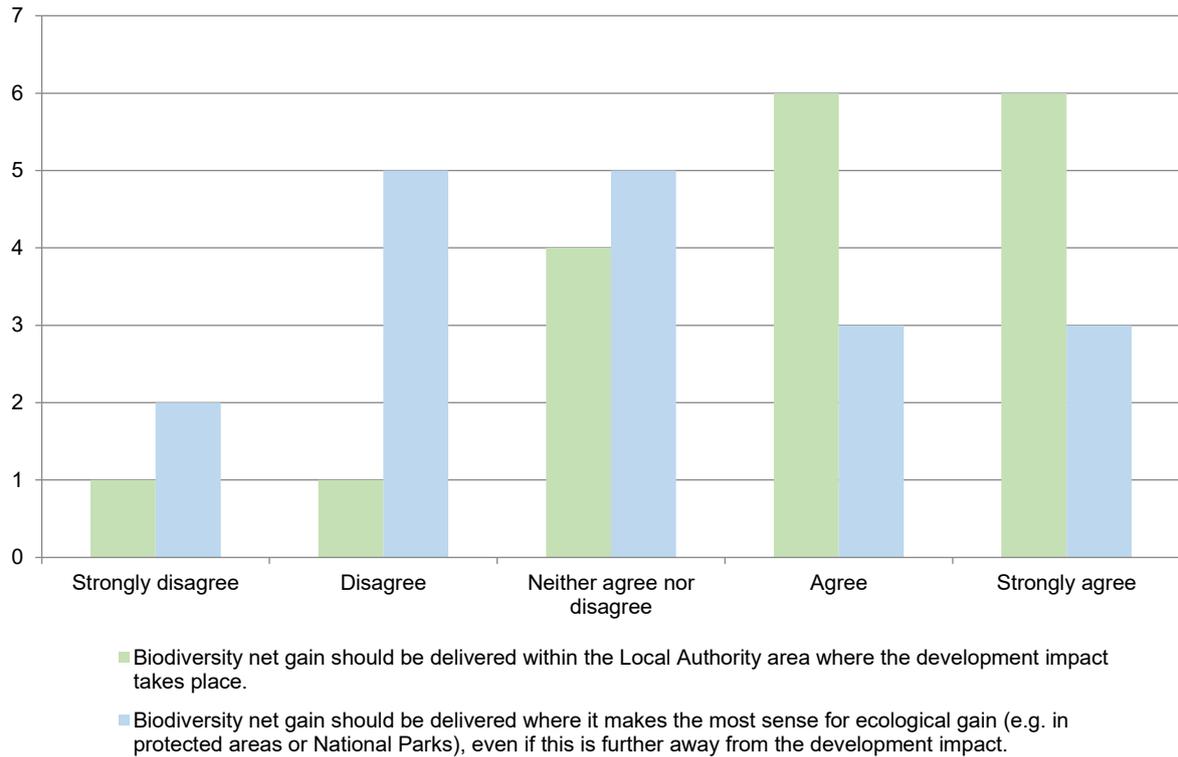
From a location perspective, there are two distinct viewpoints: one is that habitat banks should be located as close to the impact site as possible when offsetting development impacts. The second viewpoint is that habitat banks should be delivered where it makes the most sense for ecological gain even if this is further away from the development impact. 12 responses to the advisor's survey either agreed or strongly agreed that habitat banks should be located as close as possible to the development impacts with 6 responses believing habitat banks should be located to deliver ecological gain (Figure 11). For farmers, the response was mixed, with no dominant answer on whether they would be more likely to deliver a habitat bank if it was to offset local development (Figure 12). Farmers also raised some interesting perspectives with one commenting that they would wish to remain neutral from the development itself and a second expressing concerns on how this would affect upland farming communities:

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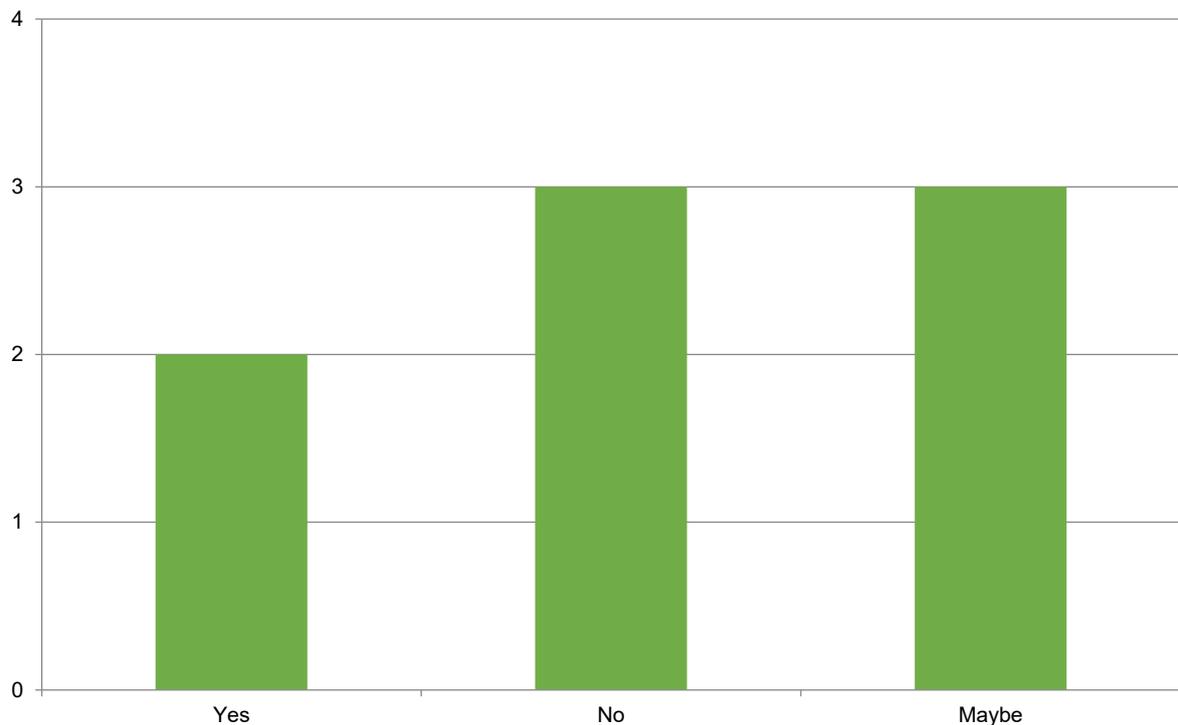
*I would rather remain independent from development otherwise the link could be challenged on both sides in the future (farmer)*

*Habitat banks can be managed remotely with low labour requirements. If the habitat bank is not created locally, there is a high risk that upland and rural communities in low-value land areas will be eroded and destroyed to allow development in urban, high-land-value communities (farmer)*

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**Figure 11: Advisors perspectives on the location of habitat banks**



**Figure 12: Would you be more inclined to participate in a habitat banking project if this was to offset a development taking place locally in your area?**



### Contract length

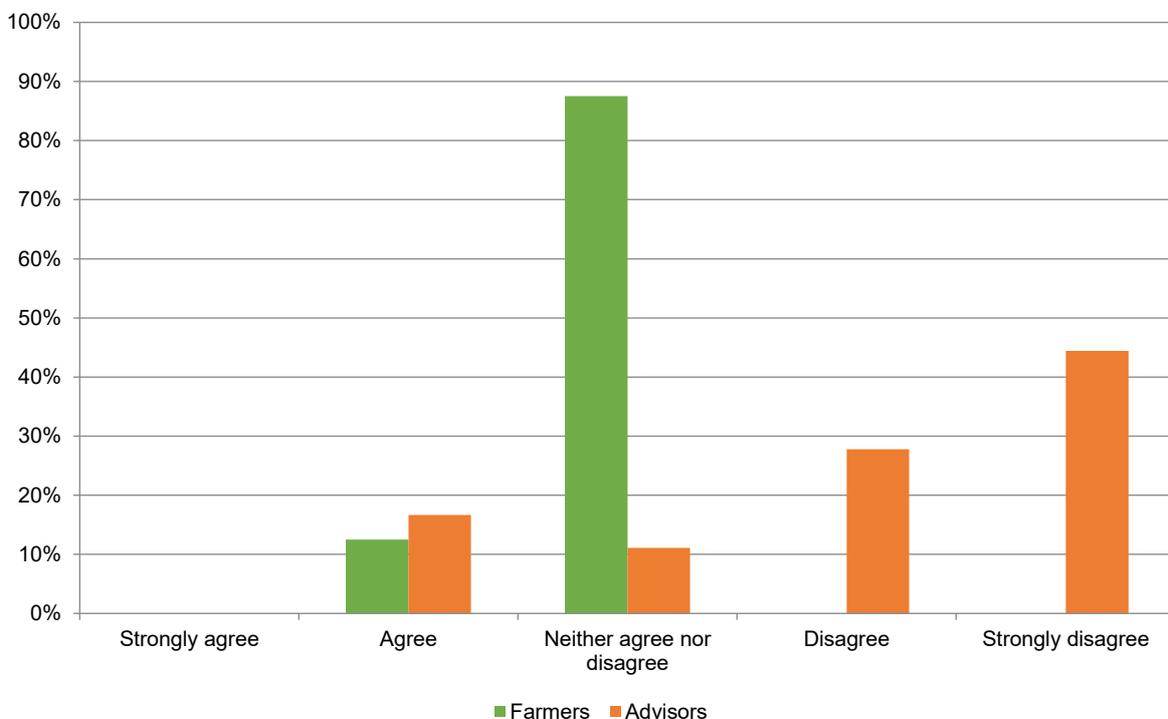
A second contentious issue in the design of habitat banks and biodiversity offsets is how long land should remain as a habitat bank, i.e., the contract length. A strong view from within the ecological community is that where habitat banks are being used to offset development impacts, these should be secured in perpetuity. 72% of advisors disagreed or strongly disagreed that the “minimum length of contract time for a habitat bank should be 30 years” with follow up responses suggesting that the land should be secured for longer than this (Figure 13). In contrast, responses from farmers, were, expectedly mixed with no strong opinions on the 30-year length (88% neither agreed nor disagreed”). However, follow up responses showed a preference for shorter, more flexible contracts with a preference for 10-year contracts emerging. There was a shared view that 30 years was a long period of time.

*30 years is a long time. Would need periodical reviews every so often (farmer)*

*A contract length is only as good as the contents of the AES agreement and the ability of the land manager to put in place the necessary biodiversity improvement (farmer)*

*Contract time should (obviously???) be flexible, depending on the type of habitat and outcomes being paid for (farmer)*

*A 10-year agreement, to be reviewed after 10 years, with the aim of continuing (farmer)*

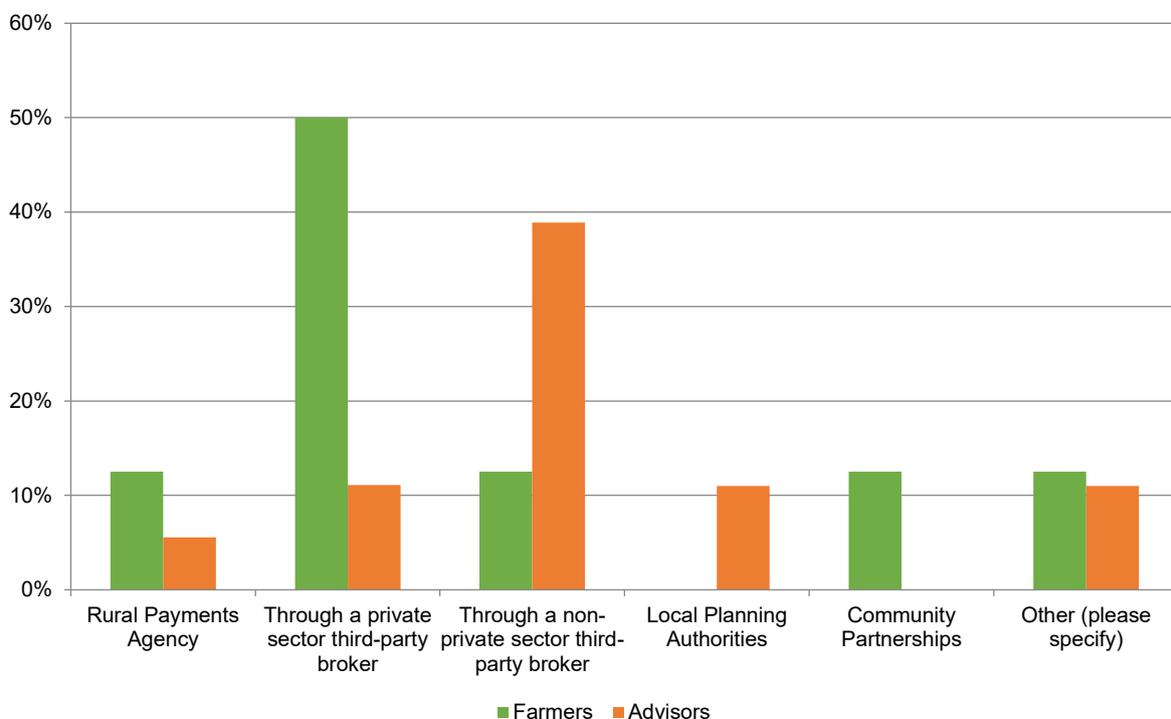


**Figure 13: Farmer and advisors’ opinions on the habitat bank contract length: “The minimum length of contract time for the habitat bank should be 30 years”**



### Administration

An ongoing concern with biodiversity offsetting is that it provides an incentive for quick and cheap mitigation: whilst both offset providers and buyers are price-conscious, neither need be quality conscious (Wainger et al. 2010). To resolve this, adequate governance, monitoring and enforcing of offsets need to be developed through a range of legal and financial tools. However, this means that the regulatory capacity needed to administer biodiversity offset markets is high. There were clear differences between farmers and advisors for the preferred regulatory agency (Figure 14). 50% of farmers would prefer habitat banking to be overseen by a third-party private sector broker, compared to 13% of the advisors. This preference for the private sector to oversee offset tallies with previously identified weaknesses with current AES schemes, in particular the bureaucracy associated with Defra, Natural England and the Rural Payments Agency. In contrast, 39% of advisors would prefer the scheme to be regulated through a non-private sector third party with Natural England and the Wildlife Trusts cited as the preferred options.



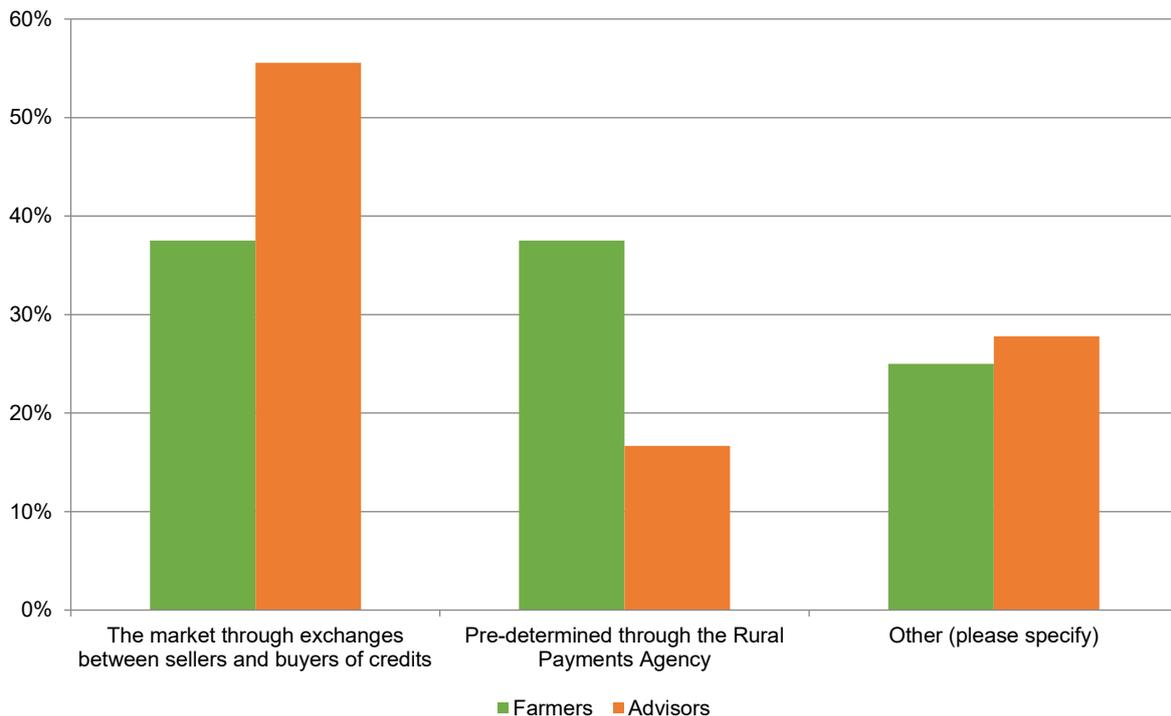
**Figure 14: Farmers and advisors’ responses to the question “Habitat banking should be mediated by the...”**

### Credit pricing

Under the current biodiversity net gain plans, Defra set the prices for each unit of biodiversity that makes up the biodiversity credit. There is uncertainty about the future price for each unit of and the estimated cost varies from £12k-£50k. The figure should be clarified by 2022. In our survey, 38% of farmers and 56% of advisors felt the credit price should be determined by the market, rather than taking a pre-determined value (Figure 15). It was felt that pre-setting the value of a credit would fail to consider the complexities associated with restoring biodiversity in different regions, as well as the differences between the habitat, which is lost, and the habitat created.



*This is not straight forward. We know that some biodiversity units are more expensive to create than others. We charge the developer a standard tariff but then the price given to the landowner is reflective of the cost to create and manage the habitat for years. There are so many variables to consider, and some areas are more desirable for creation than others, some landowners guarantee to retain the biodiversity forever, others can only guarantee this for 30 years (in accordance with the funding). This can all be reflected in the price per biodiversity unit paid to the offset provider (advisor)*



**Figure 15: Farmers and advisors’ responses to the question “The price of the offset credit should be determined by...”**

### Advisors’ perspective on biodiversity net gain and habitat banking

Advisors only were also asked a series of questions on their perspectives on the current UK biodiversity net gain policy and the role of habitat banking and offsetting within this. There was a mixed response to the question of whether net gain could be delivered through existing steps within the mitigation hierarchy with 39% of respondents neither agreeing nor disagreeing (Figure 16).

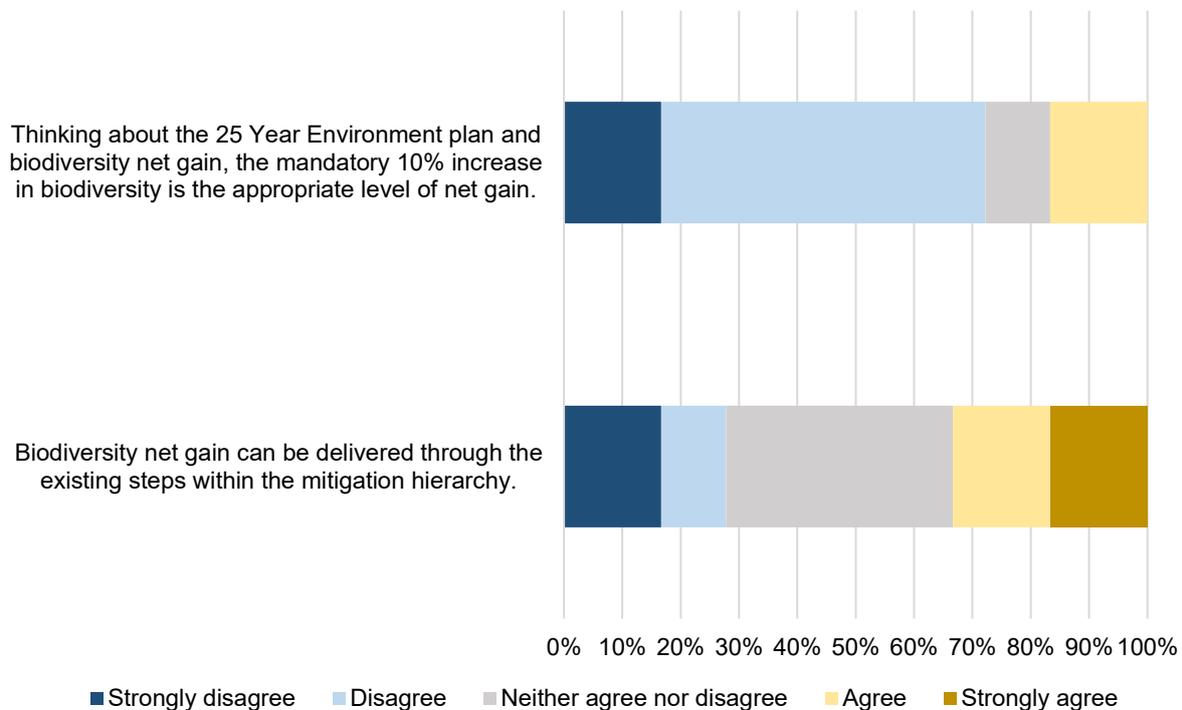
A range of views was expressed in response to what is an appropriate level of net gain (Figure 16). From all responses, it was clear that the 10% net gain target is too low for a variety of reasons, with 12 responses providing additional comments. Suggested net gain targets ranged from 20% through to 50%. Several respondents felt the target was too low to meet the targets of the Environment Plan and to deal with the risks associated with climate change. Other respondents felt that it was critical to think about how biodiversity gain is calculated and how this relates to targets (Table 6). It should be noted that one respondent did not agree with the



approach “I think more protection should be given to what is there already, not use 'net gain' to allow developers to trash ancient habitats”.

**Table 6: Advisors perspective on the UK biodiversity net gain targets. These are free text responses from all those who completed the additional text boxes**

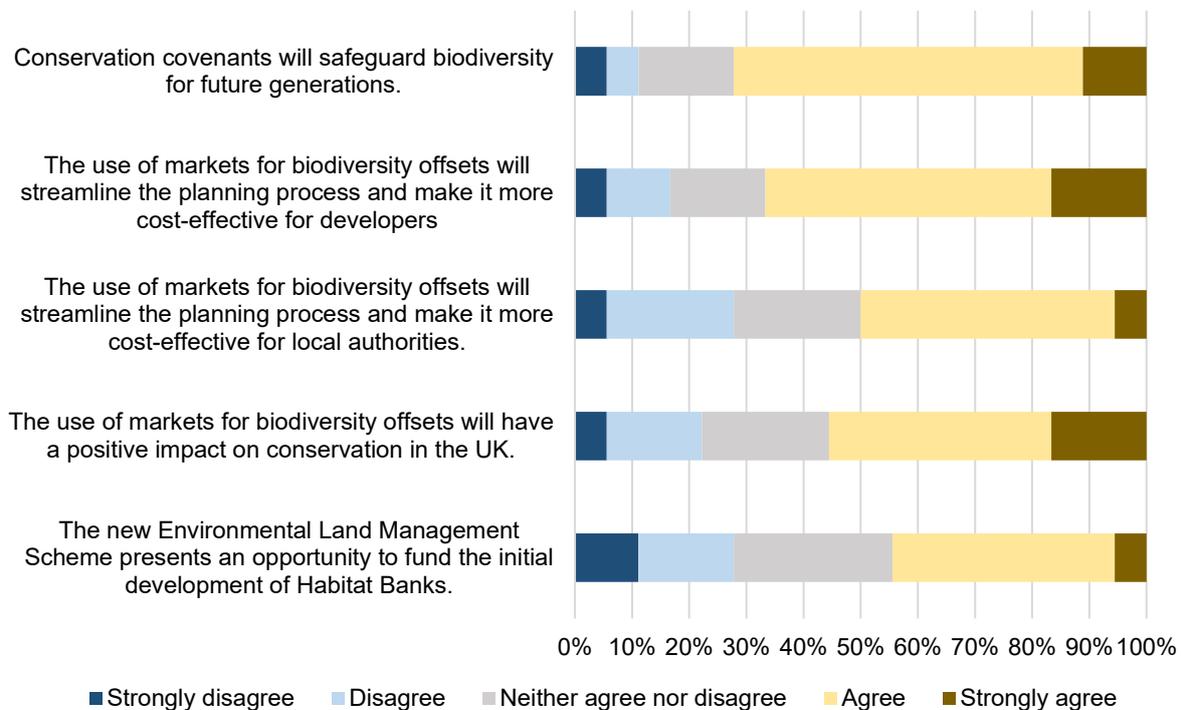
Advisor’s comment	Perspective
The aspirations of the 25-year plan are hugely ambitious and it is felt that a mere 10% net gain would not achieve what it requires	Achieving the target
Given the risks involved (climate change, lack of ecosystem support, increased rain, increased drought etc.) 20% would be a more appropriate working target to guarantee biodiversity net gain results.	Risk
20%; 10% doesn’t seem to actually deliver 10% so we need a buffer of at least 10%	Risk
At least 25% for a period to make sure it works, then review if it is failing	Achieving the target, risk
How the 10% is calculated is key. Currently, 10% is insufficient to provide the required net gain	Achieving the target
A percentage is determined by the disparity between how much of the biodiversity feature is protected, and how much we want to protect (i.e., regional biodiversity targets).	Calculation



**Figure 16: Responses to the Likert Scale biodiversity net gain questions**



Overall, there were mixed responses from the advisors that markets for biodiversity offsets would have positive benefits of conservation in the UK and the planning process (Figure 17). 66% of advisors agreed or strongly agreed that offset markets would streamline the process for developers. However, only 49% felt that offsets markets would make the planning process more streamlined for local authorities. 38% of respondents agreed that markets for biodiversity offsets would have a positive impact on conservation in the UK.



**Figure 17: Advisors responses to the Likert scale statement questions on biodiversity offsetting in the UK**

We asked the advisors to list what they thought the key obstacles would be for landowners in creating habitat banks, developers purchasing the offset credits and local authorities in managing the habitat banks. The responses are presented in Tables 7 - 9.

The main obstacles for landowners focussed on the risks to landowners of creating habitat banks. There were significant financial risks for farmers which were related to the start-up costs associated with creating the habitat bank and the uncertainty associated with the yet unknown credit price and lack of offset market. There was also concern on how farmers would be paid if the offset bank failed. A second area related to finance was the number of competing schemes: Net Gain and Environmental Land Management and which would offer better value to landowners. A second theme was information (or lack of it). Advisors felt that there was a lack of information and support for landowners regarding ecological and financial support. The final theme was a timescale with several advisors acknowledging that the 30-year contract was too long for many landowners. These themes were also echoed in the farmer's own perspectives on the future of habitat banking.

For developers, the main obstacle perceived by advisors was the lack of land currently being offered for habitat banks. However, it was felt the onsite preference by developers for habitat creation limits the incentives for farmers to establish habitat banks.

For local planning authorities, the main obstacles to creating a market for biodiversity offsets centred on a lack of resources to deliver the knowledge and expertise required to oversee such a scheme. There is a lack of ecological specialists within local authorities who can apply the net gain metric and assist developers and farmers in the application of this. Lack of resources also hinders follow up monitoring and enforcement, with several respondents citing that developers rarely meet their on-site compensatory requirements as there is no follow up enforcement from local authorities.

**Table 7: Advisors views on the main obstacles for landowners creating new habitat banks. These are free text responses from all those who completed the additional text boxes**

Obstacles for landowners creating new habitat banks	Theme
Covering the initial costs. Certainty of selling the credits and knowing that this is the best option when considering that this is an unprecedented time of change for the agricultural sector	Financial
Lack of trust in the new market	Financial
Uncertainty of policy, demand for credits and pricing compared to existing approaches	Financial
Will the purchasers bank role it if it (habitat bank) fails to establish fully because of environmental conditions such as weather and pests	Financial
Payment rates and ability to sell credits later	Financial
Uncertainty in payment rates for Environmental Land Management vs Biodiversity Net Gain	Financial
The lack of demand for offset units (the Metric is currently flexible enough that developers can meet the vast majority of their biodiversity obligations on-site)	Financial
A suitable market at a rate that reflects the effort, and being able to provide suitable habitats	Financial
Competing opportunities for land management, including differing timescales and rewards	Financial, information
Advice; finances	Financial, information
Lack of information, ease of process, incentives	Information
Understanding the different trading platforms, funding sources and having a mediator/adviser that can provide insight and guidance. Also stacking and the potential for stacking on parcels combining different schemes.	Information
Understanding the market and professional financial and ecological advice	Information

Understanding the process of biodiversity net gain and offsetting	Information
Having to tie their land up for min 30 years	Time
Risk associated with managing land for a long period	Time

**Table 8: Advisors views on the main obstacles for developers in purchasing offset credits. These are free text responses from all those who completed the additional text boxes**

<b>Obstacles for developers purchasing conservation credits for net gain off-site</b>	<b>Theme</b>
Cost of credits	Financial
Timescale and resources involved in finding appropriate sites to create the biodiversity net gain	Financial
Lack of information	Information provision
A lack of trading platform	Information provision
An available list of priority project contributing to the Nature Recovery Network	Information provision
Not enough non-agricultural land available	Land availability
Supply of local landowners willing to help deliver BNG	Land availability
Available in appropriate locations at the right time and with appropriate certainty! Will be worth paying for.	Land availability
Agreeable landowners offering land, ideally close to where the impact is occurring	Land availability
Lack of supply of credits, preference for onsite mitigation due to it being cheaper and easier	Land availability, on site-preference
Paying less for net gain off site than areas developed	on site-preference
If onsite biodiversity creation is cheaper and not regulated to the same extent as offsite offsets	on site-preference
Access to sites - that is why currently most is placed on-site which ultimately fails to delivery anything for biodiversity.	on site-preference
There is unlikely to be any need for them to do so as they can meet most of their obligation on-site under current policy arrangements	on site-preference

Advice; lack of compulsion

on site-preference

It's a win for them, keep destroying the environment and just say you're going to create something new elsewhere (that never actually happens, and the local authority can't police)

on site-preference

**Table 9: Advisors views on the main obstacles for Local Authorities in managing offset credits. These are free text responses from all those who completed the additional text boxes**

Obstacles for local authorities managing the requirements of biodiversity net gain	Theme
A trading platform whereby landowners can enter their land and actions and where developers can identify suitable partners. Brokerage is the key	Information provision
Not enough technical knowledge within Local Planning Authorities	Knowledge
Having a proper understanding of the net gain benefits	Knowledge
Access to appropriate in-house expertise to scrutinise and monitor BNG	Knowledge, monitoring
Ensuring newly created habitats are managed to maintain favourable condition and are not sold on for future development	Monitoring
Staffing and time to manage it	Resources
Lack of resources	Resources
They are underfunded and stretched - also as the planning authority it is a bit poacher/gamekeeper	Resources
Capacity - we undertake all the work for the planning authorities, so our model has zero cost to them.	Resources
A lack of potential offset sites; lack of capacity	Resources
Lack of capacity and expertise, uncertainty of policy, suitability delivery providers	Resources, knowledge
manpower, advice	Resources, knowledge
Certainty of delivery, staffing and general understanding of requirements	Resources, knowledge
Resources and expertise to check the information coming in from developers (i.e., that the metric has been completed accurately).	Resources, knowledge, monitoring



Also ensuring that the onsite biodiversity net gain is delivered as specified - the landscaping is nearly always the final part of the development, and it would be interesting to know how many Local Planning Authorities (if any?) check that the final plan meets the specification in the metric.

Too much temptation to allow existing habitats to be destroyed as 'new habitat' can be created. Policing of new habitat creation, developers promise all sorts then don't deliver and there is nothing the local authorities can do about it.	Resources, monitoring
Ensuring offsets are adequately delivered and monitored and take place in priority places	Resources, monitoring
Lack of capacity to regulate, monitor and enforce	Resources, monitoring

To end the survey, farmers and advisors were offered the opportunity to express any further comments related to the survey material. These are included in Table 10.

**Table 10: Final written comments to the survey from advisors and farmers. 'A' denotes an advisor's quote, 'F' denotes a farmer's quote. These are free text responses from all those who completed the additional text boxes.**

### Viewpoints related to finance and risk

- F The inability to put biodiversity requirements above short-term financial gain
- F Payment rates. Devaluing land.
- F the need for biodiversity enhancement projects to work is key, government funded schemes have almost all failed so perhaps private finance is the answer.
- F Tenancies plus lack of information as to what could happen if the rules change in a few years' time  
The Environment Bill may specify that the BNG site / agreement must be set up for the development to get planning permission. If this requirement is brought in, it would negatively impact the way we operate and the resulting benefit to biodiversity. We have a pipeline of projects that are approved by a Grant Panel and our aim is to deliver high quality biodiversity projects in strategic locations in the county. We need to pool funds to do this. If a developer has a requirement to deliver 0.5 biodiversity units as part of their planning application, it makes no sense to require a 30-year management plan to be set up for a tiny piece of land. This will be more costly in terms of administration than in terms of the amount spent on actually creating the biodiversity uplift.
- A The idea of using agri-environment payments is wrong - having the RPA involved would be a nightmare and will prevent private markets from establishing. This MUST NOT be seen as a means of Government stepping away from providing agri-environment funding - which is essentially the use of taxpayer's money to offset the environmental damage caused by farming. Also, the demand for conservation credits (Environment Bank product) has been hugely overstated by Government. We know what and where the demand is, and agri-environment payments must be separate payments to contracts entered into for habitat banks to service the development demand.
- A May be opportunities for large landowners and investors to make large profits from trading. Limited opportunities for small landowner or general public to benefit from net gain



### Viewpoints related to knowledge

- F Paperwork. Knowledge. Time.
- F For land managers, i.e., farmers, there will be economic constraints as well as practical ones.... how will it fit into the existing farming system? Will there be advice to create them?
- F Access to markets, knowledge of deal structures
- F Gov legislation, willingness of farmers to work together
- A Three key things. Local priorities for what need to be delivered where should be established. A recognised broker for credits, management advice and management untiring needs to be in play locally

### Management of offsetting

- A monitoring and management is key and currently is not done well - it isn't for normal mitigation as part of a planning application so how will this be policed for BNG as well
- A Lots! We need to learn from the mistakes in other countries like Australia and US. Regulation, monitoring & enforcement over the whole 30+ years is absolutely critical. The English BNG approach already departs from established best practice principles.
- A What can be achieved on the ground will depend on the strength of the legislation and the coherence of implementation. There's a real risk of poor delivery. Which would still be an improvement on the status quo, but fails to capitalise on the opportunity
- A big potential but needs to be mandatory not voluntary

### Principles of offsetting

- A Opportunities for using existing non-statutory designated sites, eg. Local Sites or Local Wildlife Sites, and LNR's should be considered (enhancement of) should be included rather than purely nationally designated sites. These types of sites, although probably covering a large portion of our landscape and associated priority habitats/species, are often overlooked. Very little resources available to encourage landowners to manage appropriately. The English BNG approach already departs from established best practice principles.
- A What can be achieved on the ground will depend on the strength of the legislation and the coherence of implementation. There's a real risk of poor delivery. Which would still be an improvement on the status quo, but fails to capitalise on the opportunity
- A big potential but needs to be mandatory not voluntary

### Criticism of offsetting

- F Offset credits is such a bad idea
- A It is a gimmick to allow developers and businesses to keep on doing what they are doing, without reducing their own impact
- F 'Habitat Banks' create a false dichotomy between food production and wildlife-rich, healthy ecosystems. This approach silos land use and limits its economic value.

## Section 5 and 6: Priorities, recommendations and actions arising

### Priority 1: Greater collaboration and flexibility

It is clear from the responses to Section A of the survey that farmers and advisors see AES as offering opportunities for real environmental gains in the agricultural setting but the top-down inflexible approach to delivery limits the potential benefits. Going forward, it is clear that future AES need to be more flexible in their approaches to applying the library of management options and that the planning of these options needs to be undertaken at the gate, through shared discussions and knowledge exchange between farmers and land advisors. This need for greater collaboration between farmers and advisors was evident throughout responses, and there were calls for greater collaboration between farmers in AES going forward.

### Priority 2: Engage farmers, land managers and landowners in the policy discussions surrounding the design of offset markets

From the responses to Sections B and C, it is clear that the new Environmental Land Management schemes and the creation of biodiversity offset markets offer opportunities for farmers to contribute to the 10% biodiversity net gain target. However, the processes around farmers obligations, expected costs and benefits of undertaken actions and monitoring and outcomes are still unclear.

There is a need for wider discussion in the aspects in the delivery of biodiversity offset markets: contract length, habitat bank location, credit price and regulation. Farmer's responses tended to favour schemes administered by the private sector, perceiving these to reduce bureaucracy and offer flexibility that publicly administered AES do not. Several responses believed that private sector financing offered more opportunities for financial and environmental success and allowed a shift in mindset to environmental improvements generating a profit for farmers, rather than only being compensated for losses. Farmers also felt the proposed contract length of 30 years was too long and heavily restricted the use of their land. Advisors, particularly those from the ecological community felt 30 years was too short, and land used to offset development impacts should be protected in perpetuity. There was also disagreement on whether habitat banks should be located as close to the impact site as possible, or in places where the ecological improvements could be greatest. Farmers and land managers favoured private third-party brokers managing offset markets to overcome the problems previously identified with the current public sector management of AES and the financial gains private sector investment could generate. In contrast, advisors expressed a preference for current regulatory agencies and wildlife trusts to administer an offset market.

### Priority 3: Explore the ecological and economic implications of delivering compensatory offsetting to offsite only

Several advisors noted problems associated with developers delivering their own compensation on-site in the context of habitat banking and ensuring no net loss of biodiversity. Developers can deliver compensation more cheaply onsite than purchasing offset credits which limits the numbers of farmers willing to convert land to offsetting. Several responses also highlighted that on-site net gain is rarely delivered to the levels promised in site plans but there is a lack of enforcement to ensure that the final compensation meets the promised specification. There is a need within the research and policy community to understand the implications financially and environmentally to farmers, local planning authorities and developers of requiring compensation to be delivered off-site only and whether this offers a true opportunity to deliver a net gain.

## Section 7: Reflections and evaluation

Overall, the online survey has provided the EFFECT case study with a range of opinions on AES and biodiversity net gain. A real strength of the survey has been the additional text provided by the majority of respondents which gives us a much richer insight into the strengths, weaknesses and future improvements needed in AES. A significant drawback of the survey was the limited number of responses to the farmer/land manager survey. Eight of the nine responses were from the same geographic region, and all were engaged with AES already. As such we did not hear from farmers who had chosen not to engage with AES previously and we are unsure if the views are shared with farmers across geographic regions. We hope to be able to engage with more farmers and land managers in the next phase of the stakeholder engagement.

### Future Plans

We are planning on holding a workshop/s to discuss the results of the survey and the next stages of biodiversity offsetting in the UK with stakeholders possibly including farmers/land managers, advisors, developers, and other key organisations.

