



# Sustainable Farming Scheme Co-design

## Final Report

18 May 2023

### **Submitted to:**

Welsh Government

## ICF makes big things possible

ICF is a global consulting and technology services provider with more than 7,000 professionals focused on making big things possible for our clients. We are policy specialists, social scientists, business analysts, technologists, researchers, digital strategists and creatives. Since 1969 government and commercial clients have worked with ICF to overcome their toughest challenges on issues that matter profoundly to their success. Our five core service areas are described below. Engage with us at [icf.com](http://icf.com).



### Research + Analyse

Our teams delve deep into critical policy, industry and stakeholder issues, trends, and behaviour. By collecting and analysing data of all kinds, we help clients understand the current landscape clearly and plan their next steps wisely.



### Assess + Advise

With equal parts experience and dedication, our experts get to the heart of the issue—asking all the right questions from the start. After examining the results and evaluating the impact of research findings, we counsel clients on how to best navigate societal, market, business, communications, and technology challenges.



### Design + Manage

We design, develop and manage plans, frameworks, programmes, and tools that are key to each client's mission or business performance. These solutions often stem from our analytics and advice.



### Identify + Implement

Our experts define and put into place the technology systems and business tools that make our clients' enterprises more effective and efficient. We deploy standard or customised methodologies based on the business context.



### Engage

Realising the promise of the digital revolution requires foresight and heightened understanding. Both are baked into the solutions-focused engagement work that runs through all we do.

# Sustainable Farming Scheme Co-design

## Final Report

A report submitted by [ICF Consulting Services Limited](#)  
in association with

[ADAS](#)

Date: 18 May 2023

Job Number 30302896

[Jessica Lyon](#)  
[jessica.lyon@icf.com](mailto:jessica.lyon@icf.com)  
[ICF Consulting Services Limited](#)  
Riverscape  
10 Queen Street Place  
London  
EC4R 1BE  
T +44 (0)20 3096 4800  
[www.icf.com](http://www.icf.com)

## Document Control

<b>Document Title</b>	Sustainable Farming Scheme Co-design
<b>Job No.</b>	30302896
<b>Prepared by</b>	Jessica Lyon, Ellie Cook, Rachel Hardy
<b>Checked by</b>	John Elliot, Liz Lewis-Reddy
<b>Date</b>	18 May 2023

This report is the copyright of Welsh Government and has been prepared by ICF Consulting Services Ltd under contract to Welsh Government . The contents of this report may not be reproduced in whole or in part, nor passed to any other organisation or person without the specific prior written permission of Welsh Government .

# Contents

Executive summary .....	4
<b>1 Introduction .....</b>	<b>6</b>
1.1 The Policy Background .....	6
1.2 Sustainable Farming Scheme: Outline Proposals for 2025 and second phase of co-design .....	7
1.3 Structure of this report .....	8
<b>2 Methodology .....</b>	<b>10</b>
2.1 Co-design approach .....	10
2.2 Co-design workshop delivery and attendance .....	12
2.3 Survey delivery and responses .....	13
2.4 Survey demographics and farm information .....	15
<b>3 Synthesis of findings from co-design .....</b>	<b>23</b>
<b>4 Resilient and Productive Farms .....</b>	<b>26</b>
4.1 Introduction .....	26
4.2 Manage and optimising farm performance through measuring and monitoring .....	27
4.3 Diversify, differentiate, specialise for added value .....	33
4.4 Minimise the risk of catching and spreading disease .....	37
<b>5 Reduce, reuse and recycle inputs, nutrients and waste .....</b>	<b>43</b>
5.1 Introduction .....	43
5.2 Make best use of artificial fertiliser through nutrient management and soil testing .....	44
5.3 Prioritising the use of manure and fertility building .....	50
5.4 Minimise use of pesticides and herbicides through integrated pest management .....	52
5.5 Make best use of grassland through alternative approaches to grazing, introducing multispecies leys and mixed grazing .....	55
5.6 Lowering the environmental impact of ammonia emissions .....	56
<b>6 Reduce on farm emissions and maximise carbon sequestration .....</b>	<b>58</b>
6.1 Introduction .....	58
6.2 Adopting energy efficiency practices and producing renewable energy on-farm .....	59
6.3 Efficient animals: Animal Health Improvement Cycle .....	60
6.4 Restore semi-natural peatland .....	63
6.5 Create new and manage existing agro-forestry and woodland .....	66
<b>7 Protect and enhance the farm ecosystem .....</b>	<b>81</b>
7.1 Introduction .....	81
7.2 Protect soils from erosion and degradation .....	82
7.3 Rich on-farm diversity: Preserving native breeds .....	85
7.4 Manage habitats and species: Habitat maintenance and creation .....	86
7.5 Manage habitats and species: Designated sites .....	92
7.6 Water is protected from pollution .....	94
7.7 Conserve and retain water .....	97
<b>8 Benefit people, animals, and places .....</b>	<b>102</b>
8.1 Introduction .....	102
8.2 Maintain and enhance the historic environment, heritage, and beauty .....	103
8.3 Enabling people to engage with and access the natural environment .....	107
8.4 Livestock have a good quality of life .....	109

8.5	Be proficient to practice safely and efficiently .....	110
9	Scheme processes .....	115
9.1	Eligibility Criteria .....	115
9.2	Sustainability Review .....	117
9.3	Monitoring and Evidence .....	119
9.4	Data .....	120
10	Conclusions .....	123
10.1	Lack of clarity around the objectives of the scheme .....	123
10.2	Rewarding existing work and earned recognition .....	125
10.3	Concern with one-size-fits all approach and UAs .....	127
10.4	Support for the industry .....	128
10.5	Readiness of the industry and supply chains to support actions .....	129
10.6	Farmers under pressure .....	130
11	Reflections on the co-design process .....	132
Annex 1	Universal Actions .....	134
Annex 2	Optional Actions .....	155
Annex 3	Collaborative Actions .....	159

## Executive Summary

This report captures the feedback and insights of Welsh farmers on the Sustainable Farming Scheme Outline Proposals for 2025<sup>1</sup>. This second phase of co-design explored farmers skills and experience, opportunity and motivation for undertaking actions and processes proposed in the outline proposals and their ideas and suggestions for improving, altering and adding to these proposals.

Farmers insights on these outline proposals were explored through a survey, workshops, and interviews to understand whether they could undertake what is proposed in the outline proposals, what support may be needed and what potential changes to the Sustainable Farming Scheme (SFS) could be made in future iterations of the scheme. The actions proposed in the outline proposals are grouped into five key characteristics which aim to support and focus on achieving different Sustainable Land Management (SLM) outcomes. The five characteristics include:

- **Resilient and productive farms**
- **Reduce, reuse and recycle inputs, nutrients and waste**
- **Reduce on farm emissions and maximise carbon sequestration**
- **Protect and enhance the farm ecosystem**
- **Benefit people, animals and places**

Each characteristic contains a range of Universal (UA), Optional (OA) and Collaborative (CA) actions that deliver against their objectives. Underpinning these characteristics and actions are scheme processes such as eligibility, registration, the sustainability review, and monitoring and evidence, were also explored.

This report provides a detailed analysis of the farmers' feedback against the actions and processes of outlined in the outline proposals. It also provides an overview of the reoccurring themes that came out of this second phase of co-design.

### Summary of findings

Farmers were supportive of the general principle and concept around several of the actions within the scheme. Farmers felt that actions related to improving soil health, hedge management, renewable energy options, animal health and welfare, and farmer health and safety were important. Most participants recognised the importance of the future scheme being underpinned by principles of sustainability despite having some differences in opinion on how best this would be achieved.

Workshop participants liked the different levels of actions within the scheme. Overall, across the OAs and CAs there was positive feedback and participants were keen to be able to choose actions which they felt could work well and bring benefits to their farm. Some participants were also supportive of the idea of a universal layer of actions which would help to bring all participating farms across Wales up to a similar standard, although some participants wanted to see some UAs simplified and concerns were raised about a once-size-fits all approach to these actions.

Throughout workshops and in the survey many farmers raised that they were already completing some of the actions included in the SFS. For those that weren't completing the actions they discussed how it could work for them and tried to work through potential practical barriers to these actions on their farms. These insights are included throughout this

---

<sup>1</sup> [Sustainable Farming Scheme \(gov.wales\)](https://gov.wales/sustainable-farming-scheme)

report and provide useful guidance for Welsh Government on how to improve the practicality of certain actions for farmers.

Whilst participants raised strengths to the scheme throughout the co-design process, there were common areas of concern raised by participants. The following concerns are key areas for the Welsh Government to consider for the improvement and development of the SFS.

- **Lack of clarity around the objectives of the scheme:** There was confusion around some of the objectives and actions described in the outline proposals. This was particularly relevant for the Key Performance Indicator (KPI) UA, where although participants recognised the value in monitoring their own farm performance they were confused as to why this action was included in a government policy. They also felt that there were contradictions behind the objectives of a KPI action which seemed to be aimed at improving productivity compared to Tree Cover and Habitat related actions which were perceived to reduce farm productivity. Participants wanted clarity on the Welsh Governments' aims of the scheme as well as clarity on how certain decisions have been developed.
- **Rewarding existing work and earned recognition:** Throughout the workshops participants strongly stated that they would appreciate a system for earned recognition and payment for those who are already undertaking actions. More clarity on how farmers who are already completing actions would be rewarded through the scheme and an understanding of how earned recognition could be used to reduce administrative burden and duplication of effort was required.
- **Concern with one-size-fits all approach and universal actions:** There was a strong emphasis in both workshops and surveys that each farm context is different and that these different contexts and circumstances needed to be recognised in the scheme. Some felt that the one-size-fits all approach, specifically to the UAs, would pose barriers to entry to the scheme. Workshop respondents liked the flexibility of having OAs in the scheme and were keen to ensure there were OAs that were applicable to them that they could take part in.
- **Support for the industry:** Workshop participants and survey respondents had a number of key concerns around how the SFS will be supporting the agricultural industry both in terms of monetary support and supporting food production. Farmers wanted to ensure that there is sufficient funding to support them to undertake actions and sustain a viable farm business, and that the budget for farmers isn't compromised by the requirement to use consultants and advisors to complete actions.
- **Readiness of the industry and supply chains to support actions:** Participants raised concerns about the resource capacity of advisors, contractors, inspectors, and parts of the supply chain (providing resource for conducting actions), to cope with the influx of farmers conducting actions as part of the scheme. These concerns related to actions such as Tree cover or Soil testing where assistance from consultants, laboratories, contractors, and plant nurseries would be required.
- **Farmers under pressure:** Multiple workshop groups raised concerns around the pressure that the SFS could add to farmer's already difficult jobs and the knock-on effect of this on mental health. The farming industry has faced high levels of poor mental health for a long period of time with many studies highlighting the causes of stress within the industry. Current global and political events are increasing costs for inputs, increasing volatility of prices for produce and creating uncertainty in policy and support payments.



# 1 Introduction

## 1.1 The Policy Background

The UK's exit from the EU brings an end to the Common Agricultural Policy (CAP) as a basis for supporting farmers to produce food and environmental services. The Welsh Government have published the following consultations to explore the basis on which it should support farmers in the future, including during the period of transition into this new policy and farming support approach.

- Brexit and our Land (2018)<sup>2,3</sup>
- Sustainable Farming and our Land (2019-21)<sup>4,5</sup>
- The Agriculture (Wales) White Paper (2020-21)<sup>6,7</sup>

These consultations and the progression towards the development of the Sustainable Farming Scheme (SFS), outline a major shift away from direct payments and agri-environment schemes (e.g., Glastir). They represent a move towards a single scheme which will pay for farm practices that deliver outcomes which benefit Welsh society socially, economically, and environmentally.

Public response to this consultation process has demonstrated an array of perspectives from across the Welsh agricultural sector. This mix of responses reflects the importance of transparency throughout the process and underpins the role co-design is playing in meeting this objective.

Co-design is the active involvement and shared responsibility of stakeholders in defining and designing solutions to shared problems. Engaging farmers, land managers and other stakeholders in the co-design of the SFS provides an opportunity to develop innovative policy solutions for this period of change for the agricultural sector, that matches their needs. If the process adheres fully to the principles of co-design - transparency, inclusivity, shared power and participation - it provides an opportunity to foster trust between farmers and government and generates buy-in for the policy<sup>8</sup>. Both are key for a smooth change between policies and effective policy design.

The first phase of co-design occurred between March – October 2020<sup>9</sup> and included surveys, interviews and workshops to explore farmers views on topics that informed the development of the SFS:

- Outreach
- Soil management
- Habitat management (ecosystem resilience)
- Farm development opportunities
- Animal health & welfare and livestock management
- The Welsh language

<sup>2</sup> [Brexit and our land - securing the future of Welsh farming \(gov.wales\)](#) (Consultation document, 2018)

<sup>3</sup> [sustainable-farms-summary-of-responses\\_1.pdf \(gov.wales\)](#) (Summary of responses, 2019)

<sup>4</sup> [Sustainable Farming and our land \(gov.wales\)](#) (Consultation document, 2019)

<sup>5</sup> [sustainable-farms-summary-of-responses\\_1.pdf \(gov.wales\)](#) (Summary of responses, 2020)

<sup>6</sup> [Agriculture \(Wales\) White Paper \(gov.wales\)](#) (Consultation document, 2020)

<sup>7</sup> [Agriculture \(Wales\) White Paper summary of responses \(gov.wales\)](#) (Summary of responses, 2021)

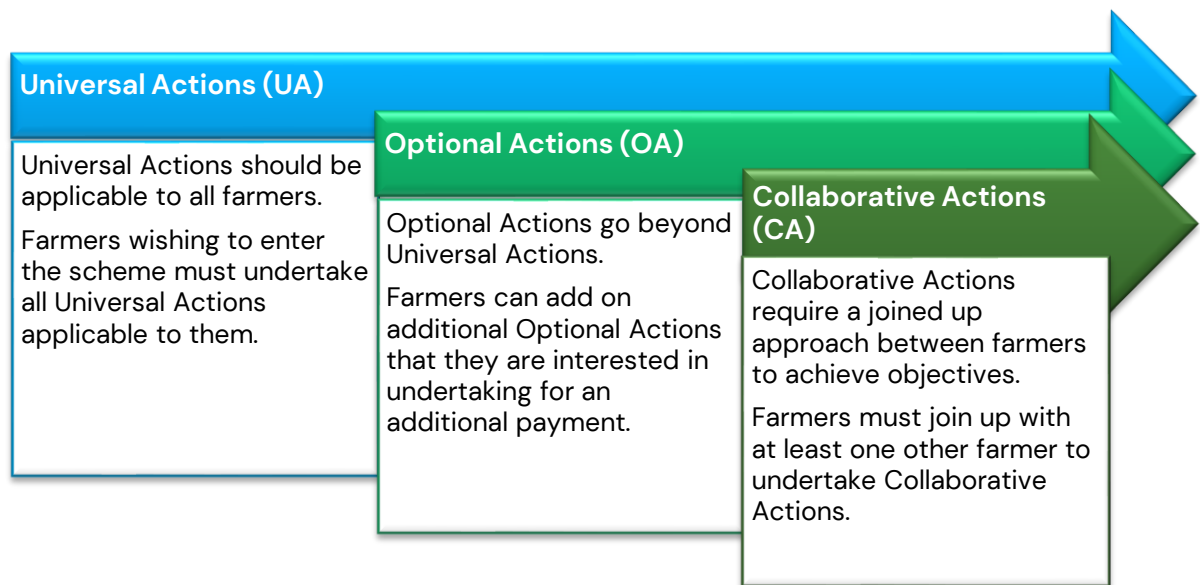
<sup>8</sup> Hurley, P., Lyon, J., Hall, J., Little, R., Tsouvalis, J., White, V. & Rose, D. C. (2022). Co-designing the environmental land management scheme in England: The why, who and how of engaging 'harder to reach' stakeholders. *People and Nature*, 00, 1–14. <https://doi.org/10.1002/pan3.10313>

<sup>9</sup> [Co-design for a Sustainable Farming Scheme for Wales \(gov.wales\)](#)

The first phase of co-design and feedback received during prior consultations later informed the Sustainable Farming Scheme: Outline Proposals for 2025 which was published in July 2022<sup>10</sup>. The outline proposals served as the basis for the second phase of co-design and the subject of this report.

## 1.2 Sustainable Farming Scheme: Outline Proposals for 2025 and second phase of co-design

The outline proposals set out in more detail the proposed actions – Universal (UA), Optional (OA) or Collaborative (CA) – and processes that are proposed to be part of the scheme.



The actions proposed in the outline proposals are grouped into five interrelated characteristics which show the way in which the Welsh Government aims to support farmers to deliver different Sustainable Land Management outcomes. The characteristics include:

- Resilient and productive farms
- Reduce, reuse and recycle inputs, nutrients and waste
- Reduce on farm emissions and maximise carbon sequestration
- Protect and enhance the farm ecosystem
- Benefit people, animals and places

Each characteristic contains a range of UAs, OAs and CAs.

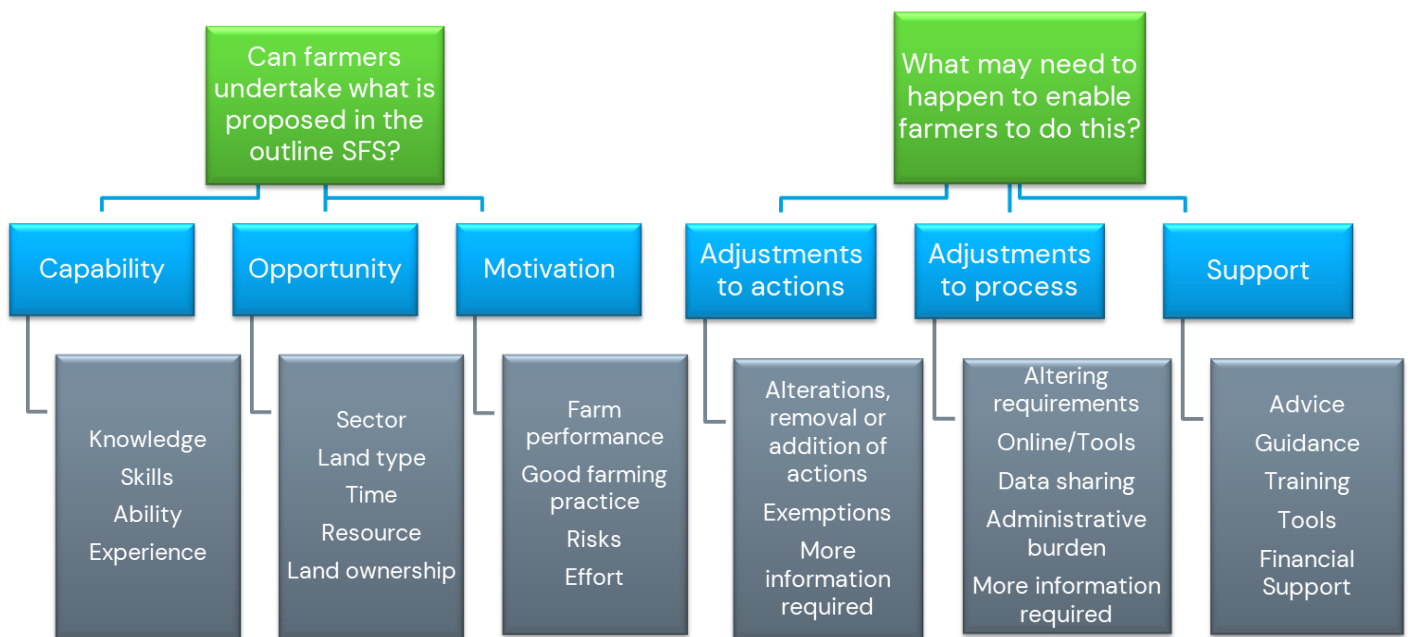
The outline proposals also provided details on the process for farmers to apply for and undertake actions through a contract period. This section is referred to as the '**scheme processes**' and includes topics such as eligibility, registration, the sustainability review, application, monitoring and evidence.

<sup>10</sup> [Sustainable Farming Scheme: outline proposals for 2025 | GOV.WALES](https://gov.wales/sustainable-farming-scheme-outline-proposals-for-2025)

The aim of the second phase of co-design was to engage the farming industry through a range of methods on specific actions and processes relating to the SFS. This second phase of co-design will contribute to further development of SFS, alongside additional stakeholder feedback and other evidence and policy workstreams, in time for consultation on draft final proposals late in 2023.

The graphic below highlights the areas of investigation that underpinned the second phase of co-design, asking two key questions:

- A) Are farmers able to do what has been outlined in the Sustainable Farming Scheme?
- B) What might need to happen or change to enable farmers to take part in the scheme?



### 1.3 Structure of this report

This report sets out the results of the second phase of co-design of the SFS, organised by the following sections:

- **Section 2** details the methodology used to engage with the farming industry and gain their insights.
- **Section 3** outlines the structure of how the findings are synthesised and presented in sections 4-8.
- **Sections 4 – 8** provides the findings from the co-design process on the actions within the SFS, organised by the five characteristics of the scheme. Each section details farmers' skills and experience, opportunity, and motivation to undertake the actions, as well as farmers' suggestions for improvements to actions and any associated requirements for support.
- **Section 9** provides the findings from the co-design process on the scheme process including on eligibility, the sustainability review, monitoring and evidence and data usage.

- **Sections 10** provides a conclusion of the findings from co-design. This is organised according to recurring themes which cut across different actions and processes in the scheme.
- **Section 11** provides reflections on the co-design process from the ICF and ADAS team.
- **The Annexes** provide additional graphs and information to support the findings detailed in the report.

## 2 Methodology

### 2.1 Co-design approach

The purpose of co-design phase two was two-fold:

- To **generate evidence** to understand the skills and experience, opportunity, and motivation of farmers to undertake what was proposed in the outline proposals.
- To **co-design** and generate ideas and solutions to improve the Sustainable Farming Scheme (SFS) with farmers.

These two different aims require different approaches. Whilst evidence gathering aims at using tools to answer specific research questions on farmers skills and experience, opportunity, and motivation to undertake the actions proposed in the scheme, co-design requires an in-depth participatory approach where farmers are given the opportunity to share and discuss their thoughts and ideas. The focus of these two different but complementary strands of work are indicated in Table 2.1.

Table 2.1 Approaches to research and co-design

	Co-design – delivered through workshops and interviews	Evidence gathering – delivered through a survey
Focus of approach	A co-design approach talking directly to farmers across Wales and different farming sectors, to discuss specific policy questions and co-design solutions with farmers.	A mostly evidence-gathering approach focussing on reaching high numbers of responses to get an understanding of the initial industry perspective of the outline proposals. The quantitative data will allow comparisons to be drawn between different types of farmers, for example, looking at sector and demographic differences.
Data collected	Qualitative data	Mostly quantitative data
Design of approach	<p>Workshops were organised by the components of the scheme:</p> <p><b>Universal (UA), Optional (OA), and Collaborative (CA) actions:</b> a total of 23 workshops covered the actions in the scheme and were organised against the five characteristics of the scheme and Sustainable Land Management objectives.</p> <p><b>Scheme process:</b> 3 workshops covered the scheme processes of the SFS including topics on eligibility, registration, the sustainability review, monitoring and evidence.</p>	<p>The survey was designed to focus on the <b>UAs</b> of the scheme.</p> <p>Respondents were asked whether they were willing or not to undertake the actions presented in the scheme and then asked to indicate the key enablers or barriers to undertaking the actions. The survey questions were organised by the COM-B model to understand farmers capability (skills and experience), opportunity and motivation to undertake actions. More detail for how the COM-B behavioural model was used for survey design is provided in section 2.3.1.</p> <p>In addition to covering the UAs, some versions of the survey also included questions on scheme processes, OAs and CAs.</p>
Methods of delivery	<b>Co-design workshops:</b> Workshops were delivered online on Microsoft Teams at 11am and 4:30pm on	<p>The survey was delivered in four different ways:</p> <ul style="list-style-type: none"> <li>- Online</li> </ul>

	Co-design – delivered through workshops and interviews	Evidence gathering – delivered through a survey
	<p>different days from October to December. Participants were given the opportunity to select workshop dates and times that suited them.</p> <p><b>Interviews:</b> Where participants were unavailable for workshops, had difficulty connecting online at workshops or had a preference for communication over the telephone they were given an opportunity to have a telephone interview instead.</p>	<ul style="list-style-type: none"> <li>- In person at agricultural shows and markets</li> <li>- Over the phone</li> <li>- Paper copies when requested</li> </ul>

## 2.1.2 Recruitment for survey, workshops, and interviews

A mixture of communication channels was utilised in order to ensure that farmers had the opportunity to engage in a way that was appropriate for them and to improve the chances of engaging harder to reach stakeholders. The following channels were used to communicate to farmers and give them the opportunity to engage in this project.

### ■ Attendance at agricultural shows, markets, events, and groups

The ADAS team, who have a long-standing working relationship with Welsh farmers and their representatives, attended agricultural shows, markets, and events to communicate to farmers the opportunity for co-design. ADAS also conducted face-to-face surveys with farmers at these shows and events. Shows and events attended included:

- The Anglesey show
- Pembrokeshire County show
- Denbigh & Fflint
- Meirionydd YFC
- Tregaron cattle market
- Farming Connect events
- Ceredigion YFC

At these events, business cards with a QR code which linked to the survey and an ICF email address were shared to promote the survey and co-design process. Over 3000 business cards were shared with farmers between ADAS, Farming Connect and the Welsh Government at these events. At these events paper copies of the survey were also shared with those who requested it.

### ■ Emails and telephone calls to the expression of interest group

The Welsh Government had generated a database of over 750 farmers that had expressed an interest in being involved in the co-design process. Farmers on the expression of interest (EOI) group list were emailed the link to the online survey and were given several opportunities to engage in a co-design workshop at a date that was suitable to them.

Those farmers from the EOI group that indicated a preference for communication via telephone were called by a bi-lingual researcher to ask if they would like to conduct the survey over the phone, and if they would be interested in taking part in an online workshop or an interview.

## ■ Sharing the survey link through networks and social media

ADAS, the Welsh Government's Rural Payment Wales team and a variety of Welsh Government related communication channels were utilised to advertise the online survey.

## 2.2 Co-design workshop delivery and attendance

A total of 26 workshops were conducted with content organised according to scheme actions and processes (Table 2.2).

- 20 workshops were conducted on the actions of the scheme. For these workshops each workshop group attended two different workshops to cover the UAs, OAs and CAs included in the scheme characteristic topic for that set of workshops.
- 3 workshops were conducted on the scheme process with groups attending one workshop.
- 3 workshops were conducted on actions that were identified as areas that would benefit from further exploration. These workshops covered the KPI UA, 10% Tree Cover UA and the Soil Testing UA.

**Table 2.2** Workshop and interview attendance

Workshop topic	Language	Total number of attendees	Sectors represented
Resilient and productive farms actions	English	10	Beef, Sheep, Dairy, Poultry and Equine
	English	18	Arable, Beef, Sheep and Dairy
Reduce, reuse, recycle actions	English	8	Beef, Sheep, Horticulture, and Pigs
	English	10	Beef, Sheep, Arable and Horticulture
Reduce on farm emissions actions	English	12	Beef, Suckler Beef, Sheep, Poultry, Dairy, Forestry
	Welsh	16	Beef, Sheep, Dairy
Protect and enhance farm ecosystem actions	English	11	Arable, Beef, Sheep, Forestry
	Welsh	9	Beef and Sheep
Benefit people, animals, place actions	English	12	Arable, Beef, Sheep and Dairy
	Welsh	13	Beef, Suckler beef, Sheep, Dairy
Scheme process	Welsh	8	Beef, Sheep and Dairy
	English	10	Arable, Beef, Suckler Beef, Sheep, Dairy, Equine
	English	11	Beef, Sheep, Horticulture, Deer
Extra workshops: Covered KPIs, Tree cover and Soil testing actions	English	8	Beef, Suckler Beef, Sheep, Equine
	English	12	Arable, Beef, Sheep
	English	11	Arable, Beef, Sheep, Horticulture
Interviews on workshop topics	Mixed	15	Mix
Total number		<b>194</b>	



The following steps were taken in the delivery of co-design workshops in order to ensure that there was alignment with key co-design principles - transparency, inclusivity, and participation.

- **Working timing:** Participants were given the option to attend workshops at a time and date that suited them. Participants could choose between workshops at 11am or 4:30pm across different days of the week throughout October and November. Participants were assigned to workshops based on their timing preference. Those who were unable to attend any of the workshop dates were offered an interview at any time that suited them.
- **Online workshops:** Online workshops reduced the time and location constraints of conducting workshops in-person. However, conducting workshops online can create a barrier for some farmers who have difficulty with internet access or using online conferencing software. To reduce this barrier, all workshop participants were given guidance on how to use the Microsoft Teams software and were offered an opportunity to join a tech practice session to ensure that they were comfortable joining Teams. Anyone who remained unable to use the online software or had difficulty joining the workshop was contacted and offered the opportunity to discuss the workshop over the phone in an interview.
- **Briefing material:** To ensure that participants were clear on the purpose of the workshop and had time to digest information in relation to the SFS, briefing material was shared with them up to a week before the workshop. This briefing material provided an overview of the SFS, the aims and objectives of the workshop, clarification on the purpose of co-design and how they can expect their inputs to be used as well as further policy detail and thinking on the particular actions to be discussed in the workshops.

## 2.3 Survey delivery and responses

### 2.3.1 Survey design

The focus of the survey was on understanding farmers perspectives of the outline proposals. The online survey was split into a core survey based on the UAs and additional surveys which can be answered if participants had the time. This was chosen to reduce survey length and prioritise receiving feedback on the UAs.

#### **Core Survey**

- **You and your farm:** Several demographic and farm characteristic questions, for example, farmer age, experience with previous agri-environment schemes, farm size, type, location.
- **The SFS process:** Exploring the process of taking part in the SFS programme focussing on registration and the sustainability review.
- **UAs:** Enablers and barriers to delivering UAs using the COM-B model and identifying where they would require support.

For each UA, survey respondents were asked ‘would you be willing to undertake the above action on your farm, as a UA under the new Sustainable Farming Scheme?’.

In the survey, where respondents indicated that they were willing to undertake an action, they were asked to indicate the key factors that would enable them to do so.



Table 2.3 Enablers to undertaking UAs

COM-B Model	Enablers
Capability (skills and experience)	I have the necessary skills / knowledge to undertake this action
Capability (skills and experience)/ Opportunity	I am already doing this action on the farm.
Opportunity	My farming system lends itself well to this action.
	I have the time/labour/material resources to complete the action on the farm
Motivation	I am willing to undertake this action to receive payments through the scheme
	This would improve my farming outputs (e.g., animal health/ productivity/ profitability)
	This would allow me to be more environmentally sustainable
	I think the action is good farming practice.
	Other, please specify.

Where respondents indicated they were not willing to undertake the action, they were asked to indicate the key barriers. These varied slightly but mostly covered the following:

Table 2.4 Barriers to undertaking UAs

COM-B Model	Barriers
Capability (skills and experience)	I don't have access to the necessary skills/knowledge/experience to undertake this action on my farm
	I don't have the physical ability to undertake this action (due to a disability or ill health)
Opportunity	My farming system does not lend itself well to this action.
	I don't have the time/labour/material resources to complete the action on the farm
	I don't have control over this type of management on the farm, for example, because I am a tenant / in a contract / commons
Motivation	The action would not benefit my farm
	The effort required outweighs the benefits
	I don't think the action is good farming practice
	I think the action is too restrictive or risky
	I don't want the additional administrative burden
	Other, please specify.

### ***Additional Surveys***

- **OAs:** Exploring participants interest and experience with undertaking the proposed OAs.

- **CAs:** Exploring participants experience with collaboration and interest in undertaking the proposed CAs.

Some modifications were made to the interview and paper surveys to adjust the length to a more appropriate level for those delivery methods.

## 2.4 Survey demographics and farm information

After data cleaning, the survey had a total of 1445 responses. The survey was completed in one of three ways:

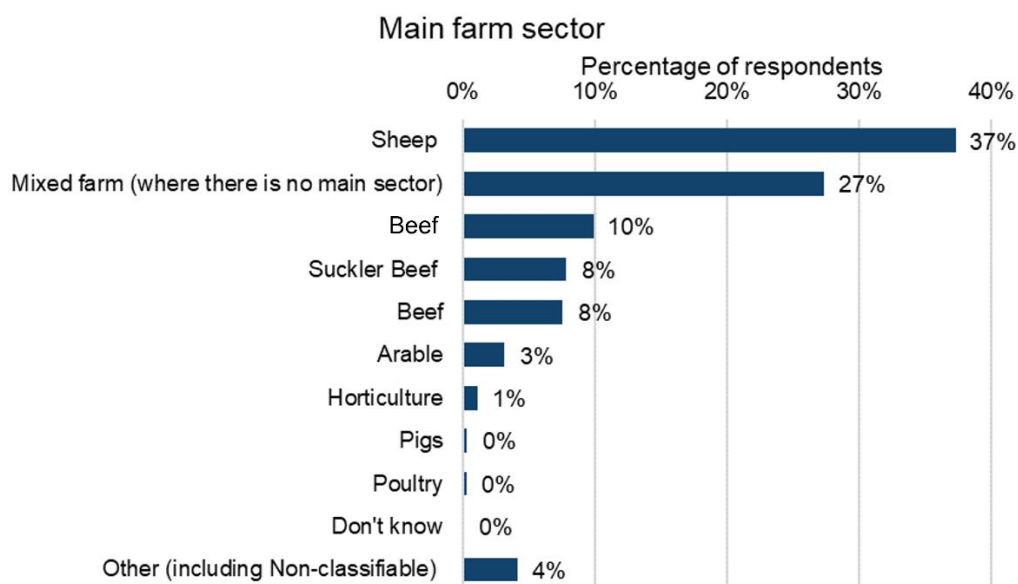
- **Online:** 1334
- **Interview over phone or in person:** 101
- **Paper copy:** 10

Survey respondents did not have to respond to each question in the survey. As a result, the number of respondents to each question (the n value) varies between questions and is noted alongside graphs and statistics in this report.

Respondents in the survey demonstrated a good range of farm types and demographics that broadly reflected the demographics and farm types across Wales (Figure 2.1 and Figure 2.2)<sup>11</sup>. The majority of respondents indicated their main sector as Sheep (37%) followed by Mixed Farm (27%) and Dairy (10%). There was a larger proportion of mixed farms in the survey than recognised in the 2022 published national statistics<sup>11</sup> however this could be due to different interpretations of what constitutes a 'Mixed' farmer.

There was an overrepresentation of certain types of farms such as larger farms (Figure 2.4), organic farms (Table 2.5) and those with agri-environment scheme (AES) experience (Table 2.6).

Figure 2.1 Main farm sector of survey respondents (n=1409)



<sup>11</sup> [Farming Facts and Figures, Wales 2022 \(gov.wales\)](https://gov.wales/farming-facts-and-figures-wales-2022)

Figure 2.2 Secondary sectors of survey respondents (n=1204)

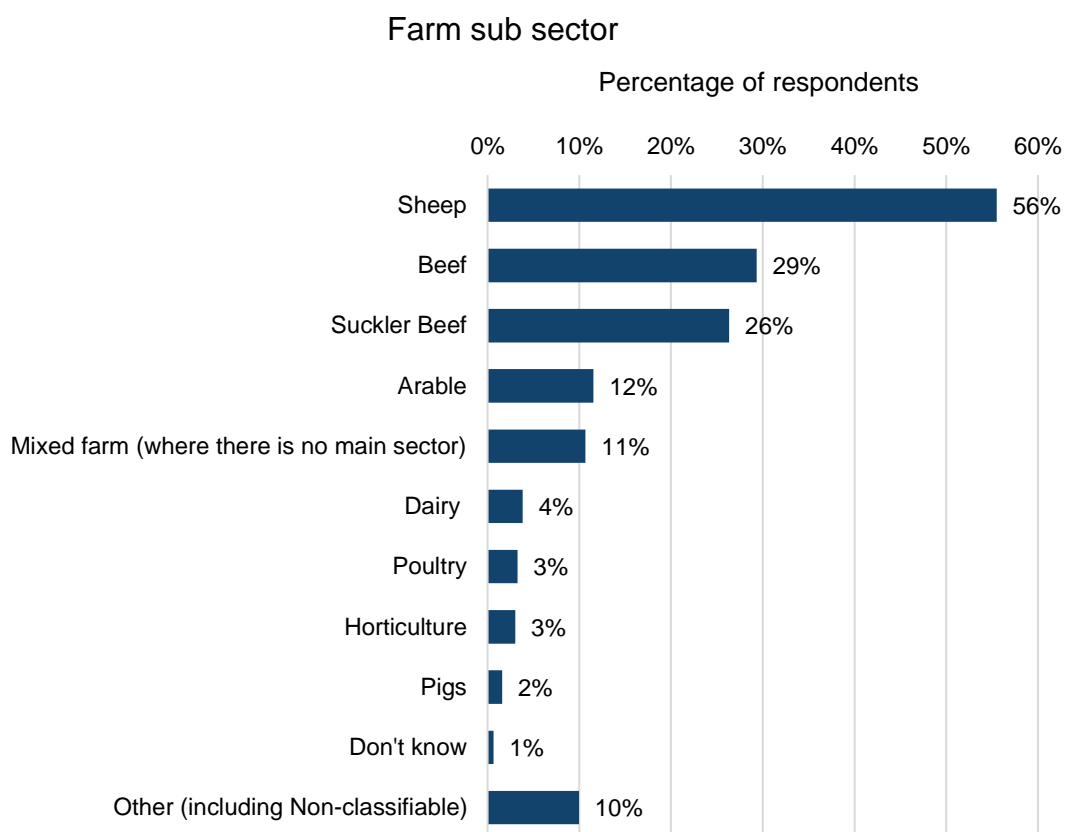
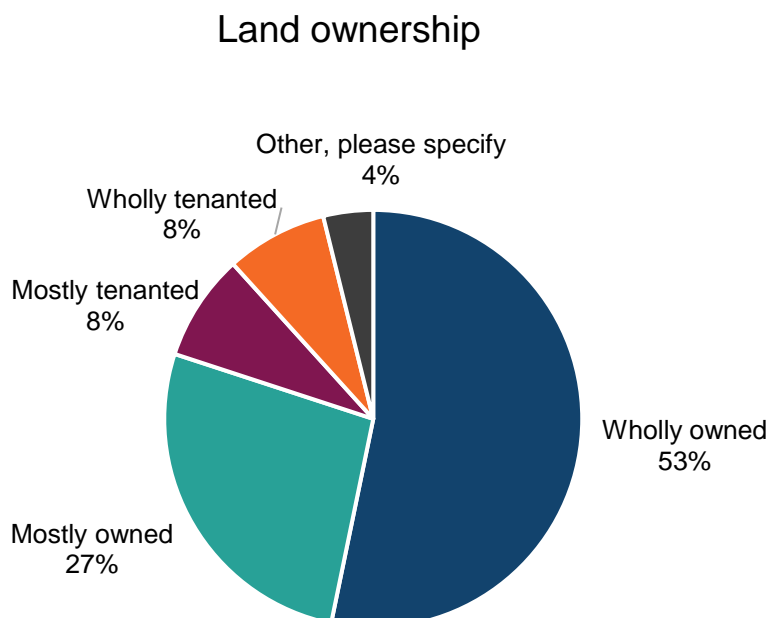


Figure 2.3 Land ownership of survey respondents (n=1452)



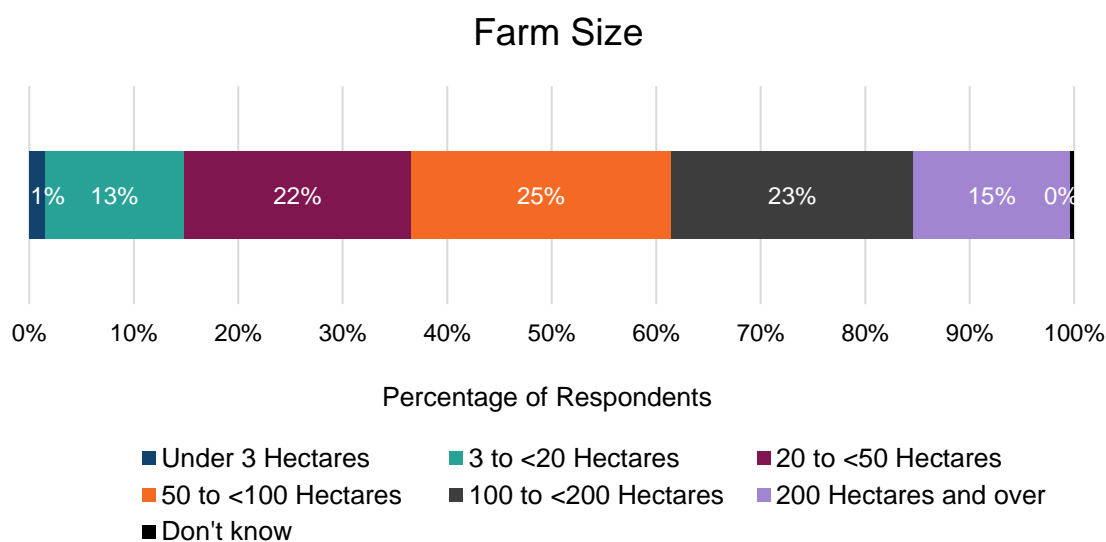
In 2020 there was 593 organic producers across Wales<sup>12</sup> which makes up approximately 2.4% of farms across Wales. This suggests that the survey had an over-representation of organic compared to non-organic producers.

Table 2.5 Farm characteristics of survey respondents

Characteristic	Number of Respondents	Percentage of Respondents (%)
<b>Is your farm organic? (n=1452)</b>		
Organic	145	10%
Non-organic	1307	90%
<b>Is your farm mainly... (n=1438)</b>		
Upland/hill	842	59%
Lowland	596	41%
<b>Does the ownership also include Rights to Commons? (n=1451)</b>		
Yes	319	22%
No	1132	78%

In the survey sample 14% of respondents indicated they had a farm of 20 Ha or less, and 63% respondents indicated a farm size of 50ha and above (Figure 2.4). However, the average farm size in Wales is 45 Ha with 54% of holdings under 20ha in size<sup>13</sup>. This suggests there is an underrepresentation of smaller farms (20 Ha and below) and an overrepresentation of larger farms (50ha and above) in the survey sample.

Figure 2.4 Size of survey respondents' farm (n=1435)



<sup>12</sup> [Organic farming statistics 2020 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/organic-farming-statistics-2020)

<sup>13</sup> [Securing Wales' Future Summary \(gov.wales\)](https://gov.wales/government/press-releases/2020/06/24/securing-wales-future-summary)

Figure 2.5 Area of woodland on survey respondents' farm (n=1444)

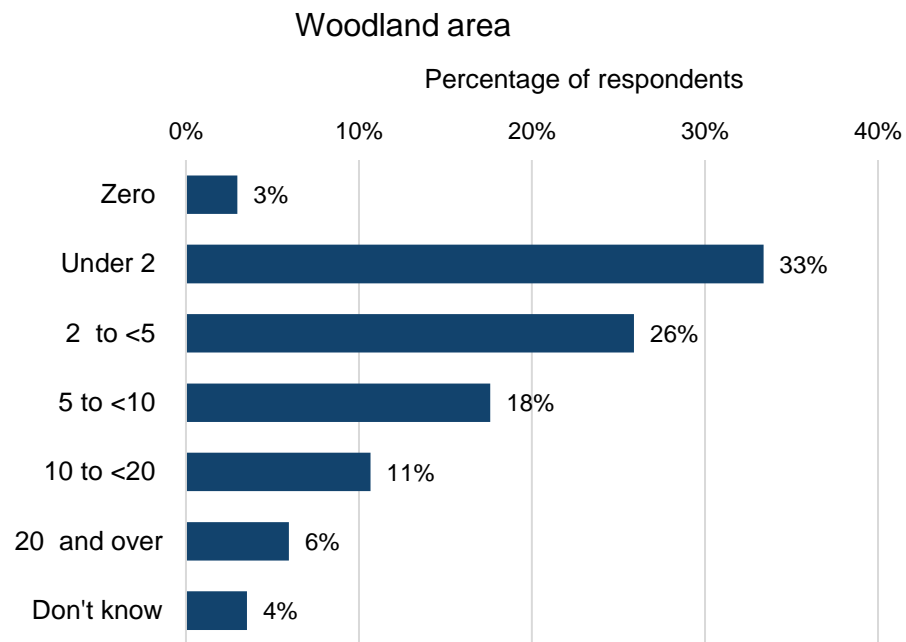


Figure 2.6 The number of full-time (39 hours a week) and part time employees working on survey respondents' farm (Full time n=1439; part time n=1418)

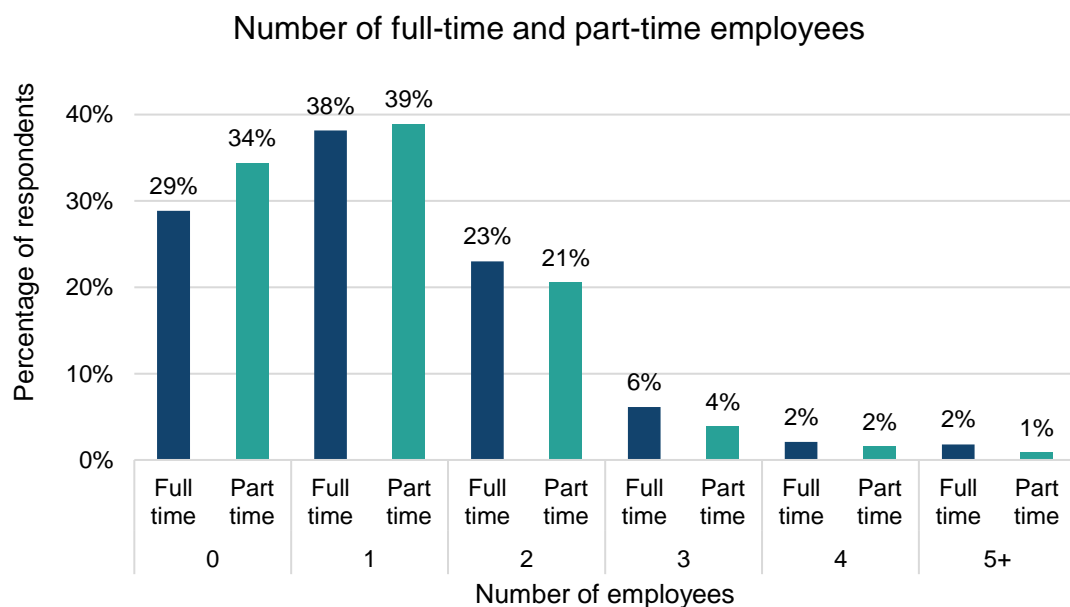


Figure 2.7 Age of survey respondents (n=1445)

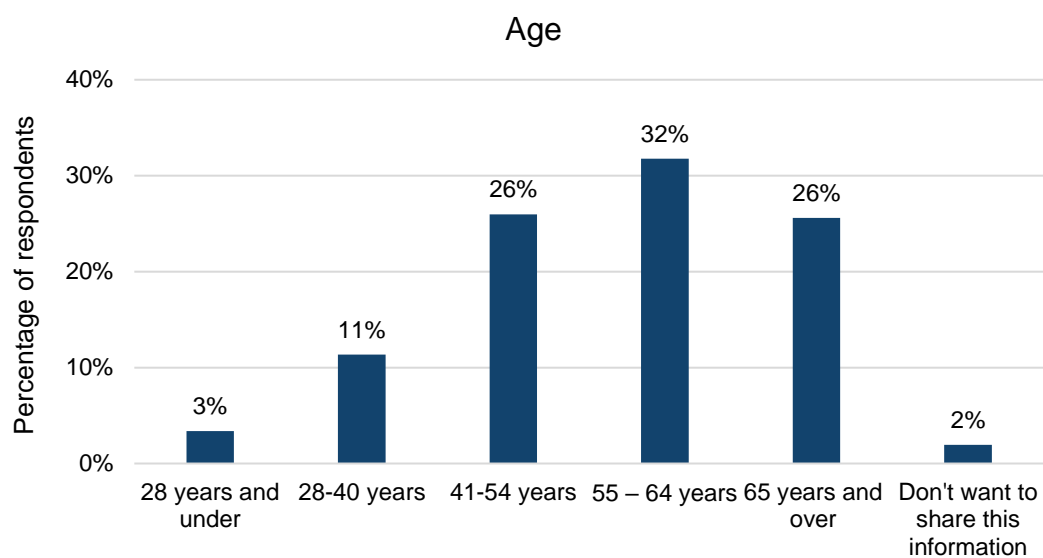


Figure 2.8 Gender of survey respondents (n=1430)

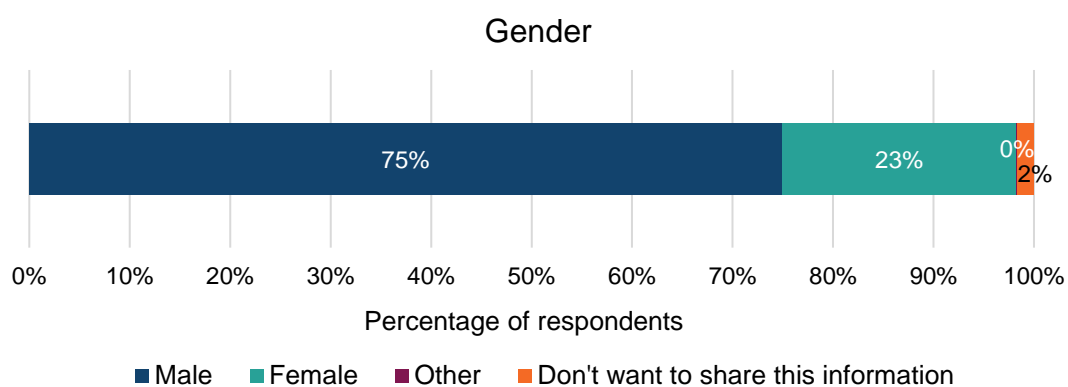
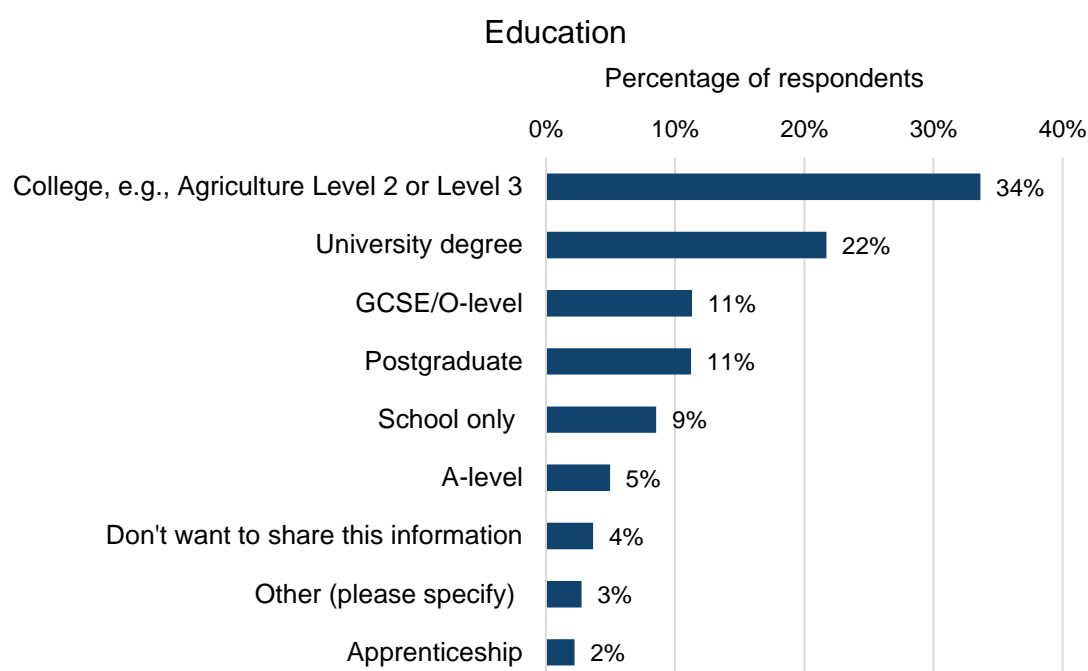


Figure 2.9 Education level of survey respondents (n=1451)



Most respondents (64%) had previously been part of an AES. Of those that had, just over half (53%) had over 10 years of experience (Table 2.6). In 2021 there were approximately 3,000 AES agreements across Wales, representing a total area of 647,000 Ha<sup>14</sup> which represents approximately 37% of agricultural land in Wales. These statistics suggest that there was an overrepresentation of those with previous AES in this survey (Table 2.6). It is likely that those with this experience were more likely to be interested in joining the SFS and therefore had an interest in completing this survey. This is an important factor to consider as those with this experience can be expected to be more willing and have more experience in undertaking agri-environmental actions on farms. Therefore, the survey results could represent a higher level of likely uptake of actions compared to the wider population. This should be noted when looking across the data presented.

Table 2.6 AES experience of survey respondents (n=931)

Years of experience in AESs (n=931)	Percentage of respondents
Less than 1 year	1%
1 – <3 years	5%
3 – <5 years	13%
5 – <7 years	13%
7 – <10 years	12%
10 years and over	53%

<sup>14</sup> [Agriculture in the United Kingdom data sets - GOV.UK \(www.gov.uk\)](https://www.gov.uk/data/agriculture-in-the-united-kingdom)

Figure 2.10 Quality assurance scheme experience of survey respondents (n=1451)

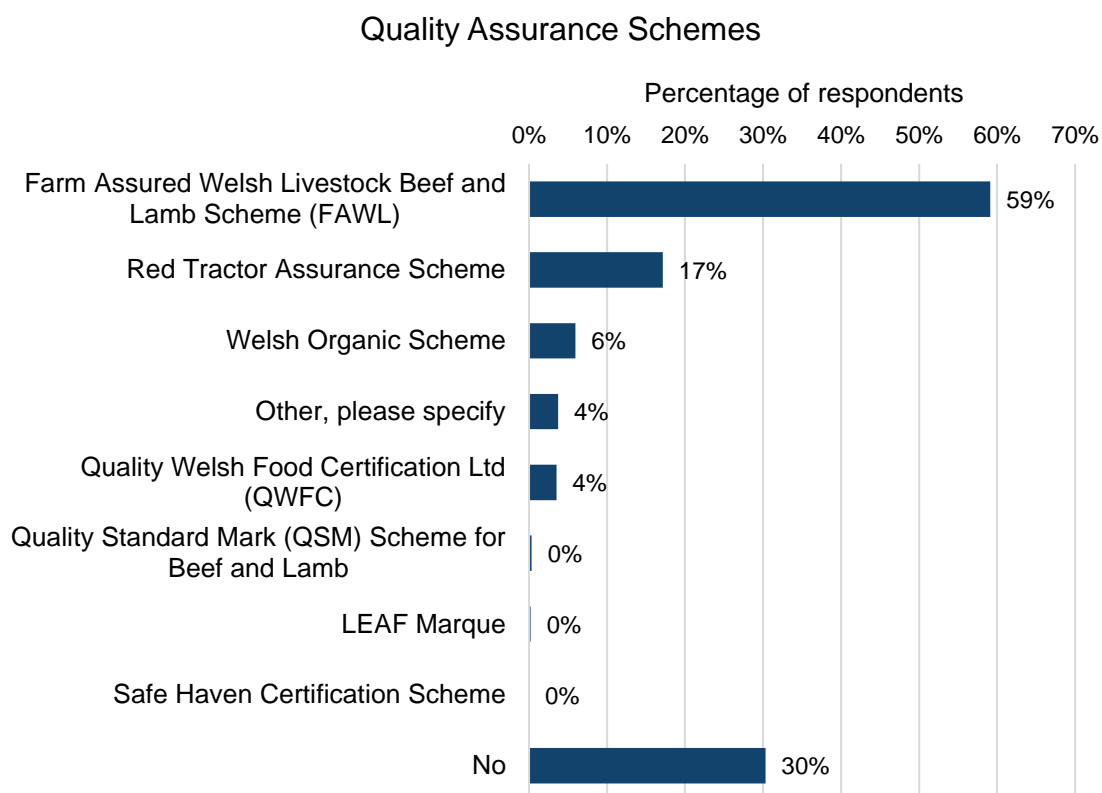


Figure 2.11 Survey respondents' interest in joining the SFS (n=1452)

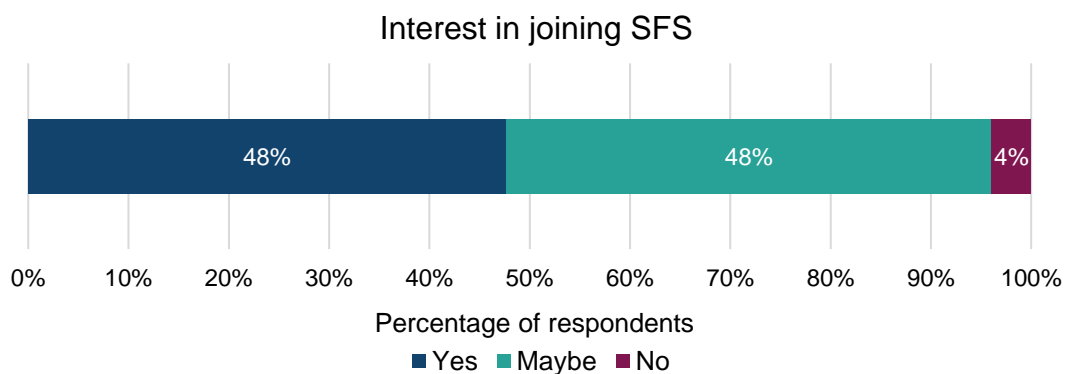
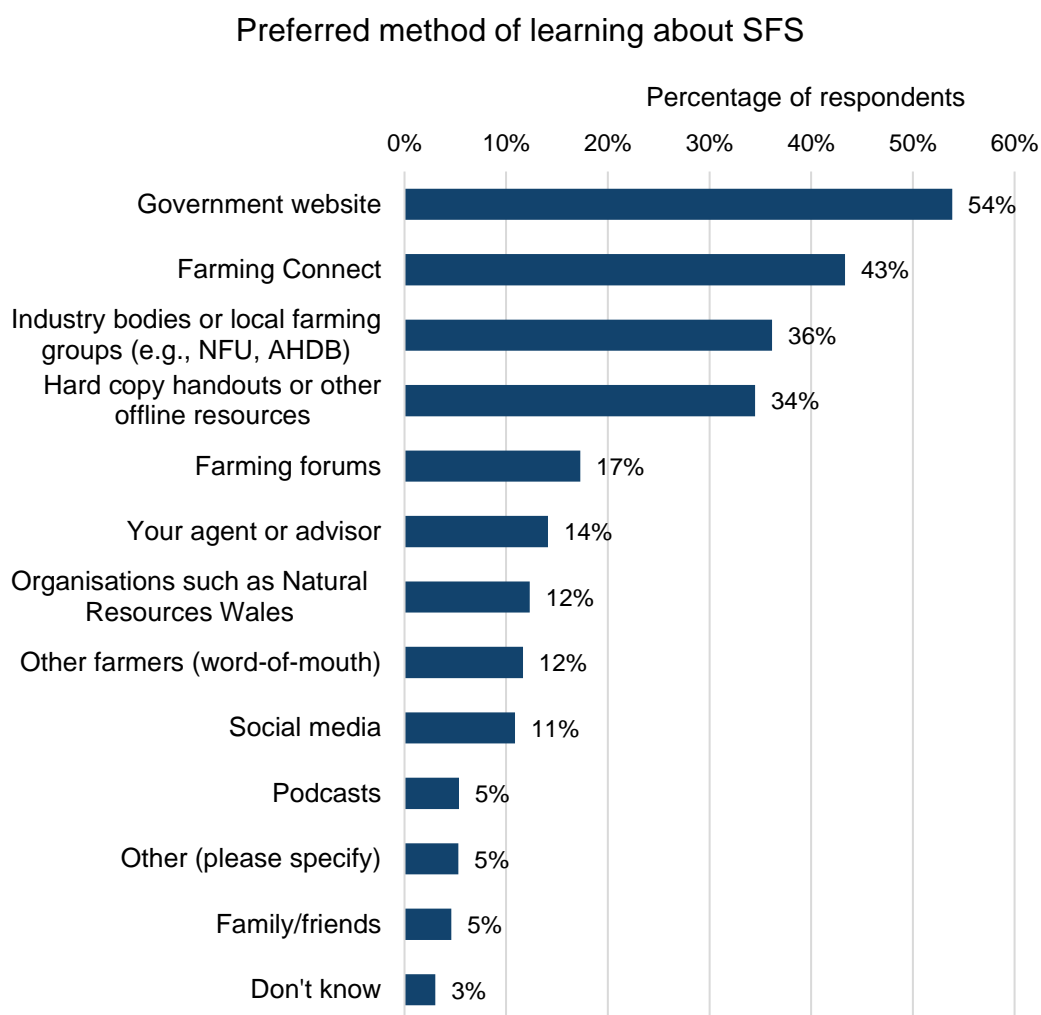




Figure 2.12 Survey respondents' preference for format of information to learn about SFS (n=1452)



### 3 Synthesis of findings from co-design

The following sections of the report synthesize the survey, interview, and workshop data across the actions of the scheme. The findings provide a detailed analysis of why farmers are more, or less, willing to complete particular actions, the barriers and enablers to completing these actions and farmers ideas and suggestions for improving actions. The survey gives a broad overview of who can or cannot undertake the different actions and why, whilst the workshops provide an in depth qualitative insight to explain farmers' choices in this regard and offer potential amendments/improvements as part of the co-design ethos.

These findings are laid out according to the layout and order of the outline proposals publication, by the characteristics, sub-characteristics and actions of the scheme (Table 3.1). For Universal Actions (UA) there is an analysis of farmers skills and experience, opportunity, and motivation for undertaking UAs and for Optional (OA) and Collaborative Actions (CA) there are summaries of key findings. These sections also report farmers suggestions for changes or improvements that could be made to actions in the scheme.

Table 3.1 Structure of the report findings

Sub-characteristic	Actions	Page
<b>Resilient and productive farms</b>		
Manage an optimising farm performance through measuring and monitoring	UA: Key performance indicators	27
Diversify, differentiate, specialise for added value	OA: Crops for feed OA: Support for starting up a horticulture business OA: support for innovation CA: Selling to market	33
Minimise the risk of catching and spreading disease	UA: Biosecurity OA: 3m-wide fence OA: Six-day isolation CA: Farmers working together to sell to the consumer	37
<b>Reduce, reuse and recycle inputs, nutrients and waste</b>		
Make best use of artificial fertiliser through nutrient management and soil testing	UA: Soil testing OA: Improving soil condition	44
Prioritising the use of manure and fertility building	OA: Crop rotation	50
Minimise use of pesticides and herbicides through integrated pest management	UA: IPM and PPP	52
Make best use of grassland through alternative approaches to grazing, introducing multispecies leys and mixed grazing	OA: Graze and rest OA: Mixed swards	55

Sub-characteristic	Actions	Page
Lowering the environmental impact of ammonia emissions	OA: Reducing ammonia emissions CA: Reducing ammonia emissions	56
<b>Reduce on farm emissions and maximise carbon sequestration</b>		
Adopting energy efficiency practices and producing renewable energy on-farm	OA: Energy efficient machinery	59
Efficient animals: Animal Health Improvement Cycle (AHIC)	UA: AHIC	60
Restore semi-natural peatland	UA: Peatland OA: Peatland CA: Peatland	63
Create new and manage existing agro-forestry and woodland	UA: 10% Tree cover OA: Managing and planting beyond 10% CA: Joined up woodlands	66
<b>Protect and enhance the farm ecosystem</b>		
Protect soils from erosion and degradation	UA: Multispecies cover crop OA: Minimum tillage	82
Rich on-farm diversity: Preserving native breeds	OA: Native breeds CA: Native breeds	85
Manage habitats and species: Habitat maintenance and creation	UA: 10% habitat OA: Above 10% habitat CA: Interconnected habitats	86
Manage habitats and species: Designated sites	UA: Protected sites CA: Protected sites	92
Water is protected from pollution	OA: Bespoke approach to water pollution OA: 6m buffer strip CA: Water quality catchments	94
Conserve and retain water	UA: Ponds OA: Ponds OA: Water harvesting CA: Reduce flooding	97
<b>Benefit people, animals and places</b>		
Maintain and enhance the historic environment, heritage, and beauty	UA: Historic features OA: Historic features OA: Protected landscapes CA: Landscape scale collaborative projects	103
Enabling people to engage with and access the natural environment	OA: Public access CA: Public access	107
Livestock have a good quality of life	OA: Good Life Welfare	109
Be proficient to practice safely and efficiently	UA: Learning OA: Additional learning	110

Section 9 focuses on Scheme processes and provides a breakdown of on farmers willingness and capacity to complete the administrative processes for registering and delivering the contract as part of the Sustainable Farming Scheme (SFS). These sections are organised by the following sections:

**Table 3.2 Structure of the scheme process section of the report**

Scheme Processes	Contents	Pages
Eligibility and registration	Eligibility criteria including 'active farmer' and '3 hectare' requirement, and registration onto the scheme	115
Sustainability review	Carbon assessment, habitat baseline assessment	117
Monitoring and Evidence	Self-assessments, on-site assessments,	119
Data	Use of data as part of the scheme	120

Section 10 Conclusions provides a breakdown of common themes and concerns raised by participants and key areas for the Welsh Government to consider for the improvement and development of the SFS.

**Table 3.3 Structure of the conclusion of the report**

Themes	Pages
Lack of clarity around the objectives of the scheme	123
Rewarding existing work and earned recognition	125
Concern with one-size-fits all approach and UAs	127
Support for the industry	128
Readiness of the industry and supply chains to support actions	129
Farmers under pressure	130

## 4 Resilient and Productive Farms

### 4.1 Introduction

The objective of the characteristic 'Resilient and Productive farms' is to help farmers adapt to changes in the environment or market. The Welsh Government will provide support to help farmers improve the resilience of their farm businesses. This in turn provides opportunities for the wider rural economy and reliable long-term employment where skills and experience are valued.

This section of the report provides an analysis of farmers skills and experience, opportunity, and motivation for undertaking Universal Actions (UA) included in 'Resilient and Productive Farms'. It also provides a summary of key findings across the Optional (OA) and Collaborative Actions (CA). This section also reports on farmers suggestions for changes or improvements that could be made to actions in the scheme.

The section is organised by the sub-characteristics and actions within Resilient and Productive farms (Table 4.1)

Table 4.1 Actions under Resilient and Productive farms

Sub-characteristic	Actions	Page
Manage an optimising farm performance through measuring and monitoring	UA: Key performance indicators	27
Diversify, differentiate, specialise for added value	OA: Crops for feed OA: Support for starting up a horticulture business OA: support for innovation CA: Selling to market	33
Minimise the risk of catching and spreading disease	UA: Biosecurity OA: 3m-wide fence OA: Six-day isolation CA: Farmers working together to sell to the consumer	37

## 4.2 Manage and optimising farm performance through measuring and monitoring

### 4.2.1 UA: Key Performance Indicators (KPI)

**UA:** All farmers will complete a self-assessment once a year against a minimum of the sector and industry KPIs (two per sector or three in total, whichever is higher).

#### 4.2.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Messages
<ul style="list-style-type: none"> <li>• <b>72%</b> of survey respondents were willing to undertake action.</li> <li>• <b>Top 3 enablers were:</b></li> <li>• "I am willing to undertake this action to receive payments through the scheme" (76%)</li> <li>• "I think the action is good farming practice" (55%)</li> <li>• "I think I have the necessary skills/knowledge to undertake this action on the farm" (47%)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>28%</b> of survey respondents were unwilling to undertake the action</li> <li>• <b>Top 3 barriers were:</b></li> <li>• "I don't want the additional administrative burden" (69%).</li> <li>• "The effort required outweighs the benefits" (52%)</li> <li>• "I don't have the time/labour/material resource to complete this action on the farm" (50%)</li> </ul>	<ul style="list-style-type: none"> <li>• Overwhelming concern about farmers comparing their KPI figures with others and a suspicion and lack of trust in the Welsh Government around why this has been included as part of the scheme.</li> </ul>

#### 4.2.1.2 Skills and experience

During workshop discussions most farmers mentioned that they were already collecting KPI information themselves and understood the utility in monitoring their own farm performance to compare their progress through the years. Most did not expand on how they monitored this information, though some did mention their monitoring of progress was 'in their head'. Therefore, participants indicated an existing level of skills and experience of collecting and using KPI data, although some felt that there would be a mix of experience in the farming industry of tracking KPIs.

72% of survey respondents indicated that they would be willing to complete a self-assessment against industry KPIs. Of those who were willing to undertake the action, 47% indicated that they had the necessary skills and knowledge to do so.

### 4.2.1.3 Opportunity

The findings in the section above (Skills and experience) suggest that as many farmers are already monitoring KPIs, albeit to differing levels of formality, the opportunity for most farmers to track KPIs exists.

New entrants to farming mentioned this activity would be new to them but also helpful in providing guidance on how to develop their businesses.

Some participants in workshops mentioned that KPIs were more likely to be undertaken by larger and more commercial farmers. This is supported by the survey results with those who indicated they were willing to undertake the KPI UA, larger farmers (over 100 hectares) were more likely to indicate that they were already completing this action than smaller farms (under 100 hectares) (Table 4.2). Dairy farmers (n= 107) had the highest percentage of respondents willing to undertake the action (77%) with 55% indicating that they were already undertaking this action.

**Table 4.2** Percentage of survey respondents willing to undertake the KPI action who are already completing KPIs on farm by farm size

	3 to <20 Ha (n=151)	20 to <50 Ha (n=229)	50 to <100 Ha (n=237)	100 to <200 Ha (n=234)	200 Over (n=151)
Survey respondents already completing KPIs	17%	25%	29%	41%	36%

When presented with a list of potential KPIs being developed by the Welsh Government, several participants mentioned there were sectors not yet included in this list. This included pigs, poultry, horticulture and equine. For those who indicated they were unwilling to undertake the action (n= 400), 38% indicated that the action would not benefit their farm. Several comments in the survey indicated a concern from respondents that performance indicators would not fit with their farm type. These comments came from both respondents who said they were willing to do the action (n=8) and those that said they were unwilling to do the action (n=20):

*“I am concerned that the enterprises and activities on this farm will not fit standard performance indicators”*

Those who indicated that they were an ‘other sector’ (n=59) had one of the lowest percentage of farmers willing to undertake the action at 69% (41 out of 59). Only 8 out of 41 who were willing to complete the action indicated that they already completed this action. Participants who were part of the ‘other sector’ group gave similar reasons for not being willing to undertake the KPI action to those who identified themselves as part of a farm type grouping. The ‘other sector’ group gave reasons such as unsuitability for their farming enterprise such as those with common grazing land or whose main enterprise was beekeeping or equine. Some felt that the KPIs did not fit with their farming objectives as they were less intensive or wildlife focussed. There were also concerns that the action would be too large of an administrative burden in comparison to any potential benefits. Concerns were also raised about penalties if KPIs were not met.

#### 4.2.1.4 Motivation

At the beginning of the workshop during the SWOT exercise, participants listed KPIs as a strength of the actions in the Resilient and Productive farms Characteristic, commenting that many farmers were doing it already and if kept simple it can be a good tool for monitoring the business and evidencing improvements on the farm. This sentiment was reiterated in the survey with 55% of those willing to undertake the action believing that the action is good farming practice. 'Good farming practice' was the second highest chosen enabler for undertaking this action, behind receiving payments for undertaking actions.

Despite workshop participants indicating the action was a good concept initially, upon a more detailed discussion participants had mostly strong negative perceptions of the action. Most participants were concerned about benchmarking their farm performance against industry level KPIs. Participants felt that individual circumstances are not like for like with both farm attributes (e.g. geography, organic or not, environmental and weather variables) and the farmers' objectives varying significantly between farms. Examples of different farmer objectives given in workshops included differences between intensive vs extensive, efficiency vs quality, commercial vs rare breeds, growing the business or slowing down.

*"It's not comparable. My figures are for different reasons than the next person. The data is not comparable so you can't draw conclusions unless it is on an individual farm basis."*

*"I could be seen as very efficient, feeding an animal hard to a young age to a weight slaughtered – but will that provide a quality product? It might look efficient, but what are you producing?"*

*"We're organic so we'll be stocking at a lower rate than more intensive farmers. Making the comparisons is going to be difficult. We're marketing most of our stock direct – we sell through farmer's markets. Daily liveweight gain not very relevant to our system. Quality of meat most important thing. KPIs will not help with measuring that sort of output."*

Similar comments were also raised in the survey. Some respondents were confused as to the purpose and aim of the objective and concerned about the impacts of a variety of variables on farm performance.

*"Example of age at first calving: I know from experience what the best is for my system and my livestock, my facilities, my soil and my topography. I do not want to be measured against an irrelevant KPI."*

*"I don't think they account for the variability in farming - there are so many external factors that if a KPI is missed then I would feel like a failure. Farming is all about adapting to the weather, market prices and external drivers such as feed and fertiliser costs. It is very difficult to set targets for successive years."*

Multiple workshop groups raised concerns that conducting benchmarking under a government scheme could add undue pressure to farmers and exacerbate already high levels of poor mental health within the industry. Historically the farming sector has been associated with poor mental health statistics, however in recent times pressure on the industry has been exacerbated by increasing costs for inputs, volatility of prices for produce and uncertainty in policy and support payments. The 2019 report from Public Health Wales and the Mental Health Foundation highlighted that the Brexit transition is bringing a high level of uncertainty to the farming industry and is a key moment for authorities with decision making power to support the



farming industry with this transition (Davies, AR. et al., 2019)<sup>15</sup>. The findings of co-design show the importance of this support and re-emphasise the concerns around mental health from the farming community.

It was unclear to most participants what the objectives of this action were and why it had been included as part of the scheme. Despite several explanations that the Welsh Government did not intend to mark or penalise farmers if their KPIs were lower than industry standard, farmers were still concerned about being penalised if they reported low KPIs. Some participants didn't trust that the Welsh Government wouldn't penalise them for low KPIs in the future. Similarly, research on engaging harder to reach farmers in the co-design of the Environmental Land Management scheme in England, found that harder to reach farmers can have a 'natural suspicion' of government and associated agencies. This can be related to negative past experiences with government and a fear of receiving penalties for not meeting the requirements or paperwork associated with AES (Hurley et al., 2022)<sup>16</sup>. There were also concerns about how the data generated from KPIs would be collected and used.

*"We need to have trust and I don't know if people trust you [the Welsh Government]. I monitor KPIs in my head. If I start sharing it, what's going to happen? Need to show you're trusted, start slowly, then do it in the spirit of improvement - not sanctions."*

*"Who is going to have all this data and who is going to collect it? What are they going to do with it? I worry about how it will be used as a stick, rather than to help us. Is it collecting info for info sake, or will it be used productively?"*

Most participants were unclear on the objectives and would need a better understanding and reasoning behind the KPIs in order to consider them. For example, participants felt there was a mismatch between KPIs that were targeted at increasing productivity and efficiency, and actions in the scheme which would reduce productivity and lower their KPIs.

*"Removing 20% of land is going to affect KPIs. If you already have machinery set up for certain acreage and you have to take 20% out for other actions it's going to put the business under pressure – will be overcapitalised on equipment."*

Time and administrative burden were key barriers to farmers willingness to undertake this action. Out of the 28% of survey respondents (n=401) who were unwilling to complete the action, the top three barriers to undertaking this action were the following:

- 69% I don't want the additional administrative burden.
- 52% The effort required outweighs the benefits.
- 50% I don't have the time/labour/material resource to complete this action on the farm.

<sup>15</sup> Davies AR, Homolova L, Grey CNB, Fisher J, Burchett N, Kousoulis A (2019). Supporting farming communities at times of uncertainty: an action framework to support the mental health and well-being of farmers and their families. Cardiff: Public Health Wales NHS Trust & Mental Health Foundation.

<sup>16</sup> Hurley, P., Lyon, J., Hall, J., Little, R., Tsouvalis, J., White, V. & Rose, D. C. (2022). Co-designing the environmental land management scheme in England: The why, who and how of engaging 'harder to reach' stakeholders. People and Nature, 00, 1–14. <https://doi.org/10.1002/pan3.10313>

Both those that were willing to undertake the action (n=7) and those unwilling to undertake the action (n=13) reiterated this concern in the qualitative survey responses:

*"Time is the biggest obstacle. Where do I make time for the 'free' advice/guidance/training? I'd rather be using my time out on the farm working not doing yet more paperwork."*

This barrier was reiterated in the workshop with several participants mentioning concerns about the added paperwork and time burden this type of action would cause.

#### 4.2.1.5 Improvements and support

Although many workshop participants were opposed to the KPI actions and most didn't want to see them included as a UA as part of the scheme, some ideas for improvement were suggested.

Further clarity from the Welsh Government on the objective and purpose of this action and how the KPIs could link to farm objectives would be needed to encourage uptake and increase confidence in using KPIs. Although some farmers found it useful to compare their KPIs with industry KPIs the majority felt that KPIs should only be used to monitor their own performance year on year and not to compare with others.

*"KPIs sole objective would be to look at their own figures, as baseline data and improve year by year. If it's your own business, your own practices, it's just a point of if there are opportunities to improve this might be a way to do it. You could choose the most relevant to yourself and build on it. I wouldn't think about other farms, but to use it to improve your own farm business."*

One participant suggested that if farmers did want to compare their KPIs with others this could be included as part of a CA, where like-minded and similar farmers could benchmark and compare with each other rather than comparing their results across the industry.

When presented with the proposed options for KPIs, some participants felt it should be simplified to a core set of KPIs, which could reduce the complexity of the action. It was also felt that too many KPIs would generate too much data that wouldn't be used effectively and therefore a core set would be more useful. One participant raised that farms were unlikely to change year-on-year and therefore the reporting cycle should be reduced which would also reduce the time and admin burden for completing the action.

Farmers were keen for there to be flexibility with KPIs and wanted to make sure they worked practically for their farm. For example, hill farmers raised that the type of data collection for the KPIs is often not compatible with their farming practices and that they would need to be sense checked to ensure they worked.

*"It needs to reflect reality. It's got to be a lot more flexible. E.g., for a hill farm, any data collection has to be compatible with practices on that farm. If the sheep are gathered half a dozen times a year, you need to identify what is the valuable data that can be collected at those times, and work that into a KPI scenario. It's got to be flexible and viable as a farm practice to do it without any extra cost."*

Participants were also keen to ensure that any KPIs would match the particular objectives of the farm. Ideas given by participants to achieve this included:

- Targeting KPIs to specific business objectives e.g. whether the farm is trying to expand, sustain or leave the market and other factors such as quality of the product.
- Space to add notes to KPIs so that farmers could note changes made or reasons why they managed the farm the way they did which would help provide context to the KPI and help farmers know the following year why they had the results they had in previous years.
- Including environmental/extensive KPIs as well as productive KPIs to balance the different objectives that farmers are trying to achieve. Examples given included diversity of grass, tree and woodland production, soil and water quality.

In addition, the KPIs would also need to include all sectors, including Poultry, Horticulture and Equine.

84% of the survey respondents who were willing to undertake the action indicated that they would require support in order to undertake the action. From the interviews, 'advice from consultants' and 'in-person training course' were the top-rated support measures. Workshop participants said they would need clear guidance on how to calculate the figures and that technology such as a programme or app could be used to make data inputting simple and user friendly. Participants acknowledged that while most would be comfortable with IT software there would need to be recognition that some farmers would need support with IT and that poor broadband connectivity in some areas would need to be taken into account. Only two participants in the workshops mentioned that they had used the example tool provided – AHDB's KPI express tool. One found this tool intimidating to look at, another participant who used it previously had found it useful but felt it can put undue pressure on farmers.

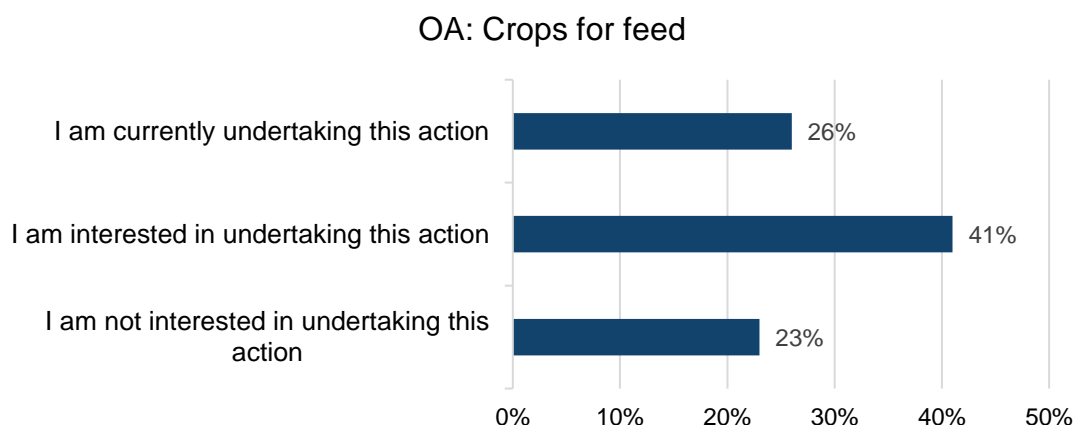
Participants also raised that best practice guidance as well as discussion groups could be useful to provide information on what farmers can do to improve their KPIs. In particular, new entrants felt like they would need more guidance on KPIs.

## 4.3 Diversify, differentiate, specialise for added value

### 4.3.1 OA: Crops for feed

**OA:** Farmers will be supported to grow crops which lower the amount of feed they buy in.

Figure 4.1 Survey respondents' interest in the crops for feed OA (n=733)



26% of survey participants indicated they are already undertaking this action (Figure 4.1) and several participants in workshops mentioned that they already completed this action as part of Glastir but with mixed success:

*“Doing it already under Glastir. No brainer – contribution to grow a crop that is benefitting us, win-win. We go for turnips, and used to go for under sown grass but Glastir dropped it. Don’t understand why more people don’t do it.”*

*“Grow turnips on Glastir agreement – can’t spray them so many crops go to waste as they’re eaten by flea beetle. We know we need to cut back on chemicals, but there needs to be a way round growing a crop successfully. Maybe spread the type of crops we grow – not just turnips – that will resist flea beetle.”*

Other participants were confused by what the purpose of this action was. Several participants felt it was contradictory to the Sustainable Farming Scheme (SFS) aims around carbon as it would require the ploughing of land which would release carbon and were unclear on what the benefits would be.

*“Carbon out of the soils – defeating the object of the benefit of the grasslands by putting crops in as we would need to plough.”*

*“In effect they pay me to grow a piece of corn, but then I’m taking grass out of production so then I’ll have to buy hay in. So it’s pointless. It’s meant to lower feed we buy in, but it isn’t going to do that.”*

*“As an old grass farm, if we diversified to growing our own crops we then need to plough. The Welsh Government should provide a template on our carbon footprint, how this would affect footprint by ploughing pasture to grow. It needs to be worked out properly before you drive people to grow different crops.”*

Some participants were interested in this option however they didn't feel they could undertake it on their farm as they don't have the machinery e.g. a combine if they decide to grow cereals. They did discuss getting a contractor to help them complete the action but felt that the area of land available for this action would be too small to be worthwhile for contractors. Other resource issues were raised included storage for crops e.g. silos for cereals. Some suggested that a solution could be for farmers to work together so that a contractor who comes out to do the work can cover a few neighbouring farms.

There was a discussion in the workshop that planting crops would not be feasible for all land types. Participants felt it is not always the best land management option for every farm due to variations in the suitability of land and soil types for planting crops.

In the survey 32% indicated that they would need support in undertaking this action. In workshops participants felt the following advice and guidance was needed:

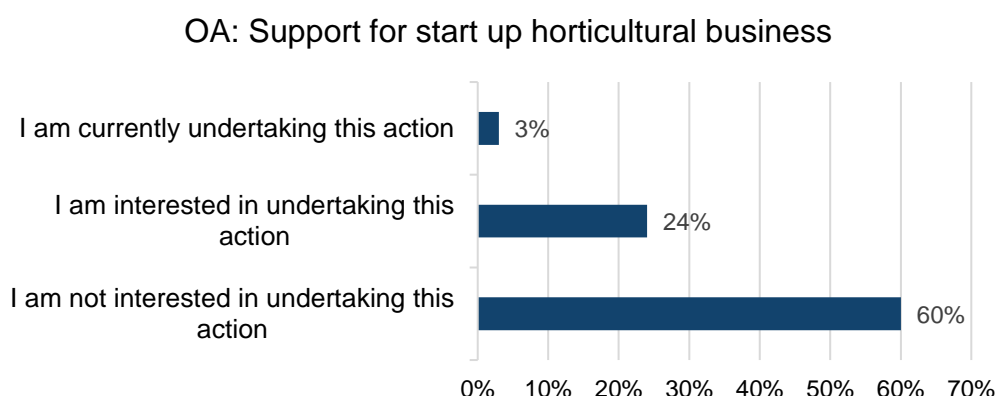
- Soil testing and guidance to ensure that the action is appropriate for conducting this action
- Capital grants to support the machinery and resources that may be required for this action
- Advice and guidance on how this action could impact the carbon footprint of the farm by introducing ploughing onto a previously unploughed grassland. Specifically one participant mentioned a 'carbon footprint template' for the action.

#### 4.3.2 OA: Support for starting up horticulture business

**OA:** The Welsh Government will offer support to start-up horticultural businesses or new horticultural enterprises within established farm businesses.

A high percentage of respondents indicated they were not interested in utilising Welsh Government support to start up a horticulture business (Figure 4.2). This was one of the least popular OA among survey respondents.

**Figure 4.2** Survey respondents' interest in the support for starting up horticulture business OA (n=733)



Similarly to the OAs to grow crops for feed, participants raised that certain types of land are not appropriate for planting crops and there would need to be advice and soil testing to ensure that this action was appropriate for the farm.

Some participants also mentioned difficulties with getting the appropriate planning permission in place when trying to diversify the business.

*"A lot of people will find that when you try to diversify there can be a big barrier with the legislation and planning. They [the people involved with planning and legislation] want you to sell produce off the farm. If you want to set up a farm shop then its all problems with planning and highways are not quite happy with this or that. There are so many obstacles so many don't start or start and give up, and just basically say well its not worth it."*

One participant raised that guidance on a transition pathway into this type of farm business and support in selling produce to market would be needed for anyone wishing to undertake this UA. 26% of survey respondents indicated that they would need support undertaking this action.

In the survey respondents mentioned other types of diversification such as bee-keeping that they would like to see explored in the scheme.

*"Bee-keeping and supporting actions that minimise environmental risk to bees."*

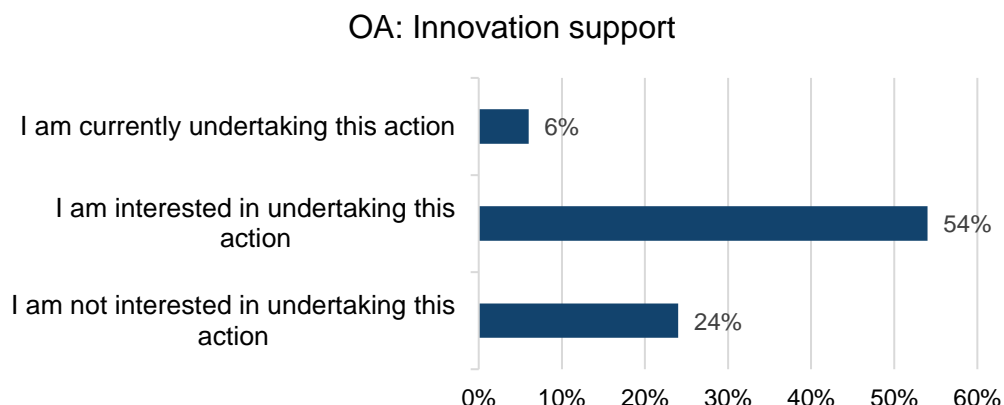
*"Inviting apiarists to keep bee-hives on farm to assist pollination."*

### 4.3.3 OA: Support for innovation projects

**OA:** The Welsh Government will offer support for innovation projects which trial new techniques and technologies at a practical level focusing on sustainability, market diversification and increased farm resilience.

Survey respondents showed a high amount of interest for receiving support for innovation projects (Figure 4.3). Workshop participants wanted some more examples of what diversification or innovation would entail as part of this OA. There was a concern raised that if everyone tries to undertake actions that diversify the farm that it would flood the market and therefore there would be little market advantage for undertaking these types of actions.

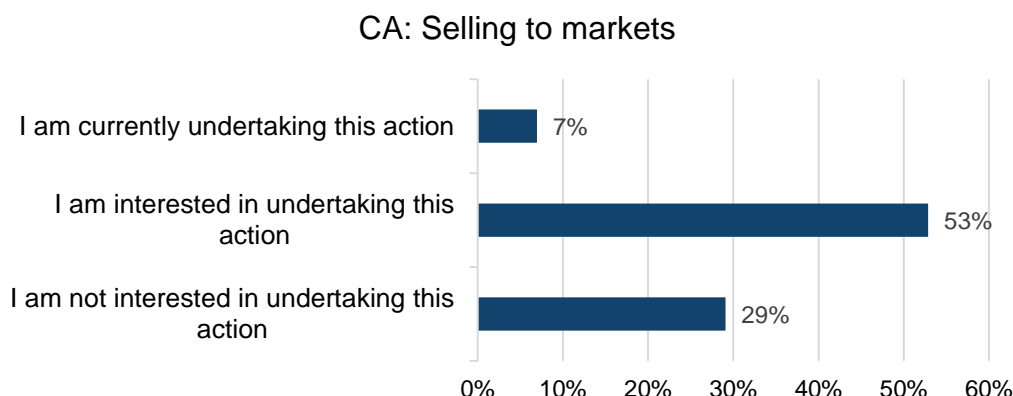
Figure 4.3 Survey respondents' interest in the innovation support OA (n=733)



#### 4.3.4 CA: Farmers working together to sell to the consumer

**CA:** Collaborative support will be available to help farmers work together to sell more directly to the consumer and add value.

Figure 4.4 Survey respondents' interest in the selling to markets CA (n=416)



A high percentage of survey respondents were interested in undertaking the CA to work together to sell directly to consumers (Figure 4.4). One participant in the workshop had experience working collaboratively with farmers to sell directly to market and felt this type of CA would benefit from Welsh Government support.

*"I was involved a few years ago in an initiative to rent premises to form a cooperative farm shop. Got to a certain stage – took some time and during that process a few of us went in different directions. There was around 6 of us involved. We would supply what we grew already for the produce in the shop. Then no individual takes the risks. It's something people may feel impossible to do as an individual, but collaboratively I think the Welsh Government could support."*

While this participant felt that this type of collaborative work could be useful to spread the risk of such activities across a group rather than solely on the individual, others felt that they would rather explore routes to market as an individual and not with a group.

Participants agreed that a major issue is supermarkets not looking after their suppliers. Participants gave examples of this, such as reducing prices just before harvest. Participants said they need legal support to help them with this to give them income security and they would like more support in this area. Other participants wanted clarification on whether a 'cooperative' would be considered as collaboration under this type of action.



## 4.4 Minimise the risk of catching and spreading disease

### 4.4.1 UA: Biosecurity

**UA:** All farms need to have the necessary biosecurity measures in place. These are:

- wash stations and disinfectant is available for people to clean their clothing, equipment and vehicles as they enter/exit the farm and any livestock areas
- all enclosed land boundaries are secure to stop stock from straying
- there is a dedicated secure store for deadstock, which can be cleaned and disinfected. It is away from livestock, feed and water
- feed stores are secure to keep out wildlife and vermin
- there is a pest control/management programme in place, which includes the responsible use of biocides.

#### 4.4.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Messages
<ul style="list-style-type: none"> <li>• <b>77%</b> of survey respondents were willing to undertake action.</li> <li>• <b>Top 3 enablers were:</b></li> <li>• "I am willing to undertake this action to receive payments through the scheme" (65%)</li> <li>• "I think the action is good farming practice" (59%)</li> <li>• "I am already doing this action on the farm" (46%)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>23%</b> of survey respondents were unwilling to undertake the action</li> <li>• <b>Top 3 barriers were:</b></li> <li>• "My farm type and/or farming system does not lend itself well to this action" (46%)</li> <li>• "The effort required outweighs the benefits" (46%)</li> <li>• "I don't have the time/labour/material resource to complete this action on the farm" (45%)</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers felt that biosecurity was important and were generally supportive of this action. However concerns were raised around some of the practicalities of the specific tasks on their farm e.g. wash stations and deadstock storage. Concerns about public access and public behaviour on farm was also a common theme.</li> </ul>

#### 4.4.1.2 Skills and experience

77% of survey respondents indicated that they would be willing to undertake the biosecurity UA. Of those that were willing to undertake the action 46% indicated they were already completing the action and 44% indicated that they have the necessary skills to complete the action. The predominant barriers for those who were not willing to undertake the action were their farm type or farming system not lending itself well to the action (46%), the effort required outweighing the benefits (46%) and lack of time, labour or resources to complete the action (45%).



Most workshop participants felt that they were already covering the majority of biosecurity measures under the UA, in particular those that were part of farm assurance schemes. This is supported in the survey where those that were part of farm assurance schemes were more willing to undertake this action and more often indicated that they had the skills or were already completing the action (Table 4.3). Workshop participants did however raise a particular issue with the 'wash stations' component of the action which is discussed below.

**Table 4.3 Willingness to undertake Biosecurity UA by quality assurance scheme experience.**

Quality Assurance scheme	Willing to undertake the action	Enablers of those willing to undertake the action	
		"I am already doing this action on the farm"	"I have the skills/knowledge to undertake the action"
None (n=439)	69%	34%	38%
Farm assured Welsh Livestock Beef and Lamb (n=850)	79%	51%	45%
Red tractor (n=249)	82%	50%	47%
Welsh Organic (n=86)	77%	45%	56%

#### 4.4.1.3 Opportunity

Of those that indicated that they would not be willing to undertake this action (23% of total 1,445 respondents) one of the most selected barriers was the respondents farm type and or farming system not being suitable (46%). This barrier was selected by 153 participants across a range of farm types including Sheep (41%), Mixed farming (24%), Other (9%), Beef (11%). These participants raised particular issues around the dedicated store for deadstock component as several respondents raised that they have deadstock removed from the farm immediately and therefore the storage is an unnecessary cost.

*"I do all of the above UAs anyway except having a dedicated store for deadstock which at my scale seems completely unnecessary. In the rare event of deadstock the deadstock removal company arrives either same or next day to collect."*

This was a common theme in the survey with both those who were willing to do the action (n=12) and unwilling to do the action (n=25) adding further detail as to why this action does not fit with their farm system or type.

*"Living in the uplands can make this difficult to sometimes get to dead stock though we lose very few sheep generally in the flock."*

*"Due to the nature of upland farming (the land boundary question) practice would be impossible to manage."*

Similar comments were raised in the workshops about some of the practicalities of completing this action and that there could be difficulties implementing these actions on common land. In the survey respondents that had 'rights to commons' were

slightly less willing to undertake this action (75%) than those who didn't have rights to common land (77%) although this difference was negligible.

Other issues around practicality were also raised in the workshop. Whilst most participants were completing the majority of indicated biosecurity measures, they agreed that the action of 'wash stations' was not always practical. Having a wash station at every entry to the farm was not thought to be practical especially with public rights of way and scenarios where animals are not enclosed. There was a general consensus in the workshops that whilst farmers think biosecurity is important and are happy to undertake most of the actions listed, they can't control the public and force them to wash themselves and dogs they bring on farm. This was also reiterated in the survey by 24 respondents who were unwilling to do the action and 9 who were willing to do the action.

*"The land on the farm is in open access, it would be impossible to disinfect at all entry and exit points. Gates are very often left open by walkers/bikers/etc and fences on the hill are often snipped by dog walkers so a secure boundary is impossible to maintain."*

Some participants also raised concerns about a pollution risk with the increased level of disinfectant associated with having more wash stations.

#### 4.4.1.4 Motivation

Having biosecurity measures as part of the scheme was raised as a strength in one workshop as the actions could help to keep farms up to date with biosecurity measures and reduce the spread of disease. 59% of survey respondents who were willing to undertake the action believed it was good farming practice, which was the top enabler for completing this action outside of receiving payments for actions. Participants in the workshops agreed that biosecurity is important with most farmers completing several of the actions listed in the scheme particularly as part of farm assurance.

Of those unwilling to complete the action, time (45%) and effort required (46%) were predominant barriers. These are common barriers across all actions as part of the scheme, indicating that these barriers are likely a symptom of lack of farmer time and concerns with the time burden of the scheme in general, rather than specific concerns that relate to this action.

#### 4.4.1.5 Improvements and support

To support farmers to undertake the action, workshop participants wanted there to be some flexibility in the measure to ensure that the actions taken would be appropriate for the farm. Capital support was also raised as important to fund the implementation of wash stations and double gating.

Those who were already accredited through a farm assurance scheme wanted to make sure that they could use the farm assurance scheme as **earned recognition** and reduce the need for further paperwork or inspection.

Workshop participants raised other biosecurity issues such as bovine Tuberculosis (bTB) and sheep scab that they wanted to see more support for tackling in the industry. Participants were concerned with bTB, which they feel is a huge issue in the industry. They suggested better testing and support from the Welsh Government is needed. Participants specifically mentioned that increases in the market price for

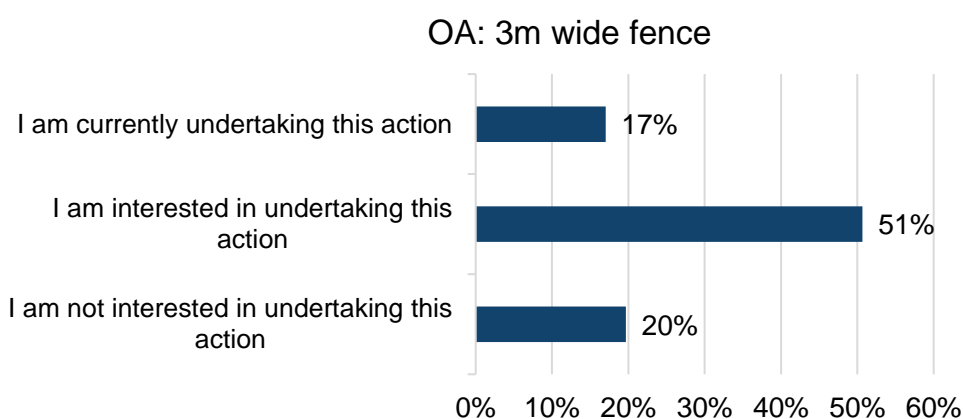
sheep dipping was a barrier to tackling sheep scab and they wanted support from the Welsh Government to help farmers in tackling this disease.

#### 4.4.2 OA: 3m fencing

**OA:** Farmers will be rewarded for having a 3m wide fence and hedge along the farm boundary (where appropriate) to prevent neighbouring stock coming into contact.

Of those respondents who filled out the OAs survey, 17% were already undertaking the 3m fence action and 51% were interested.

Figure 4.5 Survey respondents' interest in the 3m wide fence OA (n=740)



There was some confusion in the workshop as to what is expected of this action and how it would work in practice.

Farmers in workshops wanted more clarity on how this action would work when in their perspective it relies on collaboration between neighbours to achieve the 3m distance. Participants felt that this action could work better as a CA whereby each side of the farm would have approximately a 1.5m boundary to reach the total of 3m. Some participants did raise concerns about the potential for boundary disputes to arise with this action. 40% of respondents indicated that they would need support in undertaking this action.

Workshop participants felt that there was inconsistency between the Welsh Government trying to improve public access points, but also wanting to push for animal biosecurity. They thought that legislative issues mean public rights of way have to be kept open, even if this is not always best for biosecurity.

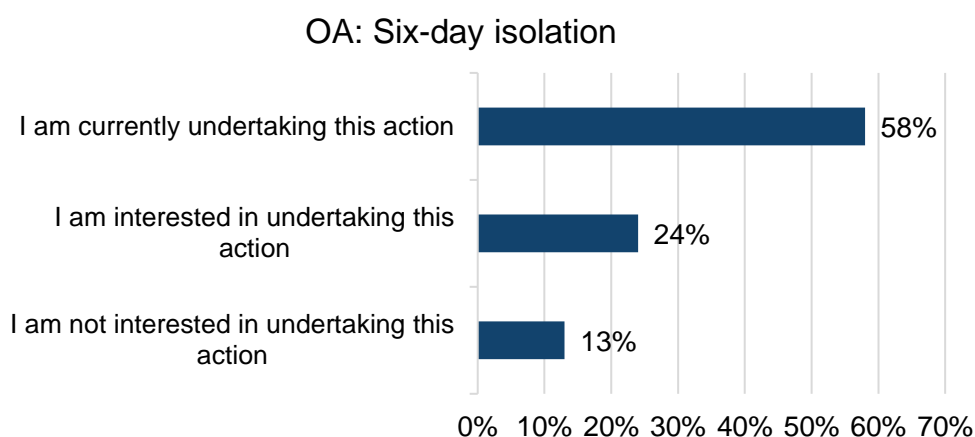
#### 4.4.3 OA: Six-day isolation

**OA:** All incoming animals are isolated for at least six days before mixing with existing stock.

The six-day isolation OA received the highest percentage of respondents indicating they were already completing the action (Figure 4.6). Some workshop participants were already completing this action and appreciated it as an acceptable action to

include as part of the scheme. Only 17% of respondents indicated that they would need support for this action.

Figure 4.6 Survey respondents' interest in the six-day isolation OA (n=737)



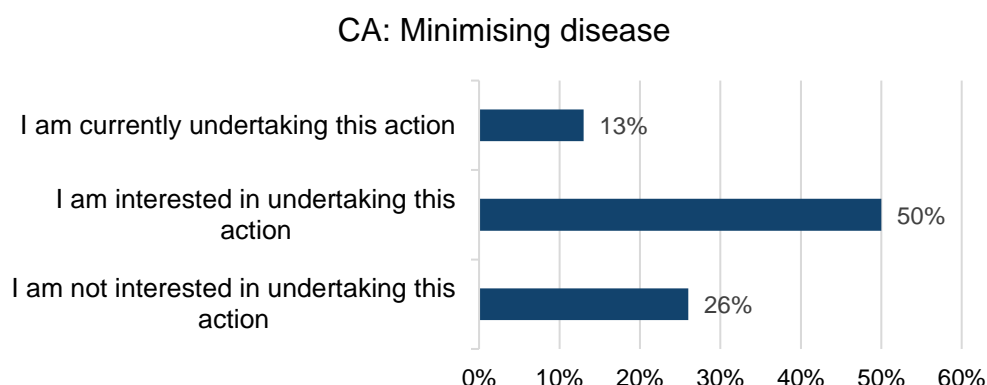
There were some questions about how this action would be monitored, as well as whether this OA would potentially supersede [The 6 Day Standstill Rule \(6DSS\) | GOV.WALES](#).

*"If we as an industry agree to this and we do it, does that mean we get rid of the 6 day rule?"*

#### 4.4.4 CA: Industry working together to minimise disease

**CA:** We will work with the industry to explore how the Scheme could introduce a procedure that demonstrates animals which come on to the farm from other units are safe, minimising the risk of introducing disease.

Figure 4.7 Survey respondents' interest in the minimising disease CA (n=414)



Participants raised several different ideas for achieving the objective of reducing the spread of disease:

- **Mandatory sharing of disease status** - Sharing of disease status so there is more awareness in the industry and prevents the movement of animals with

disease. Some participants raised that this could become a 'tick-box' exercise if people are not held to account and share correct information.

- **Sheep scab** - Several different workshops discussed the need for more to be done to reduce sheep scab. Participants felt that the barriers to sheep dipping, namely the increase cost of sheep dipping, needed to be looked at to see if Welsh Government could provide any support for tackling this disease as part of the scheme.
- **bTB** - bTB was also raised in several workshops and is a strong concern amongst participants and they felt more needed to be done to address the issue. Ideas for reducing bTB included database of health status of animals using EID Cymru, the new Multi-Species livestock traceability system, more antigen testing as animals move between farms, making it illegal to sell animals with inconclusive TB result and meetings to discuss how to prevent diseases.
- **Public engagement** - Participants felt that more collaborative work to engage with the wider community about biosecurity was needed so that public related behaviours such as leaving gates open, dogs on farm, improving hand washing could be raised to improve biosecurity issues. This topic was raised in several workshops.

Some felt that collaboration amongst farmers would be difficult and were concerned that only 'good farmers' who are already engaged in improving biosecurity measures would engage in these types of activities and 'bad farmers' would not.

## 5 Reduce, reuse and recycle inputs, nutrients and waste

### 5.1 Introduction

The objective of 'Reduce, reuse and recycle inputs, nutrients and waste' is to help farms use minimal inputs and make the best use of their resources to have fewer losses to the environment, improving air and water quality and making them more efficient and profitable.

This section of the report provides an analysis of farmers skills and experience, opportunity, and motivation for undertaking Universal Actions (UA) included in 'Reduce, reuse and recycle...' Characteristic. It also provides a summary of key findings across the Optional Actions (OAs) and Collaborative Actions (CAs). This section also reports on farmers suggestions for changes or improvements that could be made to actions in the scheme.

The section is organised by the following sub-characteristics of the Sustainable Farming Scheme (SFS) which contains the following actions:

**Table 5.1 Actions within Reduce, reuse and recycle inputs, nutrients and waste**

Sub-characteristic	Actions	Pages
Make best use of artificial fertiliser through nutrient management and soil testing	UA: Soil testing OA: Improving soil condition	44
Prioritising the use of manure and fertility building	OA: Crop rotation	50
Minimise use of pesticides and herbicides through integrated pest management	UA: IPM and PPP	52
Make best use of grassland through alternative approaches to grazing, introducing multispecies leys and mixed grazing	OA: Graze and rest OA: Mixed swards	55
Lowering the environmental impact of ammonia emissions	OA: Reducing ammonia emissions CA: Reducing ammonia emissions	56

## 5.2 Make best use of artificial fertiliser through nutrient management and soil testing

### 5.2.1 UA: Soil testing

**UA:** Carry out professional and farmer soil testing at Scheme entry and in time for contract renewal to include a combination of:

- Nitrogen (N), Potassium (K), Phosphorous (P), Carbon and pH
- a biological measure e.g. eDNA, respiration counting 'proxy' species (earthworms)
- a physical assessment e.g. infiltration rate, bulk density or Visual Evaluation of Soil Structure (VESS).
- Submit nutrient accounts and evidence covering N, P, K ,C and pH

#### 5.2.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Messages
<ul style="list-style-type: none"> <li>• <b>77%</b> of survey respondents were willing to undertake the farmer and professional soil testing action.</li> <li>• <b>Top 3 enablers:</b></li> <li>• "I am willing to undertake this action to receive payments through the scheme" (71% farmer testing) (65% professional testing)</li> <li>• "I perceive the action as good farming practice" (58% farmer testing) (54% professional testing)</li> <li>• "This would allow me to be more environmentally sustainable" (43% farmer testing) (42% professional testing)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>23%</b> of survey respondents were unwilling to undertake the farmer and professional soil testing action.</li> <li>• <b>Top 3 barriers:</b></li> <li>• "I don't have the time/labour/material resource to complete this action" (51% farmer testing) (44% professional testing)</li> <li>• "I don't want the additional administrative burden" (50% farmer testing) (49% professional testing)</li> <li>• "The effort required outweighs the benefits" (41% farmer testing) (36% professional testing)</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers were supportive of soil testing in concept although did not agree with all of the tests listed and suggested improvements for this action. Organic farmers and others who would not be using fertiliser on farm wanted clarification on the objective of this action for them.</li> </ul>

#### 5.2.1.2 Skills and experience

77% of total survey respondents indicated that they would be willing to undertake both the farmer and professional soil testing actions. 38% of the participants willing



to undertake the testing indicated that they would be confident interpreting the results of the farmer testing and 34% indicated that they would be confident interpreting the professional results. Organic farmers, farmers that had experience in an AES and those that have been part of farm assurance schemes had a higher percentage of farmers indicating that they had confidence in interpreting the results of both farmer and professional testing than those who had not had this experience.

In workshops most participants had some experience with soil testing and using a professional service such as Farming Connect. There was agreement in the workshop that most farmers would be undertaking some form of professional soil testing however there were mixed opinions about farmers skills and experience to complete self-testing. Some participants had experience with self-testing but were sceptical that others would have the skills and experience to complete this action:

*“You would have to train people to do it. It’s not as simple as it looks laid out on a page. I’m trained in biochemistry but most people aren’t”*

Some felt that with a limited amount of training farmers could start doing testing themselves and this could be a good opportunity as part of the scheme.

### 5.2.1.3 Opportunity

There were concerns raised in the workshop about whether there would be sufficient resource and capacity in the industry to undertake the soil testing actions across all farms wishing to enter the scheme. This was raised in relation to the capacity of labs to complete soil tests as well as capacity for Farming Connect to support and train farmers to undertake testing. There were comments that testing too regularly would not be worthwhile as it can take time for any impact of actions taken on the farm to be seen in the soil.

Tenancy was raised as a potential barrier to this action in two different workshops. One participant raised that those who rent land on a short-term basis may have limited knowledge of the nutrient accounts of previous tenants which may cause an issue for completing the nutrient accounts if it they had to be responsible for accounting over multiple years. Another raised that a tenant may be unable to see any change on the land in the short term as a result of testing and management actions and therefore it is unclear the purpose of the action for them.

*“This is all based on it being owner-occupier of land and no temporary ownership. If you only take on a piece of land temporarily, you may have no way of knowing what it was like last year...There’s lots of fluid land in Wales.”*

However, the survey results do not indicate that tenancy is a barrier to completing this action with tenants having either similar or higher percentage of farmers willing to undertake this action compared to those who own or mostly own their farmland.

### 5.2.1.4 Motivation

Both in the workshops and the survey participants recognised the benefits of conducting soil testing. Of those willing to undertake the action, 58% felt that farmer soil testing and 54% felt professional soil testing was good farming practice. Survey respondents indicated that this action would enable them to be more environmentally sustainable (43% for farmer soil testing, 42% for professional soil testing). In the workshops, participants raised that this action was beneficial for reducing farming inputs which in turn would help farms reduce their input costs on



fertilisers. Participants raised that this action along with other actions within the Reduce, reuse and recycle characteristic were beneficial for looking at the long-term health of the soil, rather than focussing on short term productivity gains.

Although participants understood the benefits of soil testing, the wording of the action and objective caused confusion. In one workshop all participants agreed that the objective “Make best use of artificial fertiliser through nutrient management and soil testing” seemed to promote artificial fertiliser use. Some participants felt that there should be stronger encouragement to decrease use or move away from artificial fertilisers.

*“Using artificial fertilisers should be optional, using things which are ‘good’ should be universal. Confusing having artificial fertilisers within universal indicators as making out that everyone should be doing this.”*

Other participants weren’t clear whether the objective of the action was aimed at improving productivity of farms, for carbon sequestration or for the Welsh Government to have a baseline ‘soil status’. This confusion was in part from the wording of the action but also the requirement to test all of the farm despite some farmers not using or intending to use artificial fertilisers. Certain participants would not be looking to put artificial fertiliser on the soil because they are organic, there are protected areas, difficulty with common land and hill rights agreement or difficulty reaching areas of the farm with tractors. Clarity was needed around the purpose of testing these areas of the farm.

*“For me, being such a small smallholder, we don’t do any soil testing. I haven’t done any reading – I’m a total novice. I would need hand holding, someone would have to explain the benefit of using artificial fertiliser. If I had to spend the current spend of fertiliser to improve my soil, which is currently acidic, it would wipe out any income I would generate. It would wipe me out and I would have to withdraw from the market.”*

*“I think it’s a question, of what this information is for. If it’s to improve productivity, then agree with points raised about not be able to do anything anyway. I suspect part of what the Welsh Government want is effectively baseline ‘soil status’. I think this will incredibly be valuable to inform future actions policies/ priorities. And if the Welsh Government are willing to pay that, that’s fine by me!”*

Similarly they felt the action focussed too heavily on N,P,K testing which is not always useful to the farmer. Several participants questioned the use of nitrogen testing, stating it was not part of a standard soil test because of the difficulties measuring it, with some suggesting that if nitrogen was to be included it should be tested on the leaf of the plants and not the soil.

#### 5.2.1.5 Improvements and support

Workshop findings suggest that further work needs to be done to improve the wording of the action and to clarify the objective of the action to farmers. In particular several farmers felt the way in which the action was worded seemed to encourage artificial fertiliser use rather promoting reductions in use. It was also felt that the action needed to be simplified so that it was less daunting to farmers and could encourage a basic level of soil testing.

Farmers had different priorities for soil testing, with some workshop participants preferring more of a focus on biological soil testing rather than NPK. A representative from the horticulture sector mentioned that this sector is very

contextually different to others and would be interested in a higher level of information than the test currently suggested. To provide flexibility and to prevent disincentivising those that are doing low levels of soil testing currently participants suggested that some tests could be moved to optional. The action can then be built on over time as the scheme develops. Some participants felt Nitrogen and Carbon testing could be optional, as well as others suggesting eDNA testing as a step beyond basic soil testing.

Other tests that participants would be interested in completing and could be included in an OA include:

- Cation exchange capacity testing
- Carbon capture analysis
- Leaf testing for nutrient uptake
- Magnesium and calcium ratio
- Bacterially impacted soil or fungal
- Manure testing (before spreading)
- Trace elements

When discussing how the testing should be taken, participants wanted flexibility to do it in the way that suited them, and to fit with how they have tested previously. Those participants who had more experience with soil testing tended not to use the W pattern as the samples would not be comparable in future years. Most participants had taken samples of a portion of their farm every year with some conducting them on a rotational basis. Some participants wanted to ensure they could conduct the soil testing at the same time every year as this can have an impact on the results. There was some scepticism from farmers on the purpose of testing land that wouldn't be fertilised so further clarity on whether this type of testing is required and why it would be tested is needed.

Several farmers from across the different workshops had experience with using Farming Connect for soil testing and wanted to see this support continue to be funded through the scheme. Farmers were keen for there to be appropriate advice and support available after the soil testing to ensure that they could effectively manage the land based on their results. In particular more advice and support on managing soils without the use of artificial fertilisers was mentioned.

Though some participants reported good experiences with Farming Connect, others had challenges in finding someone to complete the testing and there were concerns that capacity and geographic availability would be an issue. This issue could increase particularly considering the amount of testing that could be required as a result of the scheme. Some would prefer to continue to use Farming Connect and others would like to source their own support. Some participants wanted to take samples themselves at a time that was suitable for them and provide photographic evidence to prove the samples had come from their field. Some participants had concerns about the necessity for consultants to support with completing the UAs and felt that the requirements for consultants should be limited in the universal layer. Training on soil testing analysis and encouraging of home testing and providing home testing kits were other suggested support measures which could build capacity in the industry for completing actions themselves.

When discussing the visualisation of the soil analysis, a colour-coded table (Figure 5.1) was the preferred option in workshops although it was suggested that it should come with further guidance on actions needed for improvement. One participant mentioned that the heat map style graphic (Figure 5.2) would be useful for some farmers who use more advanced technology but not appropriate for many. Another

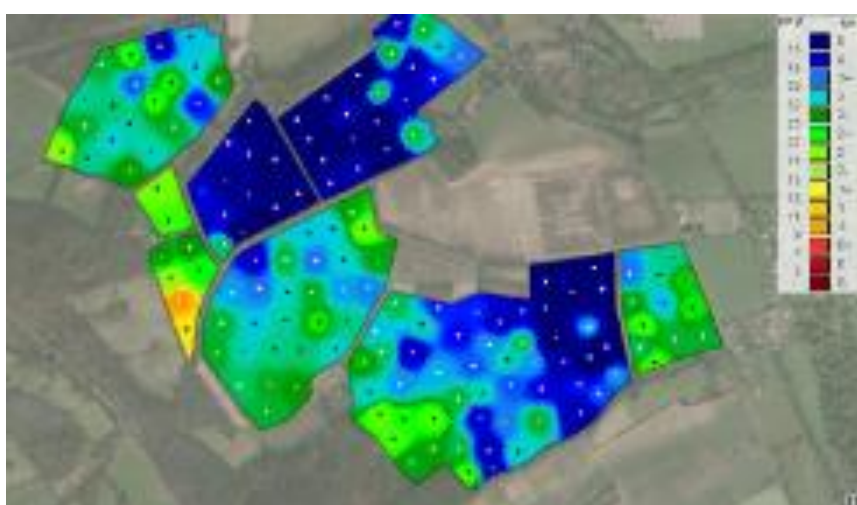
idea suggested by a participant was the use of satellite imagery of the fields on the farm to visualise the health of the soil and to easily identify which fields are doing well and which are suffering more and require testing and further management.

Figure 5.1 Example colour-coded table visualisation of soil health shown in workshops (AHDB Soil Health Card<sup>17</sup>)

Attribute*	Field A; Farm 1	Field B; Farm 2	Field C; Farm 3
SOM (%)	3.4	2	2.2
pH	6.7	6.9	7.0
Ext. P (mg/l)	40.6	59.6	37.2
Ext. K (mg/l)	158	106	148
Ext. Mg (mg/l)	82	89	144
VESS score	2	2	2
Earthworms (Number/pit)	13	8	1

■ Investigate      ■ Monitor      ■ No action needed

Figure 5.2 Example heat map style visualisation of soil health shown in workshops



Beyond reducing artificial fertiliser use, workshop and survey participants also shared additional ideas for 'Reduce, Reuse, Recycle'. A workshop participant and some survey respondents felt that there could be more OAs within this characteristic that explore reducing waste by recycling and reusing materials on farm such as plastic, waste chemical containers and wood on farm.

*"A farm plastic recycling scheme with collection points at local markets ensuring that it is disposed of responsibly."*

<sup>17</sup> AHDB Soil Health Scorecard [Soil health: Let's get physical \(chemical and biological\) | AHDB](#)

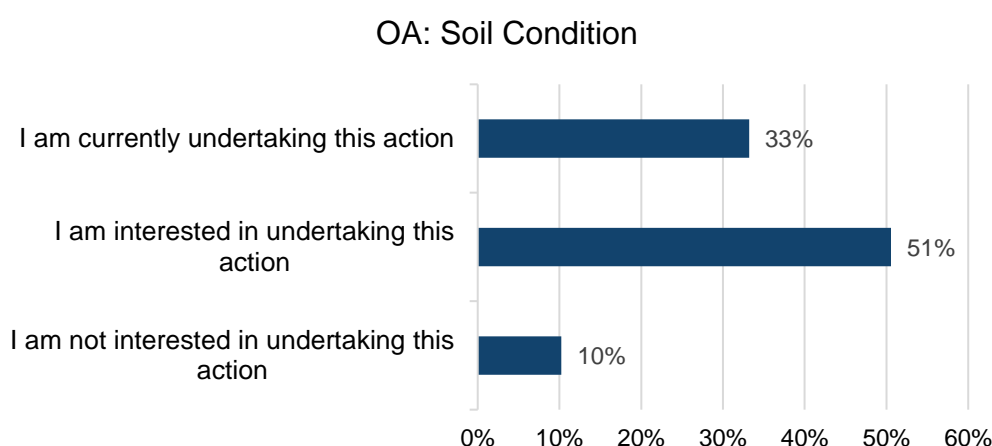
*“plastic waste was also not mentioned, stopping the burning of this illegally is a must. Whether that is through setting up local drop off places or setting up a recycling factory government owned, or heavy fines etc...”*

## 5.2.2 OA: Improving soil condition

**OA:** Optional Actions which impact a farm’s nutrient use and soil condition can be found throughout this document, including actions to:

- Supplement applied nitrogen with nitrogen fixing plants (establishing mixed swards, planning rotations, cover cropping)
- Establish leys and crops with varied rooting profiles (establishing mixed swards, crop rotations, cover cropping)
- Improve soil biology (diverse planting, graze and rest practices, minimum or no till, use of anthelmintic plants to reduce wormer usage, habitat management).

Figure 5.3 Survey respondents’ interest in soil condition OA (n=726)



This OA was in the top three actions which received the highest percentage of survey respondents indicating they already complete this action (Figure 5.3). Workshop participants were supportive of these types of actions. An organic farmer in the workshop felt that they have been doing these types of actions on farm for a long time and felt that there should be more recognition of how these actions relate to organic farming practice in the SFS.

*“As an organic producer, this is stuff we’ve all been doing. These are things that have been known for 50-100 years.”*

Ideas that participants raised of additional actions that could be included as part of this OA were: green manures e.g., mustard and buffer strips in riparian zones to keep nutrients on field and not in water courses.

In both workshops there was a concern with how tenants would relate to these OAs as the activities require a longer-term approach with often shorter term losses in productivity.

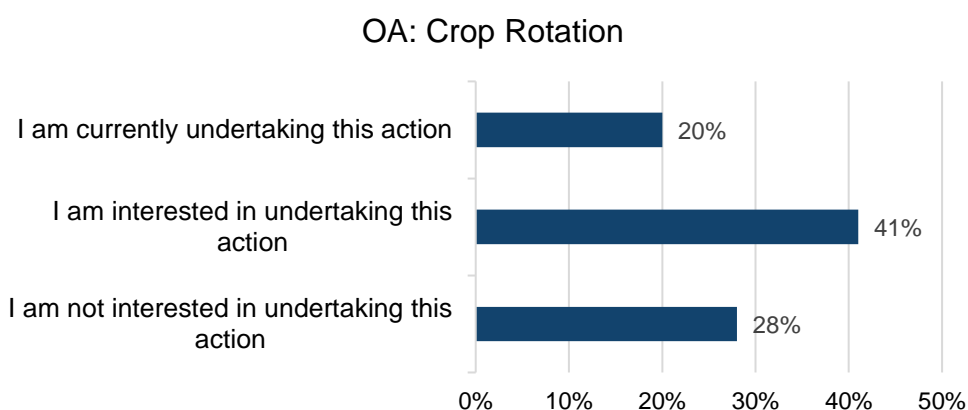
*“Think about the fact so much land is temporary usage. How do you encourage someone to put on a long-term ley if you’ve only got a year tenancy – you’re not going to be able to. I would like farmers to think in generations, but most land is held on temporary agreements, 5 years or less. Difficult to then go to a min-till system with long term leys when they’re only going to have the benefit of land for 5 years.”*

## 5.3 Prioritising the use of manure and fertility building

### 5.3.1 OA: Crop rotation

**OA:** Farmers will be rewarded for using a crop rotation which follows the basic principles and offers benefits to soil health and the wider environment.

Figure 5.4 Survey respondents’ interest in the crop rotation OA (n=726)



Two workshop participants that had organic farms were already completing this OA and felt that these actions were quite basic and should be moved to the UAs. However, others disagreed and felt that these actions would not be appropriate as a UA. These participants felt certain farm types such as Dairy and Grassland farms wouldn't implement a crop rotation and other farm specific conditions for example a participant who has flooding on their land wouldn't go into a rotation as they would risk losing too much soil.

Participants emphasised that the actions needed to maintain flexibility, not become prescriptive and recognise that different soils will require different management types:

*“Every farm has a different rotation / crop / interest, it needs to be flexible. It's really important it's not prescriptive.”*

*“Not sure it's clear within these OAs how management differs, in terms of looking after the soil nutrients and how you use it, it's not clear it's been emphasised enough. On my soil, I have shale on the surface, clay, silt – which can lead to problems if it's wet and can get dry and crack in the summer...Flexibility is important.”*

Again, the long-term nature of this action was seen as a barrier to tenant farmers. It was suggested to overcome this there could be CAs between landlords and tenants – the landlord having the long term responsibility as well as long term land benefits,

whereas the tenant does the work and gets short term financial reward (scheme payment).

Participants suggested other ideas to support fertility building in soils that could be incorporated into this action:

- interrow cropping between maize
- nitrogen fixing crops
- including a legume in cover crops
- mixed grass legumes that can add to animal feed

33% of survey participants indicated that they would need support for this action. Workshop participants mentioned specific soil/land-based management as well as a plant breeding programme that could produce plant varieties that compliment this type of land management.



## 5.4 Minimise use of pesticides and herbicides through integrated pest management

### 5.4.1 UA: Plant Protection Products and IPM

**UA:** Farmers will be supported to:

- collect, record and report data on Plant Protection Products use
- complete an IPM assessment

#### 5.4.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Message
<ul style="list-style-type: none"> <li>• <b>83%</b> of survey respondents who use PPP were willing to undertake action.</li> <li>• <b>Top 3 enablers:</b></li> <li>• "I am willing to undertake this action to receive payments through the scheme" (63%)</li> <li>• "I think the action is good farming practice" (52%)</li> <li>• "This would allow me to be more environmentally sustainable" (38%)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>17%</b> of survey respondents who use PPP were unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b></li> <li>• "I don't have the time/labour/material resource to complete this action" (49%)</li> <li>• "I don't want the additional administrative burden" (49%)</li> <li>• "The effort required outweighs the benefits" (41%)</li> </ul>	<ul style="list-style-type: none"> <li>• Participants wanted to ensure duplication of effort was avoided for those who are already submitting this type of information. They also wanted more sharing of knowledge through farmer led learning so that actions to reduce pesticides on farm were supported rather than just completing the IPM assessment as a tick-box exercise.</li> </ul>

#### 5.4.1.2 Skills and experience

39% (n=562) of survey respondents indicated that they use Plant Protection Products (PPP) on their farm. 83% (n=484) of those who use PPPs are willing to collect, record and report data on their usage and complete an integrated pest management (IPM) assessment. Of those who were willing to undertake the action 34% felt they had the necessary skills and knowledge and 37% were already completing this action on farm. However only 13% had an accredited qualification that supports IPM e.g. BASIS. In the workshops there were some participants who use PPP and therefore had experience recording data on PPP for the Health and Safety Executive (HSE) as part of legislative requirements, and several participants were already practicing IPM.

Some workshop participants raised concerns about the potential lack of computer and IT skills of some farmers, particularly on smaller farms, and how this could make the filling out of different forms and use of computer systems difficult, especially if it also comes with a financial cost. However, survey respondents who

were unwilling to undertake the action indicated that not having the necessary skills or knowledge (19%) was not the predominant barrier to undertaking the action.

#### 5.4.1.3 Opportunity

The percentage of respondents indicating that they use PPPs varied by sector but the action was most relevant for the arable sector. Of those that indicated arable as their main sector (n=45), 91% indicated that they use PPPs. Of those that indicated arable as a secondary sector (n=119), 74% indicated that they use PPPs. As expected, a higher percentage of lowland farmers (47%) indicated that they use PPPs than upland and hill farmers (35%).

In the survey 96% of organic farmers indicated they do not use PPPs. This is expected as organic farmers typically use no artificial chemicals on farm and are required to follow organic rules when choosing substances to protect crops from pest or diseases<sup>18</sup>. In the workshop, organic farmers wanted clarification on whether this action was relevant to them i.e., if they would be required to report not using PPPs. They also wanted clarification on whether they would need to conduct an IPM assessment as this action seems less relevant for those not using any pesticides or herbicides.

#### 5.4.1.4 Motivation

Participants in the workshops agreed that reporting this type of information was important and something that should continue to be monitored. In the survey, 52% of farmers willing to undertake the action think it is good farming practice and 38% think the action would help them be more environmentally sustainable. These two enablers were the highest chosen enablers excluding payments.

Some workshop participants were in favour of using the data collected from this action to promote the sustainability of Welsh farming by reporting when low and no levels of pesticides are used. However, another participant felt that the action wording implied that Welsh farmers are using lots of pesticides when they are not and that farmers do not know how to manage their own farms:

*"Goes back to it all implying we don't manage our farms. Derogatory thing the way it's put. Implying all the time that someone knows better than we do."*

Although most responding to the survey, and those in the workshops, were willing to undertake this action, administration and time burden was raised as barrier. An arable farmer mentioned the difficulty and time burden of inputting this type of data on different systems. This participant regularly records this data on their farm system digitally to monitor their usage and record margin figures and benchmark. However, when they have to submit the data into another system e.g. HSE, it becomes complicated and time consuming because of the different metrics used.

For those unwilling to undertake the action, administrative burden (49%) time and resource (49%) and believing that the effort required outweighed the benefits (41%) were the top barriers. Of those that indicated they were in the arable sector (either as a main or secondary sector) 22 out of 24 respondents listed at least one of the aforementioned barriers. The remaining 2 participants chose 'other' as a barrier and submitted a comment to indicate that they were already completing this action:

<sup>18</sup> [Farmers and growers using plant protection products \(hse.gov.uk\)](https://www.hse.gov.uk/farmers/)



*“we already do this our way.”*

#### 5.4.1.5 Improvements and support

Reducing the duplication of effort associated with this action, for those farmers who already record this information is important to reduce unnecessary administrative burden. Participants who had experience submitting this type of information wanted clarity about what is required and raised some previous issues around using HSE systems e.g., discrepancies in listing the ‘product’ or the ‘active ingredient’. Participants who don’t use PPPs such as organic farmers, needed clarity on whether they needed to complete this UA.

Farmers wanted clarity on how data collected through this action, and in other areas of the scheme, would be used by the Welsh Government. Although some understood and liked the idea of sharing the data to promote the sustainability of Welsh farming, others were still concerned about data collection and had a lack of trust in the Welsh Government.

Participants raised that it was important that this action was not just a tick-box exercise but that farmers were able to take action based on the data. This was raised in relation to the IPM assessment. Participants suggested ideas to help promote farmer-to-farmer learning to achieve this aim:

- **Website/Forum:** A database/website to share farmers’ ideas about how they reduce chemical usage.
- **Magazines:** Sharing information through write ups in Farming Connect or the Welsh Government magazines about farmers’ experiences.
- **Discussion groups:** Farmer led discussion groups to encourage learning with facilitation support from the Welsh Government or Farming Connect to publicise the meetings, set up speakers and remind farmers to attend.

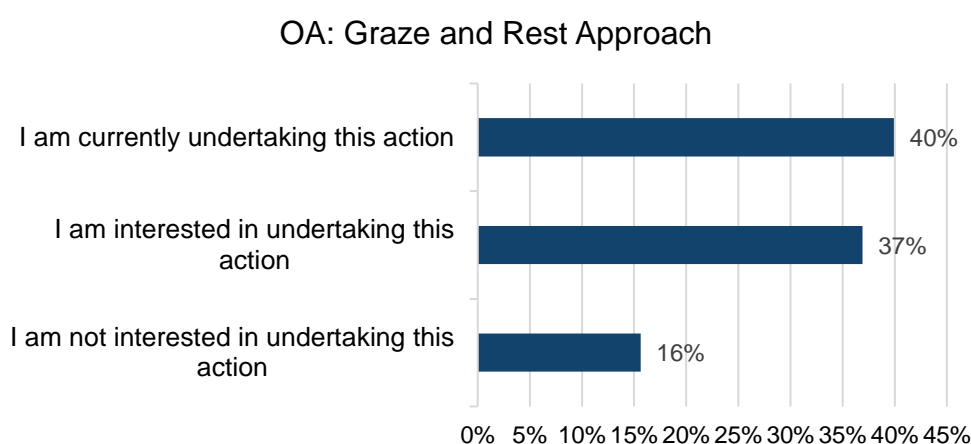
Some felt that farmer led learning was emphasised in the first phase of co-design but this had not been considered in the outline proposals.

## 5.5 Make best use of grassland through alternative approaches to grazing, introducing multispecies leys and mixed grazing

### 5.5.1 OAs: Graze and rest approach and mixed swards

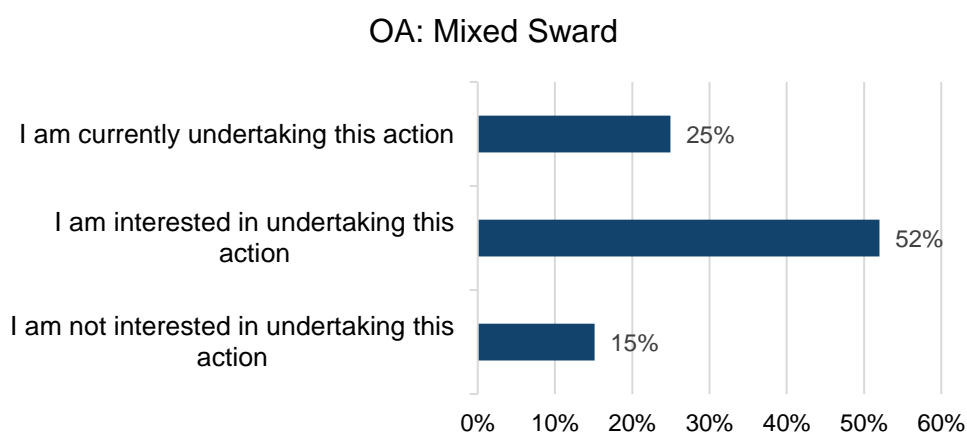
**OA:** Use a graze and rest approach, for at least five months of the year by dividing fields to allow the regular movement of livestock and grazing grass for short periods

Figure 5.5 Survey respondents' interest in the graze & rest approach OA (n=729)



**OA:** Establish and/or maintain a mixed sward of grasses, legumes and herbs (or native wildflowers)

Figure 5.6 Survey respondents' interest in the mixed sward OA (n=725)



Workshop participants were supportive of these actions as they were viewed as traditional farming methods and some were already completing these actions. Compared to other OAs, a high percentage of survey respondents (40%) indicated they were already using a graze and rest approach on their farm (Figure 5.5) with this being the second highest after the six-day isolation action.

These actions were identified as a strength of the scheme by workshop participants and participants were particularly keen on encouraging the use of mixed-species lays. One participant gave examples of the benefits of these types of actions such as resting areas of the farm can aid parasite control (e.g., fluke), bringing animal health benefits.

There were some farms that participants raised could find these actions difficult:

- Difficulty for smaller farms to carry out a graze and rest approach
- Difficulty for common land graziers to carry out a graze and rest approach and reseed any grassland would be illegal under commons regulations
- Difficulty for those on floodplains

35% of survey respondents indicated that they would want support with the graze and rest approach and the mixed sward actions. In workshops participants requested guidance on the best plants to use in a mixed sward that is suitable for their land, prioritises native species, and prevents introduction of pests or invasive plants.

Workshop participants raised that capital support would be essential to help with this action, specifically for fencing and hedging to manage livestock for the rotational grazing approach. Some participants mentioned that they felt that fencing grants needed to be higher than what was currently offered and that the 2-3m width requirement for fencing needed to be revisited as this could be a barrier for smaller farms. 67% of workshop participants were interested in receiving capital support for this action.

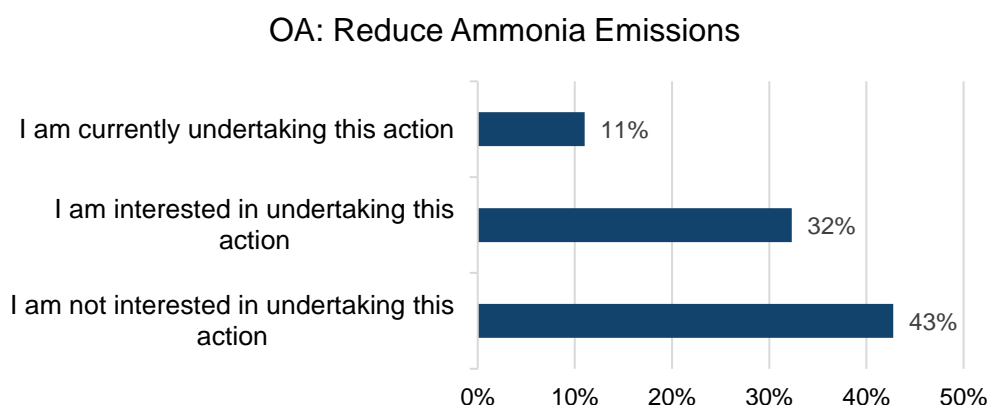
## 5.6 Lowering the environmental impact of ammonia emissions

### 5.6.1 OA and CA: Reducing ammonia emissions

**OA:** Optional actions to lower emissions include the following adaptations:

- Housing e.g., frequent slurry scraping and drying poultry manure
- Slurry storage e.g., covering slurry stores and acidifying slurry
- Precision slurry spreading e.g., trailing shoe and injection

Figure 5.7 Survey respondents' interest in the reducing ammonia emissions OA (n=718)

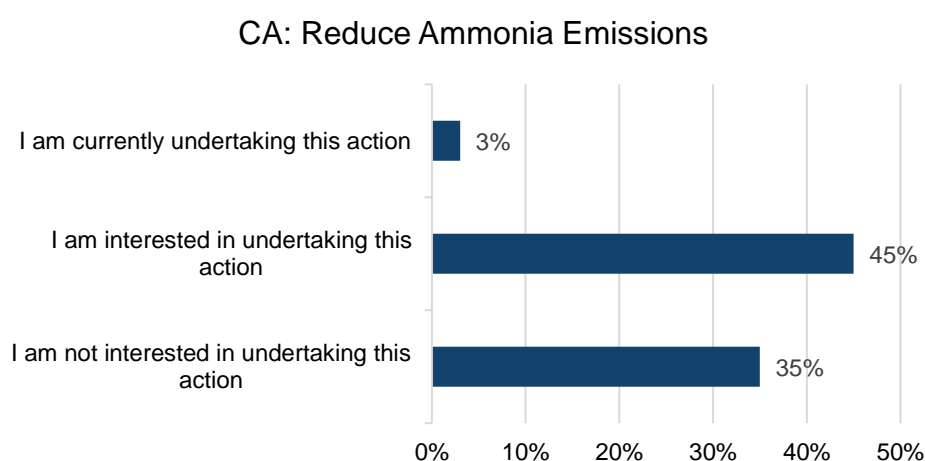


In the workshop most participants felt that these actions were not relevant to them as most were extensive grassland farmers and do not have slurry. It was thought that this action was mostly related to intensive beef/dairy systems and there was agreement that these farms should be completing these types of actions.

To add further clarification to this action, participants wanted to understand how the storing of slurry would reduce ammonia emissions i.e. where does ammonia gas build up escape to? They also wanted clarification on how and if this action is applicable to manure of non-dairy animals such as poultry.

**CA:** Support for collaborative approaches which allow farmers to work together to deliver actions to lower ammonia emissions. They may be targeted to where they will have the most benefit to ecosystems. This will include local co-ordination between farmers and other landowners to develop Shared Nitrogen Action Plans with the aim of restoring habitats and maximising local economic benefits.

Figure 5.8 Survey respondents' interest in the CA to reduce ammonia emissions (n=407)



When discussing the CA to reduce ammonia emissions, although participants did not believe this action was relevant to them, they did suggest the potential idea of sharing surplus muck as an organic fertiliser between farms. One participant who was a vet raised that this could cause disease and infection concerns when sharing the muck between farms. Participants discussed that testing of the muck would be needed to ensure that the muck was suitable for their farm.

## 6 Reduce on farm emissions and maximise carbon sequestration

### 6.1 Introduction

The objective of “Reduce on farm emissions and maximise carbon sequestration” is to help farms become more efficient, lower their greenhouse gas emissions and enhance existing carbon stocks through sequestration. The Welsh Government will also help farms make use of renewable energy and produce food with a low carbon footprint.

This section of the report provides an analysis of farmers skills and experience, opportunity, and motivation for undertaking Universal Actions (UA) included in ‘Reduce on farm emissions ...’ and provides a summary of key findings across the Optional Actions (OA) and Collaborative Actions (CA). This section also reports on farmers suggestions for changes or improvements that could be made to actions in the scheme.

The section is organised by the following sub-characteristics of the Sustainable Farming Scheme (SFS) (Table 6.1)

**Table 6.1** Actions within Reduce on farm emissions and maximise carbon sequestration

Sub-characteristics	Actions	Pages
Adopting energy efficiency practices and producing renewable energy on-farm	OA: Energy efficient machinery	59
Efficient animals: Animal Health Improvement Cycle (AHIC)	UA: AHIC	60
Restore semi-natural peatland	UA: Peatland OA: Peatland CA: Peatland	63
Create new and manage existing agro-forestry and woodland	UA: 10% Tree cover OA: Managing and planting beyond 10% CA: Joined up woodlands	66

## 6.2 Adopting energy efficiency practices and producing renewable energy on-farm

### 6.2.1 OA: Energy efficient machinery

**OA:** There will be capital support available for farmers to take up various energy efficient actions to decarbonise their machinery use and farming practices, based on the carbon assessment in the sustainability review.

**71%** of survey respondents who answered this survey question (n=726) were interested in getting capital support to improve their energy efficiency. **This received the highest percentage of survey respondents interested in completing this OA.** There was also a high interest in these OAs in the workshops with participants suggesting several ideas for this action:

- **Ideas for capital payments:** battery powered chainsaws, solar panels, wind turbines, battery packs, decarbonising quad bikes and farm vehicles, hydro power,
- **Collaborative community action** to generate renewable energy. e.g., for solar, wind energy, small hydro projects.
- **Opportunities for future proofing for future infrastructure** e.g., moving away from diesel towards hydrogen.

Although participants were interested in these actions, they mentioned several barriers to undertaking them:

- **Capacity/allocation of energy on the national grid:** Some participants mentioned that they had difficulty getting their renewable energy source supplies to feed into the national grid.
- **Location and geography:** Most workshop participants were interested in implementing more renewable energy related actions but had previously run into particular issues around national parks, SSSIs, general geographic issues or they weren't able to get the permission to install devices such as solar panels or wind turbines because they were not 'in keeping with the area'.

Participants felt there were more opportunities for decarbonisation of intensive lowland/arable farms as they are using more intensive machinery compared to upland extensive farms. Those who were upland farmers wanted to ensure that there were options for them to get involved in this type of actions. Tenancy again was raised as a concern due to the longer-term nature of the action.

## 6.3 Efficient animals: Animal Health Improvement Cycle

### 6.3.1 UA: Animal Health Improvement Cycle

**UA:** Farmers will need to: carry out actions, identified by working closely with their vet, through the Animal Health Improvement Cycle. Calculate and report the average amount of antibiotics used on the farm.

#### 6.3.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Message
<ul style="list-style-type: none"> <li>• <b>79%</b> of survey respondents who keep animals on farm were willing to undertake action.</li> <li>• <b>Top 3 enablers:</b> <ul style="list-style-type: none"> <li>• "I am willing to undertake this action to receive payments through the scheme" (62%)</li> <li>• "I think the action is good farming practice" (55%)</li> <li>• "I am already doing this action on the farm, e.g., as part of an assurance scheme or supply chain requirement" (55%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>21%</b> of survey respondents who keep animals on farm were unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b> <ul style="list-style-type: none"> <li>• "I don't want the additional administrative burden" (48%)</li> <li>• "The effort required outweighs the benefits" (42%)</li> <li>• "I don't have the time/labour/material resource to complete this action" (37%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• On the whole workshop participants were very supportive of this action with one participant saying "it is the most acceptable UA within the scheme"</li> </ul>

#### 6.3.1.2 Skills and experience

Of the survey respondents that indicated they have animals on the farm (n=1331) 79% were willing to undertake the action with 55% of those willing to undertake the action indicating they are already doing this on the farm. Everyone in one workshop agreed that the industry should already be completing this type of action on their farm and several participants commented that they are already completing similar type of actions through their farm assurance schemes. This was supported through the survey where those that indicated they were part of the following farm assurance schemes were more willing to undertake the action and more likely to already be completing the action.

Table 6.2 Willingness to undertake AHIC action by quality assurance scheme experience

Base number	No QA (n=385)	Quality Welsh Food Certification (QWFC) (n=51)	Farm Assured (n=835)	Red tractor (n=232)	Welsh Organic (n=81)
Willing to undertake the action	71%	82%	83%	84%	85%
Of those willing to undertake the action that are already completing it	12%	57%	71%	75%	67%

### 6.3.1.3 Opportunity

The dairy sector (86%) and the suckler beef sector (83%) were more likely to indicate that they were willing to do this action than the beef (77%) and sheep (77%) sectors. The dairy sector was also the most likely to be completing this action already on farm with 99 out of 119 farmers (83%) who were willing to undertake the action already completing it on the farm.

The majority of workshop participants felt that they had a close relationship with their vet. However, one interviewee felt that there can be different quality of vets and not everyone has a good working relationship with their vet. The quality of the relationship between the farmer and the vet could be a key barrier or enabler to the farmer having the opportunity to complete this action successfully.

### 6.3.1.4 Motivation

The animal health plan action was viewed as a strength of the scheme by both workshops. Participants felt that this action was useful to bring consistency and ensure high quality standards across the industry. 55% of survey respondents willing to undertake the action thought it was good farming practice and 38% thought that it would improve farming outputs. There was a comment from one participant in the workshop that they viewed this action as 'the most acceptable UA within the scheme' and another participant who had been completing this action under a farm assurance scheme shared that their experience of doing antibiotics assessment has reduced the use of antibiotics on their farm. This had been a beneficial outcome for them.

Most workshop participants felt that vets were best placed to give this type of advice on farm, although some workshop participants and an interviewee did raise some concerns. One workshop participant felt that some vets may prescribe medication for animals when the cause of a problem may instead relate to correcting a management issue. An interviewee felt that the farmer was best placed to monitor their own animal health and that a vet was not needed unless there was a problem on farm.

Of those who were not willing to complete this action (n=239) administrative burden (48%), effort required outweighing the benefits (42%) and the time required (37%) were the most frequently indicated barriers. In addition to those frequently mentioned barriers, there were a high amount of 'other responses' (n=96). 50 other



responses indicated a disagreement with the purpose of the action, believing the action would not add value to the farm. Most of the comments indicated that the respondents felt like they were already looking after their animals well and had a low antibiotic use. There was a general feeling that since respondents believed that they were already managing their animals well, it was a waste of time and money spent on vet fees:

*“On most farms this only benefits the vets bank balance and places additional vets fees on the farm. In my experience this is a complete waste of time and money, although the vets love it as they get paid for wasting farmers time.”*

*“Waste of time for farms that are already looking after their livestock well. It's insulting to farmers that a vets report on a farm where the animal are well cared for would improve animal health. This will not improve animal health on the majority of farms.”*

A small number of respondents who indicated they were willing to undertake the action, also left similar comments:

*“I selected yes however fundamentally disagree that there should be between 2-5 actions required. I sell breeding stock of a high standard and feel that I would be above average. If the vet is searching for action points, that is to the farmer's detriment. You must have faith in veterinary practice to say that on some farms, fundamentally, no routine actions are required.”*

This reflects the reliance of this action on well-trained veterinary professionals who promote beneficial farming practices in a tailored manner whilst recognising when a farm is looking after their animals to a high standard.

#### **6.3.1.5 Improvements and Support**

Capacity issues and potential remoteness of certain farms was raised as a concern, specifically the lack of post-mortem availability in areas was discussed. Concerns about capacity of vets was also raised by a small number of survey respondents and more resource capacity of vets would be required to support this action:

*“Again, this will be dependent on the availability of resources and vet practices available to undertake this as a UA.”*

*“My vets have stated they are understaffed and up to their eyes already with TB testing. They do not have the capacity to act as subcontracted personnel for the Welsh Government to carry out these proposed farm surveys. They are already at breaking point.”*

*“I would need the vet to be onside and available to discuss the actions necessary and any health concerns and be available to review various issues etc. Current issues are that our vet is so busy that it is very difficult to get hold of the same farm vet who knows and understands your farm to be able to make forward progress in this area.”*

Farmers wanted there to be more science and research on animal health so that management measures could be improved. Areas where farmers wanted advice and support to improve animal health was on anti-microbial resistance and EBVs (estimated breeding value).

## 6.4 Restore semi-natural peatland

### 6.4.1 UA: Maintain semi-natural peatland

**UA:** Where peatland exists, farmers will need to manage it appropriately.

#### 6.4.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Message
<ul style="list-style-type: none"> <li>• <b>78%</b> of survey respondents who have peatland were willing to undertake action.</li> <li>• <b>Top 3 enablers:</b></li> <li>• "I am willing to undertake this action to receive payments through the scheme" (72%)</li> <li>• "This would allow me to be more environmentally sustainable" (53%)</li> <li>• "I think the action is good farming practice" (40%)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>22%</b> of survey respondents who have peatland were unwilling to undertake the action</li> <li>• <b>Top 3 barriers were:</b></li> <li>• "The action would not benefit my farm" (43%)</li> <li>• "The effort required outweighs the benefits" (39%)</li> <li>• "My farm type and/or farming system does not lend itself well to this action" (33%)</li> </ul>	<ul style="list-style-type: none"> <li>• Participants were generally supportive of this action but would like further resource spent to identifying peatland areas and more support and guidance for management</li> </ul>

#### 6.4.1.2 Skills and experience

21% of survey respondents identified that they had peatland on their farm (n=298). 78% of farmers that had peatland indicated that they would be willing to undertake the action with 38% indicating that they already complete the action. However, other indicators of skills and experience showed low perceived levels of necessary skills and knowledge (28%). There were also low reported levels of current participation in peatland projects from our survey sample (9%).

#### 6.4.1.3 Opportunity

21% of total survey respondents indicated that they had peatland. Those that are upland/hill farmers (31%) are more likely to have peatland than lowland farmers (6%). Workshop participants pointed out that lots of peatland is found on common land, and in the survey 35% of those with rights to commons indicated that they had peatland compared to 17% who did not have peatland. Therefore, clarity is needed on how these actions are expected to be undertaken when farmers share peatland areas.

Some participants raised that some areas of peatland on their farms were not currently included as part of mapping<sup>19</sup> and therefore more consideration is needed on how these areas of peatland are captured in the scheme.

#### 6.4.1.4 Motivation

Most participants were generally happy to undertake this action and wanted to ensure that those who had already managed peatland would be rewarded in the scheme. 53% of survey respondents willing to undertake the action felt that it would allow them to be more environmentally sustainable.

There were some concerns raised from workshop participants about managing peatland for those that are mountain grazing, with some concerned how managing peatland could lead to a reduction in stocking rates.

#### 6.4.1.5 Improvements and Support

Of those who would be willing to undertake the action, 79% of respondents felt they would need support.

In the workshops, participants discussed that detail and clarity on the peatland management actions is needed, specifically on how this action works for common land, mountain grazing and how it interacts with the tree planting action.

To help support this action, participants agreed that more work needs to be done to understand and identify the state of peatland currently on farms. This is to ensure that farms with peatland present are not missed from this action and that appropriate management can be undertaken, and improvements monitored.

It was felt that for the peatland action, more coordination between Natural Resource Wales and Welsh Government would be needed:

*"Also will Natural Resource Wales be implementing these actions for the Government as it's them we have to ask permission to do a lot of this sort of work?... seems to be a disconnect between the Welsh Government, Natural Resource Wales and Glastir as one tells you to do one thing and another tells something different."*

Difficulties could arise if peatland management requires the use of heavy machinery as it can often be difficult to access peatland areas due to the geography of the land. To try and get machinery to access these areas could be expensive, so suggestions were raised for some capital support to address this issue, including ground support and floating tracks for machinery if required.

### 6.4.2 OA and CA to restore peatland

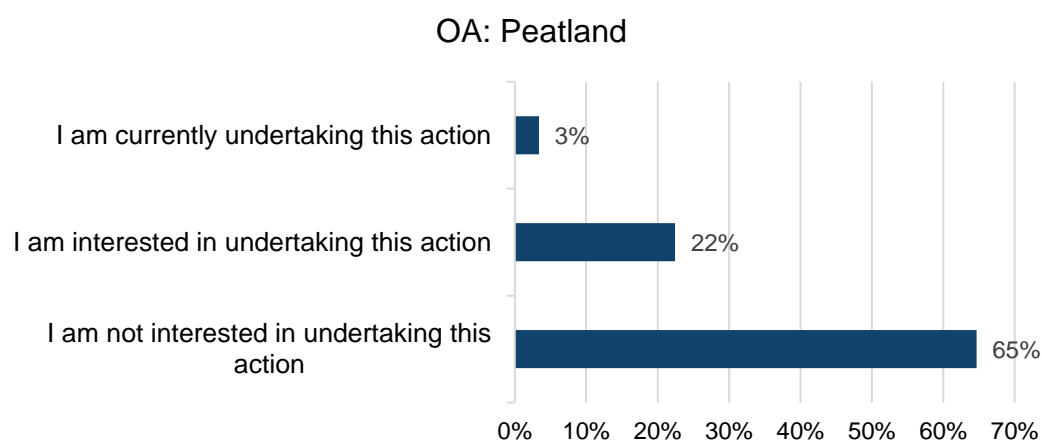
**OA:** Farms will have the opportunity to take up actions which restore and manage peatland

The OA that received the highest percentage of respondents not interested in completing the action was the support to take up actions which restore and manage peatland (65%). This is likely due to this action being dependent on the presence of peatland on farm. When viewing the responses of those that indicated they have

<sup>19</sup> Welsh Government Peatland Map [Peatlands of Wales Maps | DataMapWales \(gov.wales\)](#)

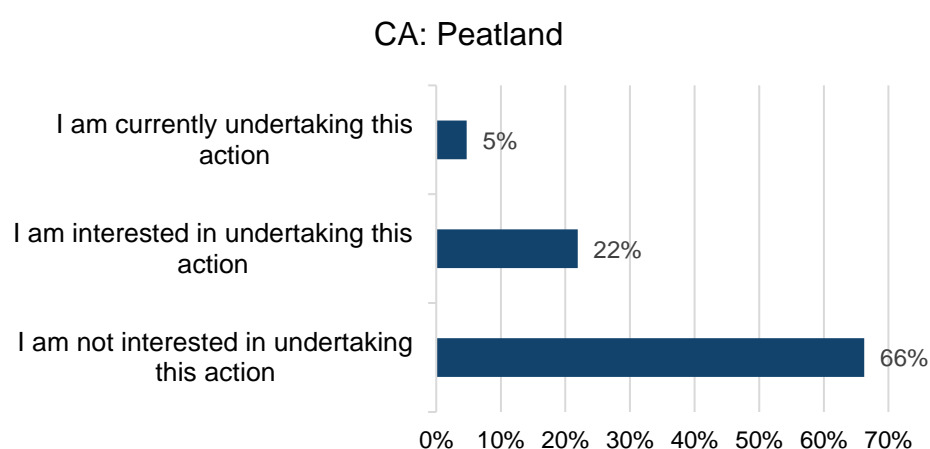
peatland on farm and had answered questions in the optional survey (n=170), 53% of respondents indicated they were interested in completing the actions, compared to 23% who were not interested.

Figure 6.1 Survey respondents' interest in the peatland restoration OA (n=708)



**CA:** Support for projects to restore and manage peatland shared by multiple farmers.

Figure 6.2 Survey respondents' interest in the peatland restoration CA (n=402)



Although survey respondents indicated a low interest in OAs (Figure 6.1) and CAs for peatland (Figure 6.2) this is likely because these actions are only applicable to those with peatland on farm. In the workshops, these actions were well received with participants who said if they were going to manage peatland under the UA they would likely consider these additional OAs. A participant with experience in collaborative management of peatland appreciated the flexibility to choose to manage peatland as an individual or collaboratively with others as part of the scheme.

One participant asked if farmers with enough peatland could opt to do the optional peatland action to manage and restore peatland for carbon benefits instead of having to complete the UA Tree cover action.

## 6.5 Create new and manage existing agro-forestry and woodland

### 6.5.1 UA: 10% tree cover and managing hedges

**UA:** Farmers will: have at least 10% tree cover on their farm. This should be managed in line with the UK Forestry Standard. Manage new and existing hedgerows in line with the hedgerow management cycle.

#### 6.5.1.1 Summary of key findings

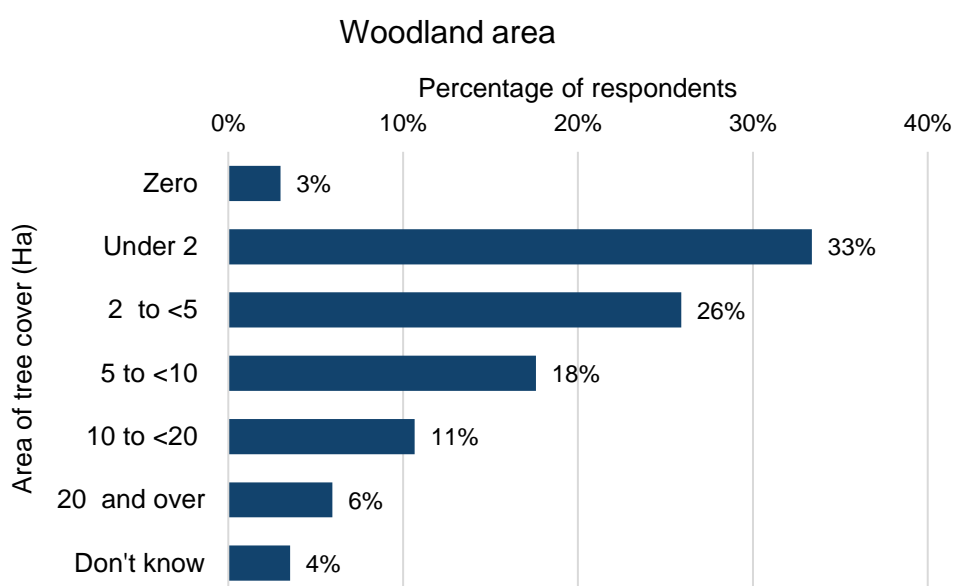
Enablers	Barriers	Key Workshop Message
<ul style="list-style-type: none"> <li>• <b>57%</b> of survey respondents were willing to undertake action.</li> <li>• <b>Top 3 enablers:</b> <ul style="list-style-type: none"> <li>• "I am willing to undertake this action to receive payments through the scheme" (73%)</li> <li>• "This would allow me to be more environmentally sustainable" (54%)</li> <li>• "I am already doing this action on the farm" (52%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>43%</b> of survey respondents were unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b> <ul style="list-style-type: none"> <li>• "It is not feasible to plant 10% tree cover on my farm type and/or farming system" (67%)</li> <li>• "The action would not benefit my farm" (57%)</li> <li>• "I don't think the action is good farming practice" (48%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Whilst workshop participants appreciated the benefits of trees, many raised particular circumstances that would make having 10% tree cover difficult or not feasible for them. Concerns were particularly made for dairy and tenant farmers.</li> </ul>

#### 6.5.1.2 Skills and experience

57% of total survey respondents were willing to undertake the action. Of those who were willing to undertake the action, 52% indicated that they were already completing the action (n=425).

Most respondents indicated that they had under 2 Ha of woodland on farm (Figure 6.3). Lowland farms were more likely to indicate that they had a low area of woodland compared to upland. 44% of lowland farms identified as having 0 to 2 Ha of woodland compared to 31% of upland farms. Similarly, those that had not previously been part of an AES were also more likely to report having 0 to 2 Ha of woodland (51%) compared with those that had been in an AES (28%). Larger farms were also more likely to have more woodland on their farm.

Figure 6.3 Total area of woodland on survey respondents' farm (n=1444)



In the survey responses 425 respondents indicated that they were already doing this action on farm. Similarly in the workshops some farmers already met the 10% requirement and were already managing their woodland. However, most do not use the UK Forestry Standard and were not fully aware of its requirements.

38% of those that indicated they were willing to undertake the action, felt they had the necessary skills and knowledge required to complete the action. Of those that were not willing to complete the action, skills and knowledge was not a major barrier with only 12% indicating that this would prevent them from undertaking the action.

### 6.5.1.3 Opportunity

Although there were some participants who met the 10% requirement, and others who felt they could plant some trees, most participants emphasised that 10% tree cover would not be possible on every farm and this action was a barrier to entering the scheme.

Specific farm and land types mentioned that could find this action difficult include the following:

- **Land type:** Difficulties with growing trees in certain types of geographies and topographies were mentioned during workshops. In particular coastal areas were mentioned in both the workshops and survey results as difficult areas to plant trees with 16 survey respondents leaving comments on this as a barrier to the scheme. Other land types mentioned included hill/mountains, flood plains and moorland.
- **Protected Sites:** Protected sites were mentioned in both the workshop, and as comments submitted in the survey. In the workshops, a list of potential exemptions to tree planting were supplied which included protected sites. Participants were relieved to see these and wished the list had been shared sooner. However, they felt that there were more situations that required exemptions than those listed.
- **Tenants and tenancy agreements:** Survey respondents whose farms were not wholly owned indicated that they were less likely to be able to complete the

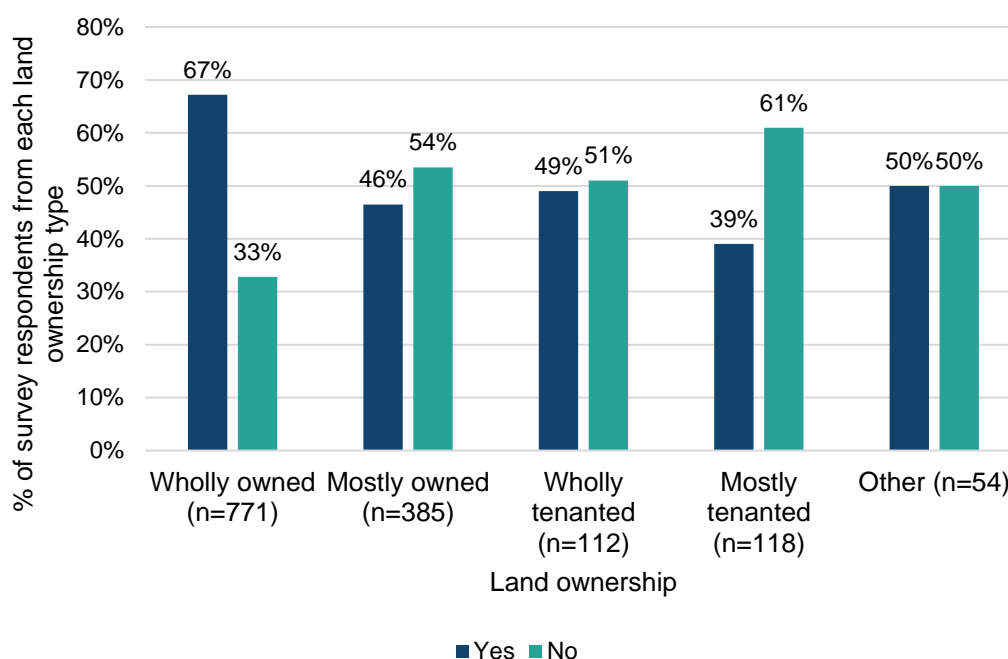
action. Responses from farms that were mostly tenanted had the lowest percentage of respondents (39%) willing to complete the action. (Figure 6.4)

A small number of survey respondents gave qualitative responses detailing that their tenancy agreements or mortgage agreements specifically state that they are not permitted to plant trees:

*“My agricultural tenancy does not permit the planting of trees.”*

*“Mortgage on farm states agricultural use only, no forestry. The farm borders NRW forest, we do not need any more trees in the area.”*

Figure 6.4 Willingness to complete the 10% tree cover UA by farm ownership type



For those unwilling to undertake the action, not having control over this type of management on the farm was the biggest barrier for wholly tenanted (65%) and mostly tenanted (61%) farmers. (Table 6.3).

Table 6.3 Top 3 barriers for those unwilling to undertake the Tree cover action, by land ownership

Wholly Owned (n=252)	Mostly Owned (n=206)	Mostly Tenanted (n=72)	Wholly Tenanted (n=57)
Not feasible to plant 10% on farm (65%)	Not feasible to plant 10% on farm (70%)	Not feasible to plant 10% on farm (76%)	I don't have control over this type of management (65%)
The action would not benefit my farm (62%)	The action would not benefit my farm (61%)	I don't have control over this type of management (61%)	Not feasible to plant 10% on farm (61%)
I don't think the action is good farming practice (50%)	I don't think the action is good farming practice (49%)	The action would not benefit my farm (49%)	The action would not benefit my farm (44%)



In addition, a total of 25 comments in the survey were left by farmers indicating that tenancy and their rental agreement would make planting trees difficult. These comments were left by both those who said they were willing (8) and unwilling (17) to complete the action.

*"As I'm a tenant farmer I would not be able to plant a woodland but hedgerows yes, as my landlord has told us we are not allowed to plant a woodland on their land."*

*"But I am tenanted and won't be able to, so what do I do then? Also 10% is too much especially for tenant farmers."*

*"We own 100 acres and rent about another 150 acres so we can't plant tree cover on rented land as there would be no point renting it."*

This was also raised frequently in the workshop, with participants unclear on who would undertake and who would receive payment for this action, landowners or tenants. In light of this action, if the landowner changes which land the tenant can rent this could change who is benefitting from the trees revenue and who needs to plant more trees, and it could take out productive land for the tenant.

*"Who receives money from the Welsh Government? If that's taken out of tenancy, do I need to provide another 10%? We prob have 3-4% not including hedgerows, makes it hard to get onto scheme."*

Figure 6.5 shows that older farmers were more willing to conduct this UA than younger farmers. This trend with age is potentially linked to trends in farm ownership. It can be seen in Figure 6.6 below that older farmers responding to the survey were more likely to own their land. It was shown in Figure 6.4 above that respondents with wholly owned land were most willing to undertake the Tree cover action.

Figure 6.5 Willingness to undertake the 10% tree cover UA by survey respondent age

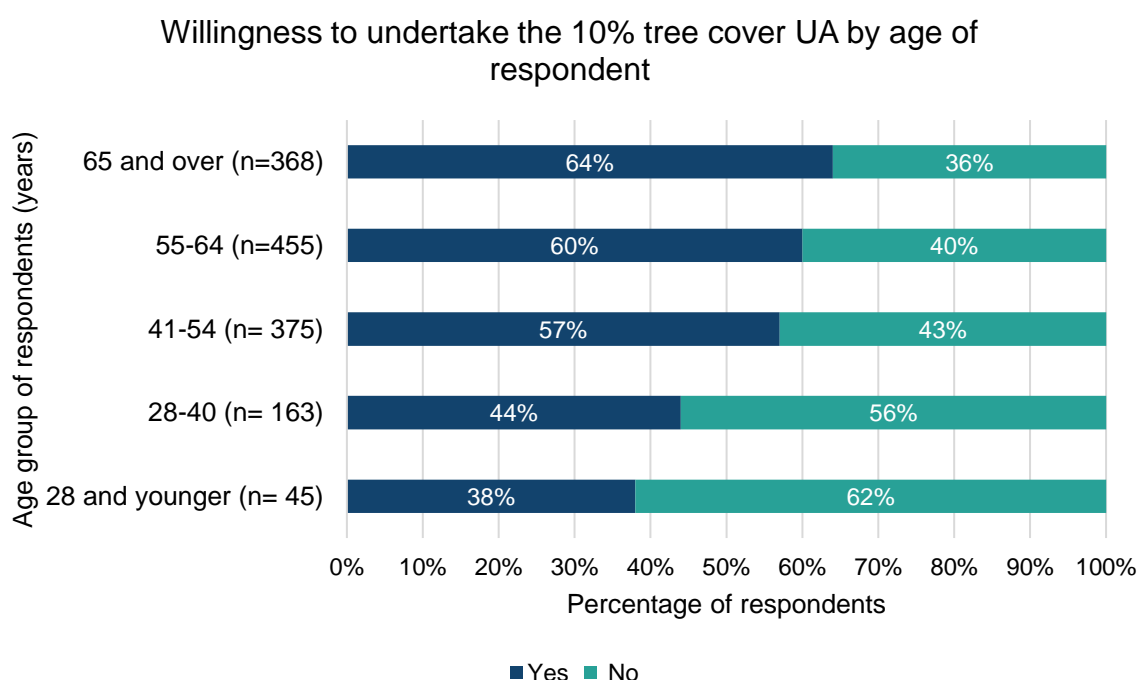
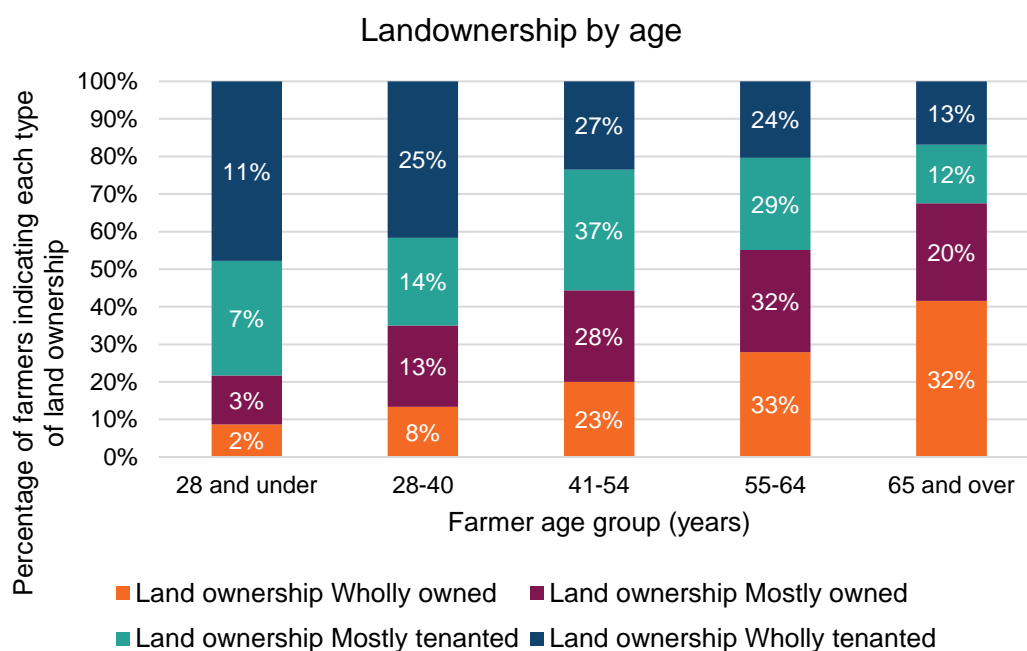


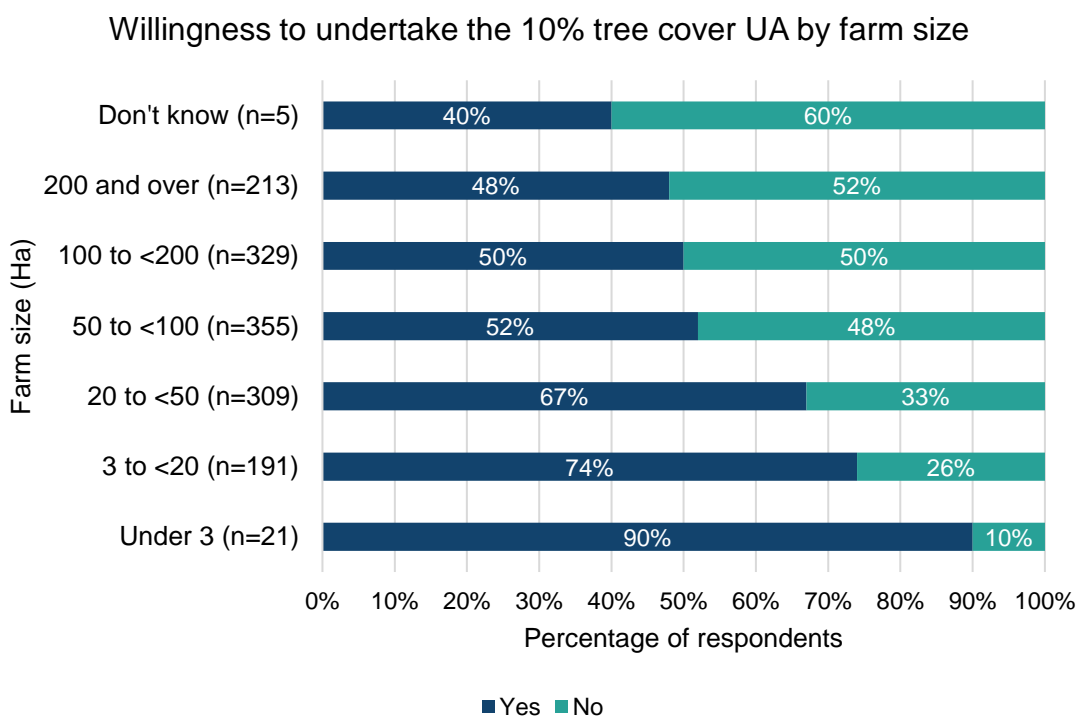


Figure 6.6 Percentage of farmers indicating each type of ownership by age



- Farm size:** Survey results showed that smaller farms were more likely than larger farms to be willing to undertake this UA (Figure 6.7). This may be due to smaller farms often having an alternative main source of income and therefore being less concerned about losing productive land to tree planting.

Figure 6.7 Willingness to undertake the 10% tree cover UA by farm size (Ha)



- **Dairy Farmers:** Dairy farmers were raised frequently in the workshop as a sector that would struggle to complete this action. A dairy farmer participating in a workshop felt that the action would be a barrier to them entering the scheme despite being enthusiastic about other areas of the scheme. Similar sentiment was shared by other dairy farmers, or farmers who knew of dairy farmers:

*"Milk prices are driving businesses hard – will not give 10% land to trees."*

*"The more productive dairy farmers will look at the scheme and walk away."*

This finding is supported through the survey, with dairy farmers being the sector with the lowest percentage of respondents who would be willing to undertake the action at 36%. The top 3 barriers for dairy farmers who are unwilling to undertake the action include:

- It is not feasible to plant 10% tree cover on farm type/farming system – 75%
- The action would not benefit the farm – 61%
- I don't think the action is good farming practice – 49%

- **Additional capacity concerns:** In addition to the conditions on the farm, the resource capacity in the industry to cope with a significant number of farms trying to complete the action was also raised into question. Specifically, the availability of contractors to support tree planting and management, as well as capacity of nurseries to have sufficient tree saplings. The timeframe around applying for support with this action was of interest, to avoid lots of farmers across Wales rushing to get applications in at once. Furthermore, participants pointed out that there would be a time lag between going through the grant system and actually planting trees in the ground.

#### 6.5.1.4 Motivation

##### ***Recognising the benefits of trees***

Most participants in the workshops that discussed the tree planting action had an appreciation of the benefits of trees and tree planting. Benefits that were discussed included:

- Shelter belts
- Animal shelter
- Biosecurity (distance between neighbouring farms)
- Water quality protection and buffer strips
- Biodiversity
- Climate change e.g., protecting land from drought

One of the participants who was more experienced in forestry and had productive woodland on farm felt that more could be done to promote the productive benefits of woodland on the farm e.g. fence posts, fruit and nuts, wood for heating.

*"With 10% woodland: if farmers could be helped to see, getting woodland into management, how that can be another very positive productive aspect which is improving the biodiversity, improving the economic resilience and the climate change resilience. This could help remove the barriers and I'm not surprised that farmers have a problem with seeing how small bits of broadleaf woodland can be productive. But with my area of woodland because it's been managed, well, there's really a high value resource there, you know."*

54% of respondents who were willing to undertake the action felt it would allow them to be more environmentally sustainable and 48% felt the action was good farming

practice. 32% of willing survey respondents felt that tree planting can help improve farming outputs and several comments in the survey were made which showed an acknowledgement of the benefits of trees even by those who indicated that they were not willing to complete the action (willing n=6, not willing n=7):

*"We already have considerable natural and old woodland. Probably nearly 10% managed holistically so sheep have access for shelter when needed but do not overgraze so we have plants and birds."*

*"This can make business sense for the farm, if this allows productive timber to be produced to support construction industry and need for timber within Wales for other uses."*

Although the benefits of trees were appreciated, some questioned the carbon sequestration benefit of trees compared to well managed grassland and other types of land management. This was also a common theme in qualitative survey responses:

*"Grassland should be equal to forestry/carbon sequestration. Really valuable habitats."*

*"...which has not had a plough on it for 40/50 years. The carbon sequestration of that ground is as good/better than woodland that would be planted on it. Don't think there would be an environmental improvement for planting trees on that kind of land."*

*"Need more information and data regarding carbon sequestration growth of traditional grass land compared to the carbon sequestration from woodland."*

*"Grasslands are already sequestering carbon and science is showing they are more beneficial than trees in many cases for environmental sustainability, as long as they are managed right."*

During the workshops there were discussions on how participants would plant trees and what trees they would be interested in planting. Several participants were interested in agroforestry as well as planting orchards, however they wanted more clarity on how these planting systems would work under the action and whether they would be considered as part of the scheme. A few participants raised how this action could change the classification of the land and this could have knock on impacts for management. There were concerns about whether where the trees were planted would then be counted as woodland rather than grazing land. Participants understood the need for protection to establish trees but were concerned that the area where the woodland was planted would need to be fenced off. They wanted to ensure that the land could continue to be used for grazing / agroforestry.

### ***Recognising the value of existing land and right tree in right place sentiment***

In the workshops, participants wanted the value of existing land to be recognised whether that be habitat, grassland or productive land. Participants felt strongly that current management of land for both production and environmental benefit needed to be balanced with the need for planting more trees.

Some farmers felt that they could go beyond the 10% habitat maintenance requirement, and this should be prioritised as that is what they had available, rather than planting new trees. Participants in one workshop were particularly concerned about maintaining wax cap grassland which can often be difficult to identify due to the seasonality of the species. Many farmers felt that the 10% tree action was a

blanket one-size-fits-all approach that did not effectively consider the best use of land, specifically in relation to food production. There was a concern from many workshop participants that food security could be threatened by this action if good agricultural land is lost to tree planting.

*"Some land suits trees and some land suits food production – how is this taken into account with a single metric."*

*"The Welsh Government in the last 12 months should have seen a massive turnaround in world food stocks – food is getting scarce, but now we are discussing how to reduce food further. Need to look at this further down the road – droughts around the world, Ukraine war. Need to produce an enviro is sustainable and food is sustainable for the Welsh Government. Do others think the same? That food production is going to be thrown out."*

*"[a threat of the scheme is] painting everybody with the same brush and should be more specific for farms with different landscapes and farming systems and production methods."*

*"Do we need to put it on grade 1 and grade 2 land as well?"*

78 qualitative survey responses (66 from those unwilling to complete the action and 12 from those willing to complete the action) highlighted concern about the loss of good productive agricultural land.

Many of these comments were strong emotional reactions from farmers who felt that they would be unable to continue a viable business and that the tree action undermined their ability to be a productive farm. Concerns were also raised about food security as well as the viability of farming for future generations.

*"This request is disaster for a small family farm like mine. My farm has a mass of well managed hedges along with trees grown in these areas... If my farm had to lose 10% to planting trees it would render my business unviable... Personally I have planted more than 250 saplings myself over the past 4 years in hedges and small areas corners but nowhere near 10%... Please don't make this mandatory."*

*"The farm already has patches of trees and hedges but not up to 10ha. Planting more is not an option here and certainly not an option on grassroots farms. It needs to be accepted that grassland has as good if not better carbon storage qualities than trees."*

*"It would take good land out of production leaving me with insufficient acreage to keep my small farm viable. The idea is actually insulting. My farm is surrounded by trees which I don't happen to own. Planting more would have no benefit to the environment whatever and would ruin a farm which my late father broke his back improving over his lifetime. This is a red line!"*

There were also concerns that the tree planting action would economically devalue the land.

*"Where is economic return? And environment return in their situation? Also if we take out 10% of farm and put into this, where will I get my capital return? Where will bank get its security from as suddenly has land with no commercial value (despite having environmental value). "*

*"The value of the land set aside to plant trees would diminish from £10000 per acre to £3000 per acre and the value to rent grassland is at £130 per*

*acre annually, so it would be better for our farm to rent the land out to other farmers than plant with trees.”*

#### 6.5.1.5 Improvements and support

##### ***Clarification on how tree planting would work for different farms***

Further clarity and detail are needed to understand how this action would work practically on farms and what land farmers would be encouraged to plant on. An exemption list was shared with participants during the workshop and while participants were relieved to see some detail around this, further explanation and clarity is required, and participants wanted some additional exemptions to be considered. These include:

- SACs and SPAs
- Parkland
- Ancient Monument
- Grade 1 and Grade 2 land

Other types of farmers that were repeatedly discussed as likely to find completing this action difficult and where exemptions or alterations of the action would need to be considered included:

- Dairy farms
- Coastal farms
- Tenants

One participant understood that the purpose of the habitat baseline review was to help farmers identify the best areas of the land for tree planting. This participant felt that the habitat baseline review should help farmers prioritise the land so that good value productive areas wouldn't be included. Clearer guidance and description of how this habitat baseline review, along with an exemption list, could help prioritise land for tree planting could help to remove barriers to farmers completing this action, especially if it is recognised that good value agricultural land will be prioritised for food production. More detail around how the 10% figure is calculated is also required, with some survey respondents wanting clarity that land that was not appropriate for tree planting would be taken out of the 10% calculation.

Tenancy was a key barrier to completing this action, with farmers unclear on how they would conduct this action if their tenancy agreement wouldn't allow it as well as confusion with who would benefit from this action; the tenant or the landowner. A scenario that was discussed in the workshops and in an interview is a 'tree rental market'. It was discussed that tenants or other farmers who did not want to plant trees on their land could rent additional land that has trees on it to ensure that they are covered under the 10% UA. Those that mentioned this scenario felt that although it would be a work around to completing the action, it shouldn't be the intended outcome of the scheme.

*“The UA could stimulate a land swapping/ tree rental market as a tool to achieve compliance. This could be an unintended consequence.”*

*“Malicious compliance, there will be people scheming on how to get round things, e.g., renting trees to qualify.”*

***Flexibility in how to achieve the objective of the action***

Farmers wanted to see flexibility with this action, so that those that don't think they can fulfil the 10% are able to achieve the same objectives in other ways. An option that came up in many workshops was to have flexibility between the habitat action and the tree cover action. If a farmer already has lots of woodland on their farm, but not much habitat they should be able to create a higher percentage of woodland and a lower percentage of habitat. One participant suggested that if a farmer had more than 10% habitat, they should be exempt from planting trees. There were mixed opinions as to whether farmers would be willing to commit 20% of their land to the combination of these actions, even if there was flexibility between them. Some participants mentioned that they already had almost 20% of habitat on farm or 20% trees, others felt that asking for a 20% coverage overall was too much:

*“10% of the tree cover should also include habitats as well as it is near impossible for farmers to put 20% of their land out of production.”*

***Hedgerow management***

Participants discussed having a flexibility to carry out other options for delivering what they believe to be the same environmental outcomes of tree planting such as peatland management and including well managed hedges in the 10% figure. This was supported in the qualitative responses in the survey:

*“Due to farm type there isn't the non-designated sites to plant, and peatland is more relevant than trees in this locality.”*

In the workshops and the survey, the inclusion of hedges in the 10% tree cover option was suggested by many, including those that responded that they were willing to complete the action.

*“unless hedgerows and hedgerow trees are eligible this would be very difficult/impossible.”*

*“I would be willing to plant more hedges and make my existing hedges wider and with more trees. But don't want to lose that much land to woodland.”*

*“We cannot get to 10% tree cover as the farm is tenanted - hedgerows are crucial for us. We can work on the hedgerows but planting trees is not an option I'm afraid.”*

Participants generally wanted more clarification around what would be counted in the 10% action, asking whether trees in hedges or the hedges themselves would be included. In the workshop, facilitators explained to participants that the Welsh Governments' current thinking was that whilst hedges themselves would not be included in the 10% figure, trees in hedges would be included. This prompted questions such as “at what point does a hedge become a tree?” and “why couldn't hedges be included if they could also deliver the same environmental objectives?”:

*“Having a 12-foot-wide hedgerow is so good for wildlife. So it doesn't make any sense.”*

*“Hedgerows have a sequestration value which should be calculated as does grassland otherwise loss of productive land will make entry uneconomic and impact on sustainability of business and the rural economy.”*

One participant suggested that potentially some sort of weighting of hedges to trees could be a compromise that would enable hedges to be included in the action:



*“Hedges as a proportion of trees, e.g., 2Ha of hedges to 1Ha of trees so they can count.”*

Several survey respondents were keen to see more detail around hedgerow management aspect of this action:

*“In terms of hedgerows, I have not seen much about planting, laying and coppicing which we have done but should be included.”*

*“I would like to see support for not cutting the hedges at the first opportunity as the hedgerow fruit and berries are a natural bounty to sustain wildlife ready for winter.”*

### **Flexibility and guidance on how to integrate trees on farm**

In addition to flexibility in delivering the action by other means than tree planting, participants also wanted to ensure they had flexibility with how they would plant trees and integrate trees into their farming system. Participants and survey respondents discussed different options for planting trees on farms, these included:

- Agroforestry
- Orchards
- Planting marginal land

Farmers were interested in these options for delivering on tree planting but were not sure whether these approaches would be allowed due to messaging from previous schemes e.g., orchards not included in BPS and previous woodland creation grants not allowing grazing which would prevent agroforestry. Participants were keen to have clarification as well as guidance on how these types of options to tree planting could be delivered and included in the scheme. An individual who was more experienced in forestry felt that in general there should be better promotion and guidance on how woodland can be productive for farmers.

Participants also asked for clarification around what would be classed as ‘habitat land’, as well as what is classed as ‘trees’, and clarity around how this action would work alongside rules in other schemes which currently provide counter messaging.

Guidance and support are also needed for the UK Forestry Standard<sup>20</sup> which there was a lack of information in the scheme about and was not well understood by participants. The UK Forestry Standard is over 232 pages long and it was thought that it is unrealistic to expect farmers to have a good understanding of this guidance.

*“UK Forestry standard is a bit like cross compliance rules for agriculture and is quite expensive. It includes a whole bunch of legal requirements and then there is guidelines etc. Not many people know well to know if following or not frankly – funny one without help on it.”*

*“I do not know what 'Forestry Standard' means - you need to spell this out in more detail for farmers.”*

Participants in one workshop discussed needing support for managing invasive species, diseases and pests such as squirrels and deer. Survey respondents also wanted more actions to cover the management of invasive species and mentioned

---

<sup>20</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/687147/The\\_UK\\_Forestry\\_Standard.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/687147/The_UK_Forestry_Standard.pdf)

that this action must only encourage planting of native species in order to not increase invasive disease prevalence.

*“Control of invasive non-native species e.g. Japanese knotweed, himalayan balsam, rhododendron, cherry laurel, grey squirrels, muntjac deer.”*

*“need for support to deal with invasive species such as himalayan balsam, japanese knotweed.”*

Workshop participants and survey respondents were also seeking more clarity on how the actions proposed in the SFS would work alongside other green finance models such as the carbon market. Some farmers were concerned that by planting trees through the SFS they could lose the opportunity to enter the carbon market at a later date. This was shared particularly by those who would need to plant trees to meet the UA as they were weighing up their options for financial rewards.

#### 6.5.1.6 Types of support

In the survey 75% of farmers who were willing to undertake the action indicated that they would need support. From the interviews the following were the highest rated support options:

- Advice from consultants
- In-person training course
- Group discussion / seminar with peers

Concern was raised about the resource capacity of the industry to support the planting of trees on this scale. Participants suggested that there should be better collaboration between different industry sectors e.g., contractors and the Welsh Government to ensure there would be enough support available. Participants also wanted there to be support for local sourcing of materials to carry out this action and felt that currently it was difficult to find native species of trees/hedges locally.

Participants wanted clarifications on the grants that would be available for planting and specifically how these relate to existing grants on offer such as the ‘creation grant’. They wanted further detail on the timings of these types of support to ensure they would be able to use the funding to plant trees within the timescales of the scheme.

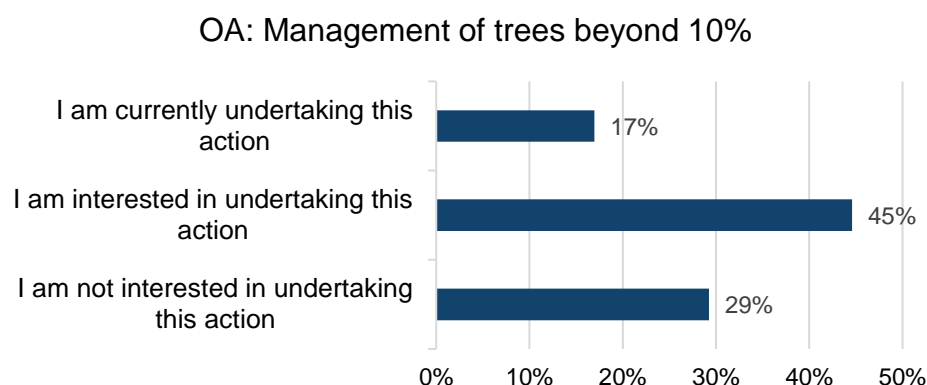
Of those that indicated they were unwilling to complete the action (667 respondents out of a total of 1443), 73% indicated that the appropriate support would not help them conduct the action.

### 6.5.2 OA: Management and planting trees beyond 10%

**OA:** Manage existing trees and woodland, including ancient woodland, in line with the UK Forestry Standard (beyond the 10% Universal Action).

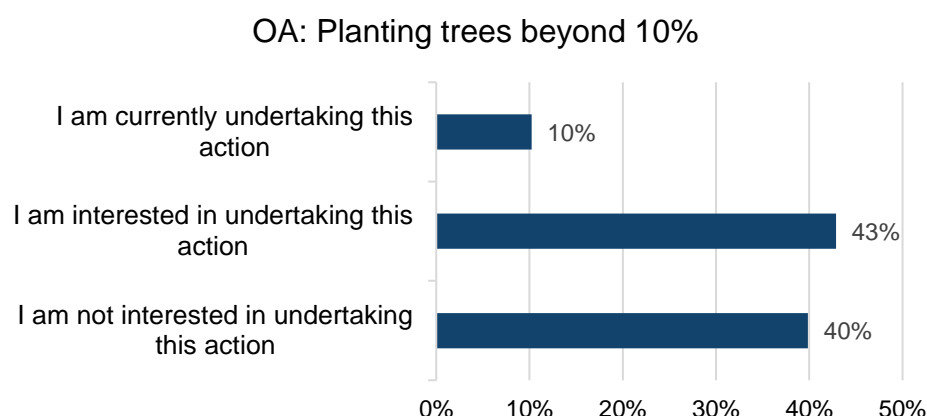


Figure 6.8 Survey respondents' interest in management of trees beyond 10% OA (n=713)



**OA:** Farmers wishing to plant more trees than the minimum 10% coverage can receive further support to plant more individual trees, hedges, groups of trees, shelter belts and riparian strips.

Figure 6.9 Survey respondents' interest in planting of trees beyond 10% OA (n=714)

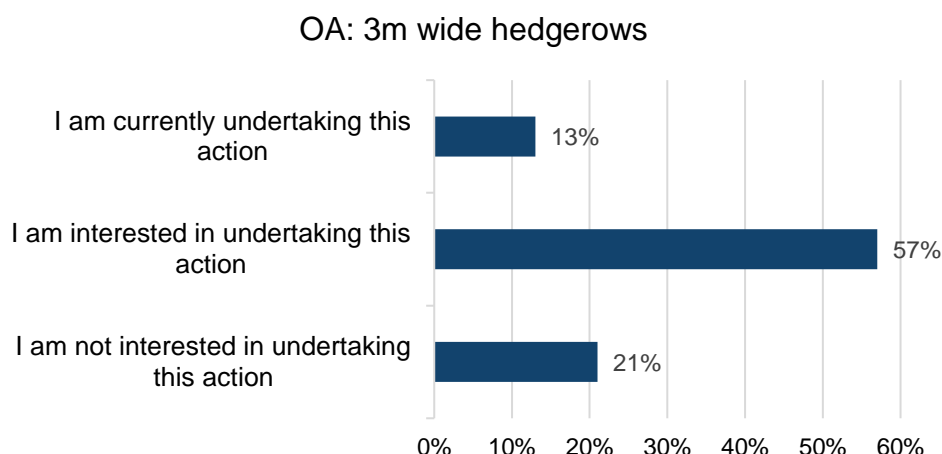


Workshop participants saw the value in bringing more woodland into management however there was some concerns about the potential conflicts between tenant and landowner about the OA to increase beyond the 10% tree cover. 38% of survey participants indicated they would need support for management of trees and 32% indicated they would need support in planting. Workshop participants discussed that investment of time, equipment and expertise were needed to support these OAs.

### 6.5.3 OA: 3m wide hedgerows

**OA:** The Welsh Government will support farmers to increase the width of hedgerows on boundaries between farms to 3 metres (unless they're separated by woodlands, roads, walls etc).

Figure 6.10 Survey respondents' interest in the 3m wide hedgerows OA (n=723)



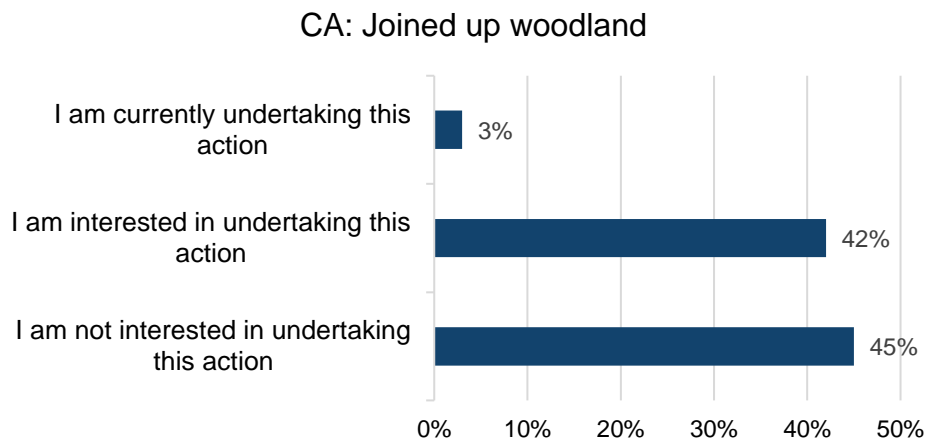
A high percentage of respondents were interested in the OA to increase the hedgerow boundaries to 3m (Figure 6.10). In the workshops and in the qualitative survey responses, farmers showed a keen interest in recognising the value of hedges and managing hedges as part of the scheme. In one workshop participants discussed the benefits of hedgerows including for biodiversity and for animal disease control, however in another workshop although biosecurity was assumed as the purpose for the '3m' distance participants wanted further explanation.

One participant felt that the distance should be reduced to 2m rather than 3m to increase uptake which matches similar comments made in other workshops in regards to hedges and fencing grant requirements. 41% of survey respondents indicated they would need support with this action.

### 6.5.4 CA: Joined up woodland

**CA:** Support for projects to manage and create joined up woodlands at a scale larger than the individual farm to benefit the farm, environment, and wider society.

Figure 6.11 Survey respondents' interest in the woodland CA (n=406)



Beyond the barriers to tree planting as part of the UA, workshop participants had a positive response to this CA and felt it could be achieved on a small scale although they recognised collaboration would require time and effort. Some participants wanted clarification whether this action was specifically in place for commons farming. 35% of survey respondents indicated they would need support for this action, and in the workshop grants for planting was discussed as a support measure that would be required.

## 7 Protect and enhance the farm ecosystem

### 7.1 Introduction

The objective of “Protect and enhance the farm ecosystem” is for the Welsh Government to support farms to work well with their ecosystems, using nature-based solutions for healthy living soils and enrich farm and nature diversity.

This section of the report provides an analysis of farmers skills and experience, opportunity, and motivation for undertaking Universal Actions (UA) included in ‘Protect on farm ecosystem’ Characteristic. It also provides a summary of key findings across the Optional Actions (OA) and Collaborative Actions (CA). This section also reports on farmers suggestions for changes or improvements that could be made to actions in the scheme.

The section is organised by the following sub-characteristics of the SFS which contains the following actions:

**Table 7.1** Actions within Protect and enhance the farm ecosystem

Sub-characteristics	Actions	Pages
Protect soils from erosion and degradation	UA: Multispecies cover crop OA: Minimum tillage	82
Rich on-farm diversity: Preserving native breeds	OA: Native breeds CA: Native breeds	85
Manage habitats and species: Habitat maintenance and creation	UA: 10% habitat OA: Above 10% habitat CA: Interconnected habitats	86
Manage habitats and species: Designated sites	UA: Protected sites CA: Protected sites	92
Water is protected from pollution	OA: Bespoke approach to water pollution OA: 6m buffer strip CA: Water quality catchments	94
Conserve and retain water	UA: Ponds OA: Ponds OA: Water harvesting CA: Reduce flooding	97

## 7.2 Protect soils from erosion and degradation

### 7.2.1 UA: Multi-species cover crop

**UA:** To protect soil from erosion, farmers will need to establish a multi-species cover crop on all land which is uncropped over winter.

#### 7.2.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Messages
<ul style="list-style-type: none"> <li>• <b>82%</b> of survey respondents who have bare soil on farm over winter are willing to undertake the action.</li> <li>• <b>Top 3 enablers:</b> <ul style="list-style-type: none"> <li>• "I am willing to undertake this action to receive payments through the scheme" (62%)</li> <li>• "I am already doing this action on the farm" (60%)</li> <li>• "I think the action is good farming practice" (50%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>18%</b> of survey respondents who have bare soil on farm over winter are unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b> <ul style="list-style-type: none"> <li>• "The action would not benefit my farm" (37%)</li> <li>• "My farm type and/or farming system does not lend itself well to this action" (36%)</li> <li>• "The effort required outweighs the benefits" (36%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Participants were supportive of this action in concept however some raised scenarios where this action would not be beneficial (e.g. if they had a late harvest) or felt they were delivering the objectives of this action through a different method (overwinter stubble or organic farmers leaving weeds).</li> </ul>

#### 7.2.1.2 Skills and experience

In the survey of those that indicated that they were cropping or growing cereals on their farm 82% were willing to undertake the action. Of those, 60% indicated that they were already doing this on the farm which was the top enabler outside of receiving payments. 37% indicated that they had the necessary skills and knowledge to complete the action.

Several participants in the workshop had experience in establishing a multi-species cover crop with mixed success.

#### 7.2.1.3 Opportunity

This action is specifically relevant for farmers who have arable land and for lowland farmers of which 39% indicated they had crops or cereals, compared to only 18% of upland/hill farmers.

Despite it being more relevant to arable farms, 40% indicated they would not be willing to do the action. Those who selected beef and mixed farm as their main farm type demonstrated the most willingness across all farm types to undertake this action, with 87% of respondents for both sectors indicating willingness.

There was agreement in the workshop that cover crops work better in certain circumstances than others with participants mentioning that it is more appropriate for maize than wheat. There were other circumstances that were discussed that would mean the action would not apply to certain farms, especially with the prescriptive nature of the action. It was mentioned if there was a late harvest there may not be enough time to establish a cover crop, and that farmers could do more damage by disturbing the soil. Another participant felt that they didn't need a multi species cover crop as their arable land had a lot of native weeds that come up every year and they do not spray chemicals to remove the crop. Another participant described how they currently leave winter stubble and weeds on the land instead. Similar comments were left in the survey, with 9 out of 25 responses from those that were unwilling to complete the action indicating they were already completing the action but felt that the action should not be restricted by a prescription in the scheme due to weather:

*"We always try to, but it can be hugely weather dependent."*

*"We use cover crops every year, but it is so weather dependent and farm dependent."*

*"Soil conditions don't always allow this as good practise, and in a situation where a farmer judges it to be inadvisable who in Rural Payment Wales has the skills to adjudicate?"*

#### 7.2.1.4 Motivation

Most people in the workshops were supportive of the idea in principle and felt that actions to address soil erosion were a strength of the scheme. Participants liked the choices of multi-species groups provided and the flexibility to choose between them:

- N fixing plants
- Plants for forage
- Plants which improve soil structure through rooting action
- Plants for pollinators
- Plants for birds

50% of farmers who were willing to undertake the action felt it was good farming practice which was the 3<sup>rd</sup> highest enabler.

However, as mentioned above participants discussed specific circumstances where this action may not always be the most practical. There was also confusion as to whether over winter stubble would continue to be supported in the scheme as it has been in Glastir. Workshop participants as well as some survey respondents were keen to see this type of action continue as part of the scheme.

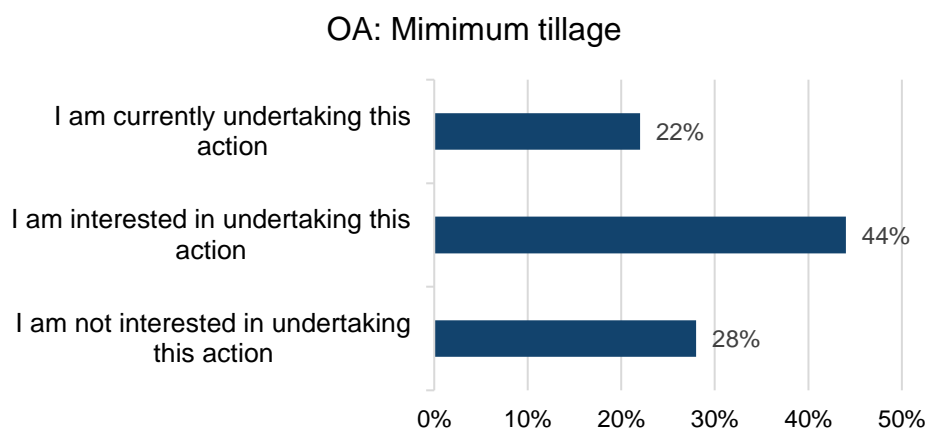
#### 7.2.1.5 Improvements and support

Participants were keen to ensure that there was flexibility within this action so that farmers could manage their land to achieve the same objectives but in a way that suited their farms. Participants suggested that the action should be more flexible but perhaps in certain circumstances applying a more prescriptive approach e.g. for maize growing. Participants would like advice from Farming Connect about the ways they could approach this action if flexibility was allowed.

## 7.2.2 OA: Minimum tillage

**OA:** Farmers will have the option to choose actions which focus on establishing crops by using minimum tillage or no tillage cultivation methods.

Figure 7.1 Survey respondents' interest in the minimum tillage OA (n=724)



Several workshop participants had positive experiences with no till / minimum till. Some were starting to trial this on their land and have had mixed success but were aware that this technique takes times to establish.

There was a discussion in the workshop between farmers about the pros and cons of having a low/min till farm system but having glyphosate vs ploughing. There was a discussion around the use of glyphosate with recognition that it may not be beneficial to the environment, but there is little alternative in some circumstances to prevent weeds and several farmers who were currently direct drilling felt glyphosate was necessary for the process to work.

*"I've racked my brain about this about what's better – with ploughing, you're releasing carbon and potentially killing earthworms, disrupting soil structure. If you're doing no/minimum till – if you're having to spray off with glyphosate, I can't do this as an organic farmer – I wouldn't have it near my farm anyway."*

There were discussions about how successfully delivering this OA would be depend on the land as it may not work in some areas such as stony soil areas. The equipment to conduct this action may also be a barrier for some, especially if they were a small farm or a difficult to access farm and would struggle to get contractors to do the work.

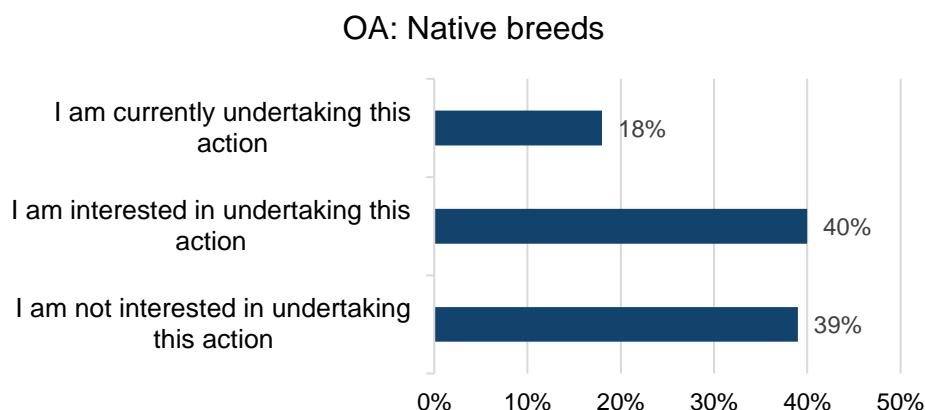
A horticulture participant wanted more OAs that were related to their sector and discussed ideas such as no dig approaches, mulching and use of biochar.

## 7.3 Rich on-farm diversity: Preserving native breeds

### 7.3.1 OA and CA: Native breeds

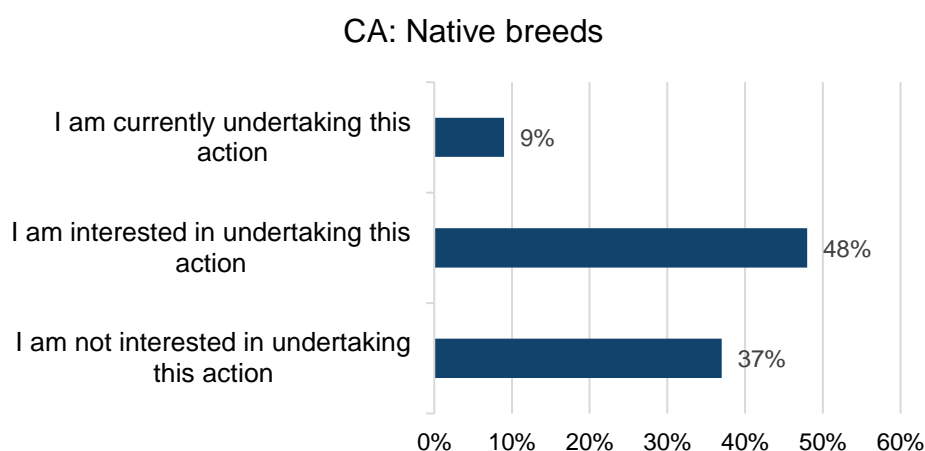
**OA:** Farmers will have the option of taking up a UK native breeds risk option as a supplement to other Optional Actions. These must be registered pedigree animals from a native breed, as defined on the UK approved list of native breeds at risk.

Figure 7.2 Survey respondents' interest in the native breeds OA (n=716)



**CA:** Collaborative support will be available for farmers to consistently produce from native breeds, including selling more directly to customers and for working together to promote genetic health. There will also be collaborative support available for farmers to come together and use native breeds to develop and maintain natural habitats and increase biodiversity.

Figure 7.3 Survey respondents' interest in the native breeds CA (n=408)



Workshop participants recognised the benefits of native breeds with participants mentioning the resilience to climate and the benefits for wildlife.



*"...they thrive in our climate and will be resilient to how the climate is predicted to change..."*

In one workshop participants discussed additional native breeds that could be added to the native breeds at risk list such as 'Welsh blacks' and 'Welsh mountains'. They also raised how the native breeds action could link up with other actions in the scheme. An example was given of the benefit of native breeds looking after habitat e.g., grazing peatlands, woodland, to manage 10% habitat.

There were concerns however with how native breeds would potentially impact productivity and economic performance of the farm and impact their KPIs, although another participant disagreed and felt their KPIs improved after moving to native breeds. More clarity on how this action may impact KPIs is needed.

## 7.4 Manage habitats and species: Habitat maintenance and creation

### 7.4.1 UA: Manage 10% habitat

**UA:** Farmers will need to actively manage at least 10% of their land to maintain and enhance semi-natural habitats. Where there is insufficient semi-natural habitat available, farmers will need to select actions to create permanent or temporary habitat features on other agricultural land.

#### 7.4.1.1 Summary of key findings

Enablers	Barriers	Workshop Messages
<ul style="list-style-type: none"> <li>• <b>65%</b> of survey respondents were willing to undertake the action.</li> <li>• <b>Top 3 enablers:</b></li> <li>• "I am willing to undertake this action to receive payments through the scheme" (73%)</li> <li>• "I am already doing this action on the farm" (52%)</li> <li>• "This would allow me to be more environmentally sustainable" (50%)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>35%</b> of survey respondents were unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b></li> <li>• "The action would not benefit my farm" (55%)</li> <li>• "My farm type and/or farming system does not lend itself well to this action" (53%)</li> <li>• "The effort required outweighs the benefits" (42%)</li> </ul>	<ul style="list-style-type: none"> <li>• Many workshop participants were delivering 10% habitat protection but were concerned about the implications for the farm business of having a combined 20% of land out of production. Some participants would like to see habitat and tree cover actions be interchangeable so that they could deliver more for one than the other depending on what was available on their farm.</li> </ul>

### 7.4.1.2 Skills and experience

65% of total survey respondents indicated they were willing to manage 10% habitat. Of the 936 respondents who indicated that they were willing to complete this action, 52% felt that they already have 10% habitat cover on the farm. The majority of participants in one workshop felt that these actions were feasible on their farm, and they already had 10% habitat cover but they did raise concerns about other farms being able to complete the action.

Those who had previous experience in AES were more likely to be willing to complete the action, and also were more likely to indicate that they were already completing the action (Table 7.2). Similarly, organic farmers were more likely to be willing, already undertaking the action and have the necessary skills than non-organic farmers (Table 7.3).

Table 7.2 Willingness to complete the action by AES experience

AES Experience	Percentage of survey respondents willing to undertake the action	Of those who are willing percentage indicating that they are already completing the action	Of those who are willing percentage indicating that they have the skills and knowledge to complete the action
AES Experience (n=917)	68%	58%	39%
No AES Experience (446)	60%	41%	28%

Table 7.3 Willingness to complete the action by organic status (Please note the small sample size for organic farmers which may impact on the strength of these findings)

Organic status	Percentage of survey respondents willing to undertake the action	Of those who are willing percentage indicating that they are already completing the action	Of those who are willing percentage indicating that they have the skills and knowledge to complete the action
Certified Organic (n=145)	72%	64%	40%
Not Organic (n=1288)	65%	50%	34%

### 7.4.1.3 Opportunity

The data suggests that the majority of farm types would have the opportunity to complete the action as there were high levels of willingness indicated (Horticulture 94%, Pigs 80%, Poultry 75%, Sheep 70%, Mixed farms 66%, Suckler Beef 65%, Beef 57% and Other 88%). However, Arable and Dairy indicated low levels of willingness to complete this action (44% and 45% respectively). Arable workshop participants were concerned about taking land out of arable production. Some raised concerns about having to provide 10% of their land for habitats and 10% for trees and the potential impact of this on the farm business viability.

Concerns were also raised in the workshops about dairy farmers being able to complete this action. Workshop participants felt this would be an easy action to complete on mountain and upland compared to lowland.

*“Easy enough to do this on mountain land etc, but on lowland it would be very hard to get 10% on prime agricultural land which is down to productive grassland or crops.”*

These concerns were supported by the survey with 55% of dairy farmers indicating that they would not be willing to complete the action with the top barriers being that the action would not benefit the farming system (68%) and my farm type/system does not lend itself well to the action (64%). In addition, 40% of lowland farmers were unwilling to complete the action, compared to 31% of upland farmers.

Finally differing land ownership types appeared to present barriers to opportunity for tenant farmers (Table 7.4). 72% of those who wholly owned their land were willing to undertake the habitat action, compared to 56% who mostly owned their farm, 50% who were mostly tenanted and 64% who were wholly tenanted. For those who were mostly tenanted and wholly tenanted, lack of control over this type of management is a top barrier.

**Table 7.4 Top 3 barriers for those unwilling to undertake the Habitat action, by land ownership**

Wholly Owned (n=216)	Mostly Owned (n=168)	Mostly Tenanted (n=59)	Wholly Tenanted (n=39)
The action would not benefit my farm (56%)	The action would not benefit my farm (60%)	My farm type and/or farming system does not lend itself well to this action (53%)	My farm type and/or farming system does not lend itself well to this action (51%)
My farm type and/or farming system does not lend itself well to this action (50%)	My farm type and/or farming system does not lend itself well to this action (55%)	The action would not benefit my farm (51%)	I don't have control over this type of management (49%)
Effort outweighs the benefits (46%)	Effort outweighs the benefits (46%)	I don't have control over this type of management (49%)	The action would not benefit my farm (38%)

#### 7.4.1.4 Motivation

50% of respondents who were willing to complete the action, indicated environmental sustainability as a key factor that would enable them to undertake the action. This was the third highest enabler outside of payments and already completing the action. The benefits of habitats for pollination were discussed in one workshop and workshop participants as well as several interviewees felt that including and promoting the active management of habitats was a strength of the scheme.

Although most participants in one workshop were already reaching the 10% habitat requirement, there were concerns about how the 10% habitat action, combined with the 10% tree action would impact their productivity and business. These participants were concerned that they wouldn't be adequately compensated through the scheme to cover the losses.

*“I'm prepared to do what it takes to get into the scheme. I suppose it will mean a reduction in should we call it agriculturally productive land or*

*grazing land to meet the 10% of semi natural and 10% tree cover as well. It depends what happens with the hedgerows, really that the detail in that and the bottom line is the economics of it. So will I be adequately compensated for a movement out of grazing and into Semi natural or tree cover?"*

*"Losing 20% land farmers will have to be more intensive to reach same production levels."*

Comments were also submitted in the survey with similar sentiments. Table 7.5 shows some examples of themes that comments related to in the survey and compares the numbers of comments left by those who were willing and unwilling to undertake the actions. The table shows that despite their willingness some respondents still had concerns about the actions and their potential wider implications.

**Table 7.5** Number of survey respondents leaving comments relating to food production and land use

Codes	Willing (n=78)	Unwilling (n=107)	Illustrative quote
Loss of productive/ good agricultural land	5	20	"We are doing this where we can (Excluding the woodland) but to stretch it over 10% of the farm would have a fairly damming effect of profitability"
Food security	*	14	"ignoring importance of food security"
10% of land is too much	10	18	"can't reach 10% 5-8% might be possible"

\*Suppressed for disclosure control – sample size less than 3

In one workshop there were differing opinions on the 10% figure, with some thinking it was too much and others thinking that the variety of different habitats in Wales meant that it was an achievable action. 17 comments were left by survey respondent that said they would not be willing to conduct the action, indicating that they were already managing habitats in line with the aims of the action although they were not meeting the 10% requirement.

Some participants in a workshop questioned taking land out of production which could cause an increase of food imported from elsewhere, displacing land use change to other countries which may also have vital habitat to protect. In another workshop some participants felt that the 10% action took a land sparing approach to farming, rather than a land sharing/ whole farm approach which was suggested to be previously preferred. This indicates that further clarity of wording is needed, especially when considering the 10% habitat action and the 10% trees action together.

Clarifications were needed around what would be included as part of the habitat action. In a similar way to the tree action, participants wanted to know whether hedgerows would be included. Another participant wanted clarification that if you had trees with habitat underneath that was not grazed, would this count towards both actions:

*"10% would cross over on each other? Two systems (trees on top and habitat on bottom) and where these overlap, does this count?"*

### 7.4.1.5 Improvements and support

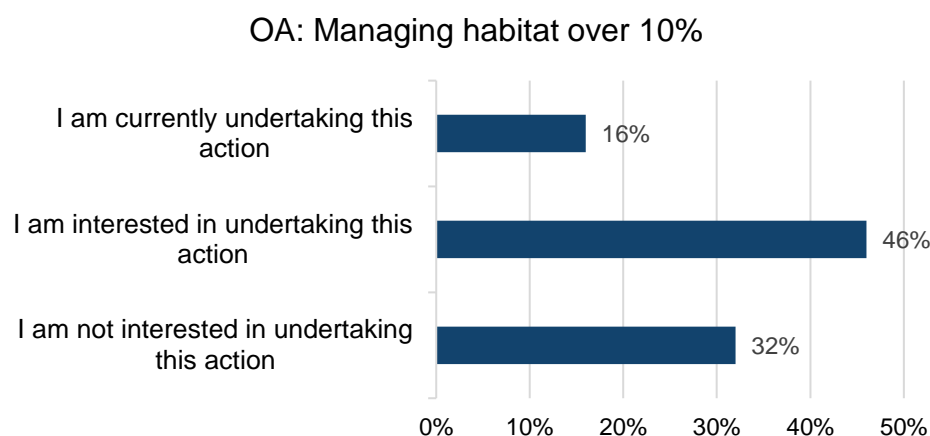
In one workshop participants raised different ideas for how the action could be more flexible for different systems including temporary habitat areas (cover crops/mixed swards), looking at it from a field-by-field basis rather than being prescriptive to the whole farm, and thinking about how the mixes of hedges and trees could contribute and balance these actions out. More clarification is needed for participants on what can be included as part of the action and how it relates to hedges, tree actions and grazing. Again, there was a suggestion that this action could create a rental market where people could rent land to make up for the tree and habitat actions. Some participants felt that this would be a risk to the objectives of the scheme especially if the rented land is unmanaged.

77% of those that were willing to complete this action (n=904) indicated that they would need support. In particular those that had not been in previous AES indicated that they needed more support (84%) than those who had (73%). In person training courses and advice from consultants were the most popular types of support requested from interviews for this action.

### 7.4.2 OA: Manage habitat above 10%

**OA:** Managing or enhancing habitats above the 10% minimum including more bespoke site-specific actions.

Figure 7.4 Survey respondents' interest in the optional habitat action (n=714)

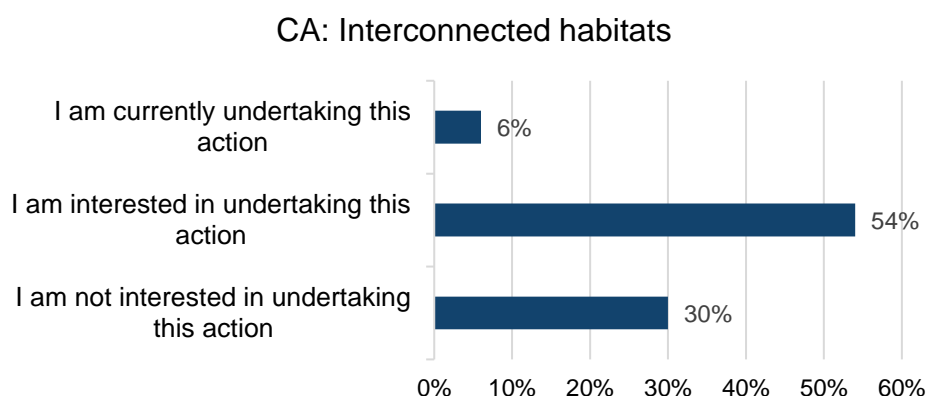


Workshop participants thought this was an important action to encourage as part of the scheme. One participant discussed how it would be beneficial if farms that were able to protect larger areas of habitat could deliver this so that 'monocultures' and intensive farms can be balanced out by an 'oasis of biodiversity'. Workshop participants were pleased to see recognition of good management of features throughout the scheme.

### 7.4.3 CA: Interconnected habitats

**CA:** The Scheme will support collaboration to create interconnected habitats across landscapes through joining up habitat land, taking into account any local or national species recovery priorities.

Figure 7.5 Survey respondents' interest in the collaborative habitat action (n=411)



There was a high percentage of survey respondents (54%) interested in a CA to join up landscapes and habitats (Figure 7.5)

Workshop participants felt that was important to have flexibility in the CAs. For example, many participants were keen to have collaboration with other parts of the industry and wider public as well as other farmers. Examples were given such as:

- educational visits,
- beekeepers,
- science,
- drinking water,
- local wildlife trust recovery grant,
- linking farms with common land for biodiversity,
- public access and footpaths,

Some participants were already undertaking collaborative work such as educational visits on farm and would like to see it being supported as part of the scheme.

There were concerns from some participants about how they would be able to access the CAs if they don't get on with their neighbours and that they could be left out of the scheme because of this.

*"Problems of isolation, maybe mentality you're not as outgoing and don't feel that you know as many neighbours. Why should all of that be dumped on you when really it's about how you manage your own farm"*



## 7.5 Manage habitats and species: Designated sites

### 7.5.1 UA: Management plan for protected sites

**UA:** Have a fully developed and agreed management plan in place ready for implementation for protected sites under the farmer's sole control.

#### 7.5.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Messages
<ul style="list-style-type: none"> <li>• <b>81%</b> of survey respondents who have protected sites on farm were willing to undertake the action.</li> <li>• <b>Top 3 enablers:</b> <ul style="list-style-type: none"> <li>• "I am willing to undertake this action to receive payments through the scheme" (67%)</li> <li>• "I am already doing this action on the farm" (61%)</li> <li>• "This would allow me to be more environmentally sustainable" (40%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>19%</b> of survey respondents who have protected sites on farm were unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b> <ul style="list-style-type: none"> <li>• "I don't want the additional administrative burden" (54%)</li> <li>• "I don't have the time/labour/material resource to complete this action on the farm" (52%)</li> <li>• "The action would not benefit my farm" (48%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Workshop participants were keen for more support and flexibility from organisations providing funding for work to enhance and protect designated sites. Some felt that more resourcing and expertise was needed for designated sites.</li> </ul>

#### 7.5.1.2 Skills and experience

22% of farmers responding to the survey indicated that they had protected sites on farm, of which 81% were willing to conduct the action. 169 farmers out of 275 (61%) indicated that they were already completing the action on farm, and this was the second highest enabler.

#### 7.5.1.3 Opportunity

25% of upland/hill farmers indicated that they had protected areas of farm which was higher than that of lowland farmers (19%). Those who had larger farms were also more likely to have protected areas.

#### 7.5.1.4 Motivation

40% of those willing to conduct the action believed it would make them more environmentally sustainable. Those in the survey who already completed the action discussed the benefits of this action to them:

*“Part of our land, a wildflower meadow, is officially designated as a Local Wildlife Site by Gwent Wildlife Trust. We manage this actively to encourage biodiversity & wildlife”*

*“The SSSIs are very important to us and appreciated by thousands of walkers every year”*

#### 7.5.1.5 Improvements and support

In one workshop one participant described having spent 7 years trying to get funding for a management plan. While the results of this have been very rewarding for this participant, they state that responsible organisations should be more flexible in terms of criteria for awarding funding, as there are currently too many hurdles.

Another participant referred to a local wildlife trust recovery grant, which links farms in the area with common land. They suggested that this could be an interesting model to consider within a CA.

3 survey respondents (who indicated they would be unwilling to complete the action) mentioned that they were already completing a management plan in other contracts:

*“NRW already have me in a contract”*

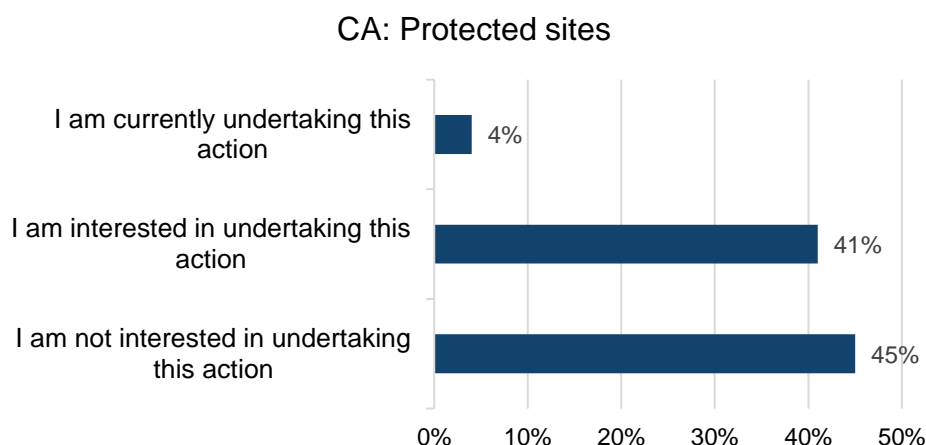
*“We already have an agreement on the SSSI”*

Clarity is needed on how farmers can use existing plans as part of entering the scheme, and as suggested in other areas of the scheme cohesion is needed between the Welsh Government and other organisations to ensure the SFS fits with other schemes and interventions.

### 7.5.2 CA: Collaborative management of protected sites

**CA:** Support for collaborative management of protected sites to deliver Sustainable Land Management outcomes.

Figure 7.6 Survey respondents' interest in the collaborative management of protected sites (n=396)



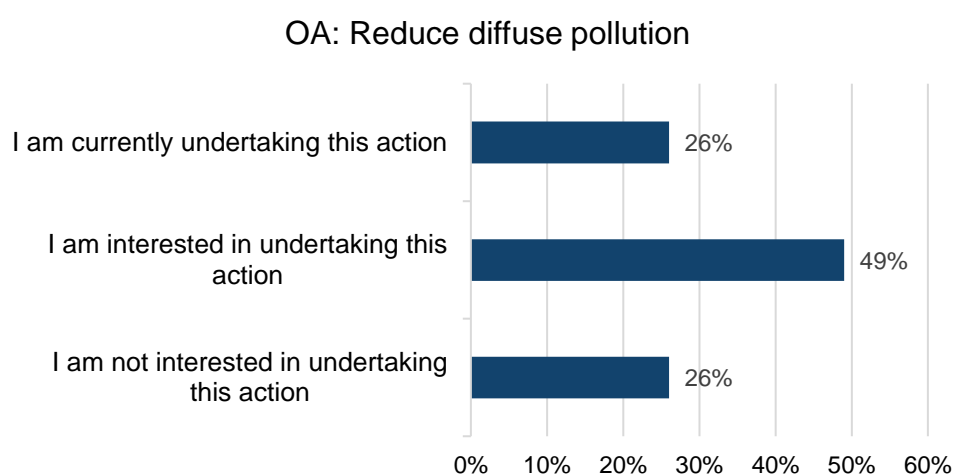


## 7.6 Water is protected from pollution

### 7.6.1 OAs: Preventing water pollution and 6m buffer strips

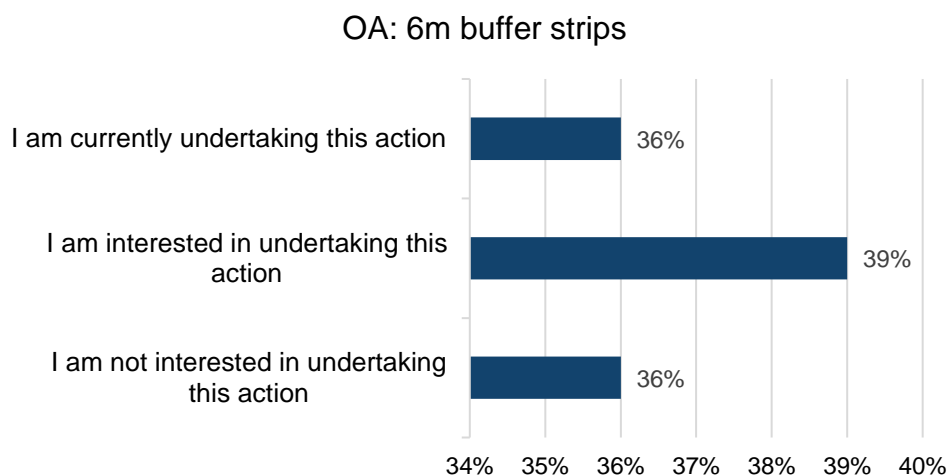
**OA:** Farmers will be supported to develop a bespoke approach to lower the risk from diffuse pollution. This will vary from farm-to-farm but will include choosing Optional Actions based on risk mapping data.

Figure 7.7 Survey respondents' interest in the bespoke approaches to reducing diffuse pollution OA (n=713)



**OA:** Farmers will be supported to establish a buffer strip alongside watercourses. This must be at least 6 metres wide and can include a mix of grasses, shrubs and trees.

Figure 7.8 Survey respondents' interest in the 6m buffer strip OA (n=716)



Workshop participants were positive about these actions with some already completing this action on farm and thinking it should be a UA. They saw these

actions as a strength of the scheme. Participants raised the potential benefits of buffer strips for these actions as they prevent livestock grazing on wet pasture, therefore reducing the risk of fluke. One thought it should be a country-wide stipulation, whether you're in the scheme or not, to ensure Welsh rivers are free from pollution and participants also raised that more should be done legislatively to penalise farmers that were causing pollution issues.

Although workshop participants were positive about these actions, they did raise some potential management concerns. One participant felt there may be difficulty getting machinery to buffer strips, which could result in buffer strips becoming overgrown. This participant felt this could cause habitat issues for example if they could not appropriately manage meadow areas next to water courses.

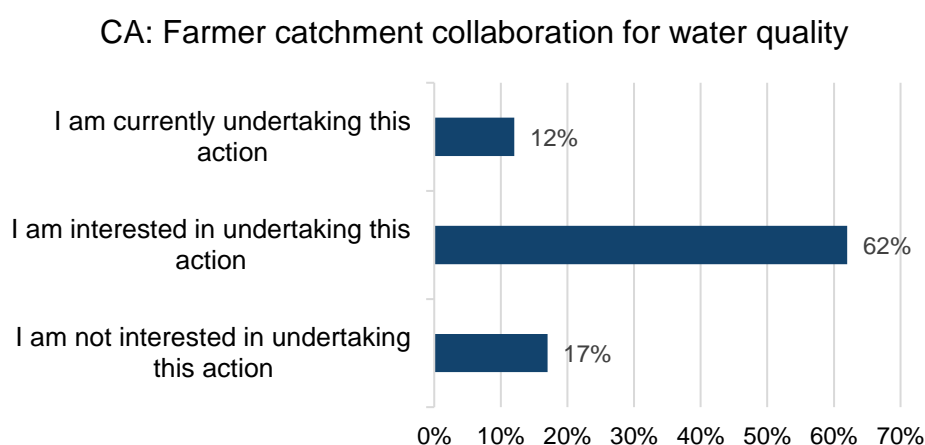
Participants in one workshop wanted more advice and guidance on how temporary fencing such as electric fencing could be used to protect buffer strips as flooding can cause damage to fencing.

In both workshops participants mentioned that for them to complete this action they would need support for alternative drinking stations for stock as well as support for fencing.

### 7.6.2 CA: Working with farmers and wider industry to improve water quality

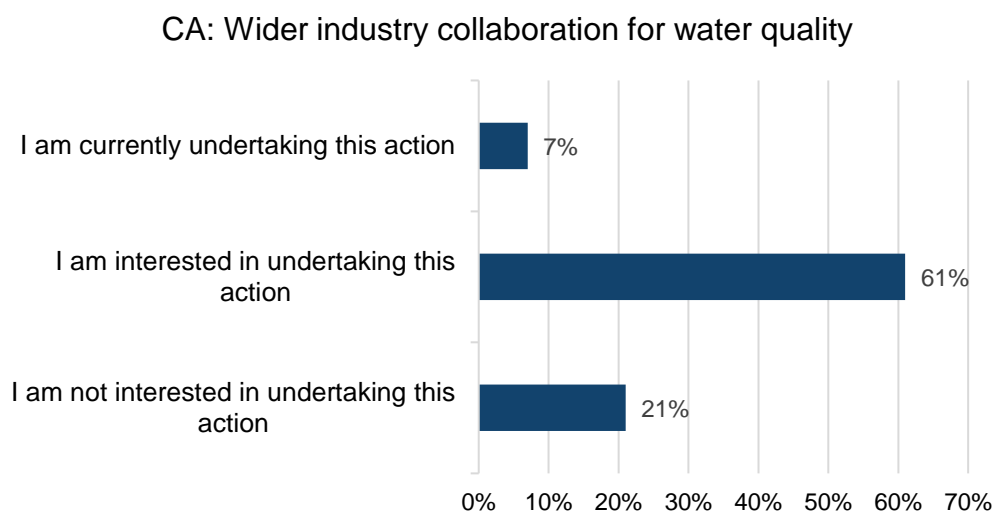
**CA:** Support for farmers to work together in a catchment to improve water quality

Figure 7.9 Survey respondents' interest in the CA for farmers to work together in a catchment to improve water quality (n=412)



**CA:** The Welsh Government want to explore how the Scheme could bring together a wider group of farmers, land owners, interested parties and water companies to ensure actions undertaken on farm are part of a wider package dealing with all sources of water pollution

Figure 7.10 Survey respondents' interest in the CA for wider industry to work together to improve water quality (n=411)



Both of the CAs to improve water quality received the highest percentage of respondents interested in undertaking these actions (Figure 7.9 and Figure 7.9).

One participant had experience of these actions as part of the sustainable management scheme. They currently have someone responsible for the paperwork and managing the scheme on behalf of the farmers but they felt future schemes would need improvements to this so it could run more smoothly.

Participants in a workshop raised that current rules around closing of slurry spreading could cause unintended consequences and undermine these actions by farmers spreading slurry in the rain.

## 7.7 Conserve and retain water

### 7.7.1 UA: Ponds

**UA:** Farms will have to restore and manage existing permanent wildlife ponds and/or create a number of temporary ponds (scrapes).

#### 7.7.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Message
<ul style="list-style-type: none"> <li>• <b>66%</b> of survey respondents were willing to undertake the action.</li> <li>• <b>Top 3 enablers:</b> <ul style="list-style-type: none"> <li>• "I am willing to undertake this action to receive payments through the scheme" (71%)</li> <li>• "This would allow me to be more environmentally sustainable" (50%)</li> <li>• "I am already doing this action on the farm" (39%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>34%</b> of survey respondents were unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b> <ul style="list-style-type: none"> <li>• "My farm type and/or farming system does not lend itself well to this action" (52%)</li> <li>• "The action would not benefit my farm" (50%)</li> <li>• "The effort required outweighs the benefits" (39%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Participants were generally supportive of having ponds on the farm, with some commenting to say they were glad to see this supported as they could not receive support for it in previous schemes. However, there were concerns raised about the size requirements for ponds as well as the quality and placement of ponds.</li> </ul>

#### 7.7.1.2 Skills and experience

66% of survey respondents indicated that they were willing to undertake this action. Of the 945 respondents who indicated they were willing to do the action, 39% felt they were already completing this action on farm and 30% indicated they had the relevant skills to complete the action.

Organic farmers were more willing to complete the action with 79% of organic farmers willing to complete it compared to 65% of non-organic farmers. Organic farmers were already more likely to be undertaking the action and felt they had the relevant skills to complete the action (Table 7.6).

Those who had been in an AES were also more willing to do the action, have already completed the action and have the relevant skills to complete the action than those who were not part of an AES, although this difference was less pronounced (Table 7.7).

Table 7.6 Willingness to complete the action by organic status (Please note the small sample size for organic farmers which may impact on the strength of these findings)

Organic status	Percentage of survey respondents willing to undertake the action	Of those who are willing percentage indicating that they are already completing the action	Of those who are willing percentage indicating that they have the skills and knowledge to complete the action
Certified Organic (n=145)	79%	47%	40%
Not Organic (n=1288)	65%	38%	29%

Table 7.7 Willingness to complete the action by AES experience

AES Experience	Percentage of survey respondents willing to undertake the action	Of those who are willing percentage indicating that they are already completing the action	Of those who are willing percentage indicating that they have the skills and knowledge to complete the action
AES Experience (n=918)	69%	41%	33%
No AES Experience (n=445)	59%	37%	27%

### 7.7.1.3 Opportunity

Of those that were not willing to undertake the action, suitability of farm type/system was the biggest barrier (52%). When reviewing responses from dairy farms this rose to 61% unwilling to undertake the action, and farm type listed as a barrier. Land type suitability was the most common barrier raised in the qualitative survey responses (24 comments out of 107). Issues raised included certain topographies, types of soils, limestone, very dry land, heavy clay soil, shallow soil, limited flat ground.

*"The land is on limestone, the water wouldn't hold without the requirement for a form of barrier or liner."*

*"I have very little flat ground that would be suitable for locating a pond. Also, I am limited in terms of streams / ditches that would enable me to fill a pond."*

Tenants were less likely to be willing to undertake this action than those who had ownership of the farm- 71% of those who wholly owned their land were willing to undertake the pond action, compared to 61% who mostly owned their farm, 55% who were mostly tenanted and 57% who were wholly tenanted (Table 7.8) The lack of control over their land was one of the top three barriers for both wholly tenanted (54% top barrier) and mostly tenanted (51% second highest barrier) with some survey respondents also sharing this as a barrier in the comments:

*"Again, this would need the landlords permission & could cause issues."*

**Table 7.8 Top 3 barriers for those unwilling to undertake the Ponds action by land ownership**

Wholly Owned (n=221)	Mostly Owned (n=148)	Mostly Tenanted (n=53)	Wholly Tenanted (n=48)
The action would not benefit my farm (52%)	My farm type and/or farming system does not lend itself well to this action (57%)	My farm type and/or farming system does not lend itself well to this action (53%)	I don't have control over this type of management (54%)
My farm type and/or farming system does not lend itself well to this action (49%)	The action would not benefit my farm (51%)	I don't have control over this type of management (51%)	My farm type and/or farming system does not lend itself well to this action (46%)
Effort outweighs the benefits (43%)	Effort outweighs the benefits (41%)	The action would not benefit my farm (45%)	The action would not benefit my farm (33%)

There was also a small difference in willingness to undertake this action between upland (70%) and lowland (60%) farmers. This could possibly be due to differences in the perceived benefits for their farm businesses as 45% of upland farmers felt that this action would not benefit their farm business compared with 56% of lowland farmers.

#### 7.7.1.4 Motivation

50% of survey respondents willing to manage and create ponds on farm felt that this action would make them more environmentally sustainable, and 38% thought that it was good farming practice. In one workshop most participants supported the management and creation of farms, acknowledging the benefits and importance of wetlands. Benefits discussed included:

- Flood protection
- Resilience for drought
- Wildlife benefits

Several interviewees and participants in one workshop felt that water and pond/scrape actions were a strength of the scheme and were glad it was getting supported. Comments were made that previous schemes haven't included these types of actions well in the past.

In both workshops participants raised concerns about the quality and/or placement of ponds and that creating ponds in the wrong area could potentially cause negative impacts of losing or damaging existing habitats or holding contaminated water.

*"Would be completely against creating new ponds, very often where people would put ponds would be where the best habitats on farm are. Think it is a very negative thing if forced to do as a UA."*

Similar comments were also made in the survey qualitative responses from 9 respondents who disagreed that ponds would achieve the aim that is described:

*“Its not clear to me that this will benefit nature, depends on the farm. Do you want me to replace semi-natural habitat with scrapes e.g., on my wet flushes where there is already great habitat?”*

In one workshop it was felt the suggested minimum size for ponds was too large as well as raising that the increase of expected size of ponds for larger farms was too big.

#### 7.7.1.5 Improvements and Support

82% of survey respondents willing to complete this action felt they would need support. Workshop participants as well as some qualitative survey responses raised that support would be needed to help farmers to choose the best places to put in ponds/scrapes so that they have the highest benefits, are of high quality and prevent damage to existing habitats.

Workshop participants discussed that a more results-based approach or additional payments could be used to incentivise and reward higher quality wetlands. They also wanted to ensure that maintenance of existing ponds was recognised and rewarded as part of the scheme.

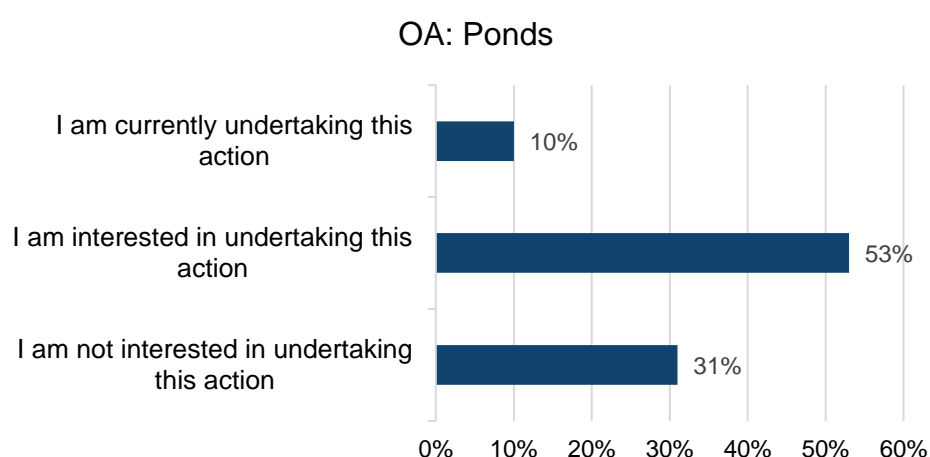
Other suggestions participants raised for delivering this action included:

- Swales
- Leaky dams on brooks
- Lots of small ponds (rather than fewer larger ponds)
- Wetland ecosystem treatment systems

#### 7.7.2 OA: Additional ponds

**OA:** Farmers wishing to do more will be rewarded for introducing additional ponds and scrapes where it is appropriate to do so.

Figure 7.11 Survey respondents' interest in the ponds OA (n=416)



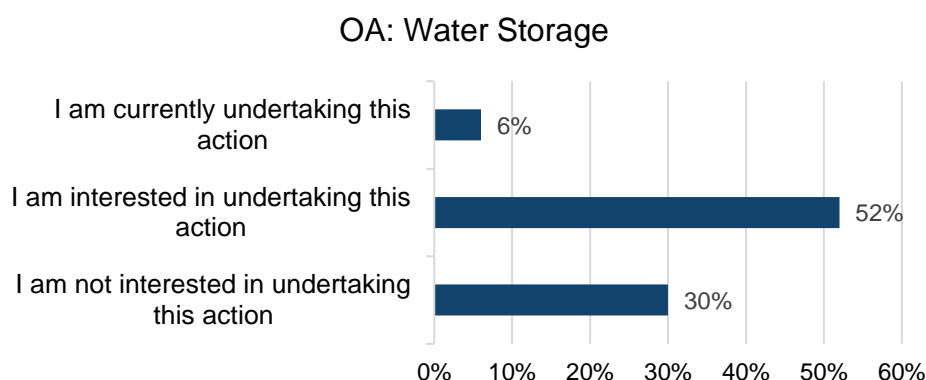


### 7.7.3 OA: Water storage

**OA:** Farmers will be supported to:

- Create new reservoirs and irrigation ponds
- Install water harvesting reuse equipment
- Install clean and dirty water separation infrastructure

Figure 7.12 Survey respondents' interest in the water storage OA (n=716)

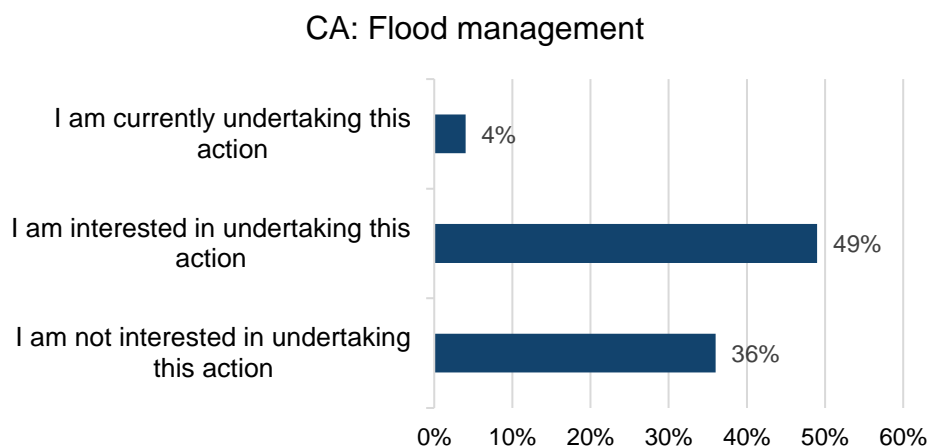


There was some interest in this OA in the workshop. One participant wanted to ensure that grants and support available for conducting these actions took into account smaller scale buildings, as previously they felt that the grants on offer only catered to large scale buildings and farms. Another participant wanted to see the support continue for dirty water separation that had been part of previous schemes.

### 7.7.4 CA: Flood Management

**CA:** Farmers will be encouraged to collaborate across a catchment to lower the risk of flooding. They will be rewarded for taking up actions collectively including practices such as introducing leaky barriers, offline storage areas or floodplain woodland.

Figure 7.13 Survey respondents' interest in the flood management CA (n=405)



## 8 Benefit people, animals, and places

### 8.1 Introduction

The objective of the characteristic “Benefit people, animals and places” is for the Welsh Government to help farmers to proactively promote and improve their own wellbeing, as well as the wellbeing of their families, workforce, the wider community and their livestock. The Welsh Government will support farms to enhance the beauty of the natural environment and provide opportunities for people to interact with rural culture, landscapes and heritage.

This section of the report provides an analysis of farmers skills and experience, opportunity, and motivation for undertaking Universal Actions (UA) included in ‘Benefit people, animals and places’ and provides a summary of key findings across the Optional Actions (OA) and Collaborative Actions (CA). This section also reports on farmers suggestions for changes or improvements that could be made to actions in the scheme.

The section is organised by the following sub-characteristics of the Sustainable Farming Scheme (SFS) (Table 8.1)

**Table 8.1** Actions in Benefit people, animals and places

Sub-characteristic	Action	Pages
Maintain and enhance the historic environment, heritage, and beauty	UA: Historic features OA: Historic features OA: Protected landscapes CA: Landscape scale collaborative projects	103
Enabling people to engage with and access the natural environment	OA: Public access CA: Public access	107
Livestock have a good quality of life	OA: Good Life Welfare	109
Be proficient to practice safely and efficiently	UA: Learning OA: Additional learning	110

## 8.2 Maintain and enhance the historic environment, heritage, and beauty

### 8.2.1 UA: Historical environmental features

**UA:** Farms with historical environment features identified on their land will need to follow general guidance on how to manage them.

#### 8.2.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Messages
<ul style="list-style-type: none"> <li>• <b>83%</b> of survey respondents with historic features on farm were willing to undertake the action.</li> <li>• <b>Top 3 enablers:</b> <ul style="list-style-type: none"> <li>• "I am willing to undertake this action to receive payments through the scheme" (73%)</li> <li>• "I am already doing this action on the farm" (50%)</li> <li>• "My farm type and/or farming system lends itself well to this action" (34%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>17%</b> of survey respondents with historic features on farm were unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b> <ul style="list-style-type: none"> <li>• "I don't have the time/labour/material resource to complete this action" (54%)</li> <li>• "The action would not benefit my farm" (35%)</li> <li>• "The effort required outweighs the benefits" (33%)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Workshop participants were generally supportive of this action although they wanted to ensure that the management of features on their farm did not hinder their ability to develop their farm. Participants would like a clearer definition of historical environmental features and would like to see the addition of other features included in the scheme.</li> </ul>

#### 8.2.1.2 Skills and experience

28% (n=412) of the total survey respondents indicated that they had historical environmental features identified on their land and 12% indicated they did not know if they did or not. Of those that indicated they have historical environmental features, 83% (n=343) indicated that they would be willing to follow guidance on their management. Of those that were willing to follow guidance to manage historical environmental features, 50% said they were already completing this action which was the second highest enabler.

Those that had previous experience in an AES were more likely to be willing, already completing and have the necessary skills compared to those who had not been part of an AES (Table 8.2).

Table 8.2 Willingness to undertake the action by AES experience

AES Experience	Percentage of survey respondents willing to undertake the action	Of those who are willing percentage indicating that they are already completing the action	Of those who are willing percentage indicating that they have the skills and knowledge to complete the action
AES Experience (n=325)	85%	53%	33%
No AES Experience (n=79)	76%	35%	22%

### 8.2.1.3 Opportunity

Larger farms were more likely to have historical environmental features than smaller farms (Table 8.3). Similarly, those who had previously been involved in AES were more likely to indicate that they had historical features than those who had not (Table 8.4). This may be because those with AES experience were more likely to know that they had these features on their land due to activities involved in AES.

Table 8.3 The percentage of respondents with historical environmental features on their land by farm size (n=412)

Farm size (Ha)					
Under 3	3 to <20	20 to <50	50 to <100	100 to <200	200+
14%	17%	21%	22%	33%	48%

Table 8.4 The percentage of respondents with historical environmental features on their land by AES experience (n=412)

	AES experience	
	Yes	No
Percentage of respondent with historical environmental features on their land (n=412)	34%	17%

Workshop participants felt that there needed to be more clarity around the definition of historic monuments as sometimes these features aren't identified as such and therefore participants could miss out on completing this action.

*"If someone has a Scheduled Ancient Monument (SAM) then it is automatically registered but other historic farm features may not be and less known."*

Participants also wanted clarification on how historic features would be verified so that the features that they have identified but do not necessarily show up on maps could be included as part of the scheme. Workshop participants suggested other

types of historical features that they would have interest in maintaining as part of the scheme such as industrial heritage (see examples in 8.5.1.5)

#### 8.2.1.4 Motivation

This action had the highest percentage of farmers indicating they were willing to complete this action (83%) and of those that indicated they were willing to complete it 50% were already completing this action. As with the survey, workshop participants were generally supportive of this action, and agreed that maintaining existing historic features is important and payment should be provided to support this.

Participants did raise concerns that preserving of historic features could prevent farmers from being able to get planning permission to develop their farm. While farmers were supportive of historic environment conservation, they wanted to ensure that their farm development wasn't unduly hindered in the process. Some raised that a potential barrier to scheme entry could be if there are issues with planning and having limitations on some development on the land. Similar comments were made by an interviewee:

*“Support maintenance and development of traditional buildings but need to allow for evolution of buildings, can't lock them in history.”*

Although this planning issue is not one that the SFS scheme itself can solve, it is an issue that could cause farmers to be reluctant to engage with this action or may be a barrier to entering the scheme.

#### 8.2.1.5 Improvements and suggestions

82% of survey respondents indicated that they would need support, with findings from interviews showing that factsheets, followed by group discussion, and advice from consultant were the most popular support mechanisms.

Workshop participants indicated that they needed greater guidance and clarification on what would be considered a historic feature, with opportunity to expand the list based on some of the suggestions given in workshops. Examples of types of historical features participants raised in the workshops that they would be interested in maintaining include:

- Stone walls
- Styles
- Old style barn
- Industrial heritage features e.g., mine shafts

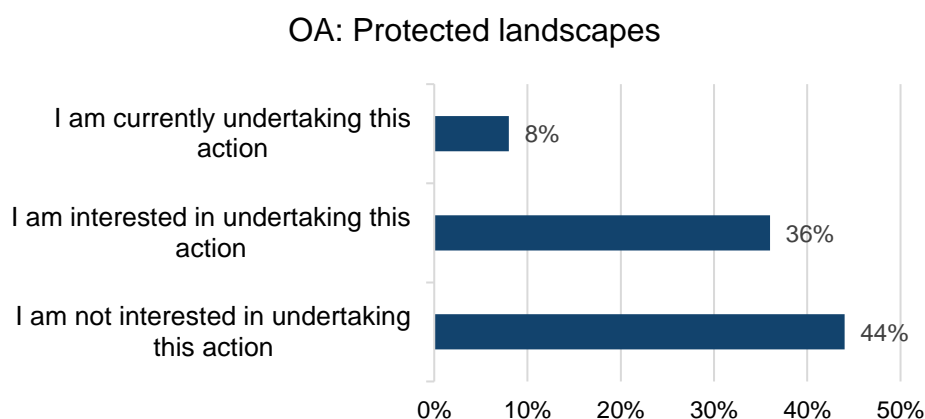
Participants also wanted assistance in verifying features on farm, with one participant raising that they had previously had difficulty getting someone to verify features on their farm as part of Tir Gofal.

Few comments were left on this action in the survey, but a common theme from both those who were willing to and those who indicated they were unwilling to complete the action, was a concern over public access and how the public and vandalism can have an impact on these historic features.

## 8.2.2 OA: Protected landscapes

**OA:** Farmers will be supported to deliver more for protected landscapes. These actions will be bespoke to the farm and surrounding area and will align with the special qualities of Areas of Outstanding Natural Beauty or a National Park.

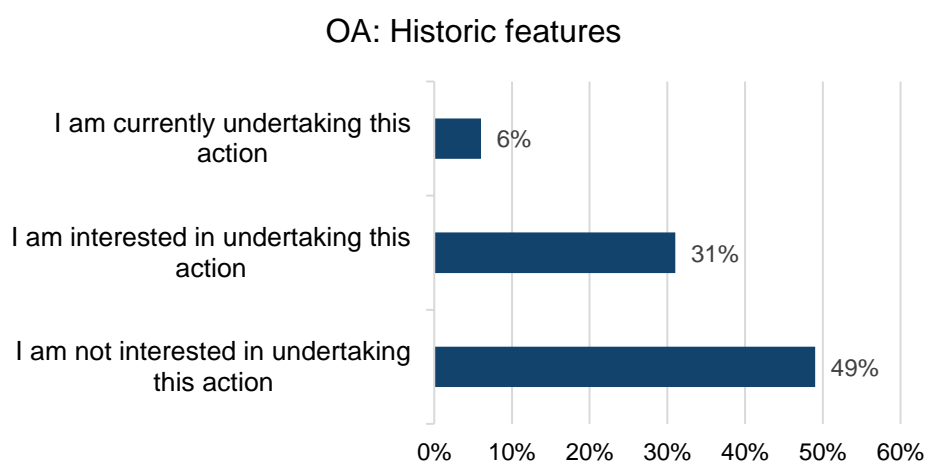
Figure 8.1 Survey respondents' interest in the protected landscapes OA (n=702)



## 8.2.3 OA: Historical Features

**OA:** Farmers will be supported for reporting on the condition of historic features and how they are managed. Where appropriate, they will be supported to repair or conserve a historic feature with professional guidance.

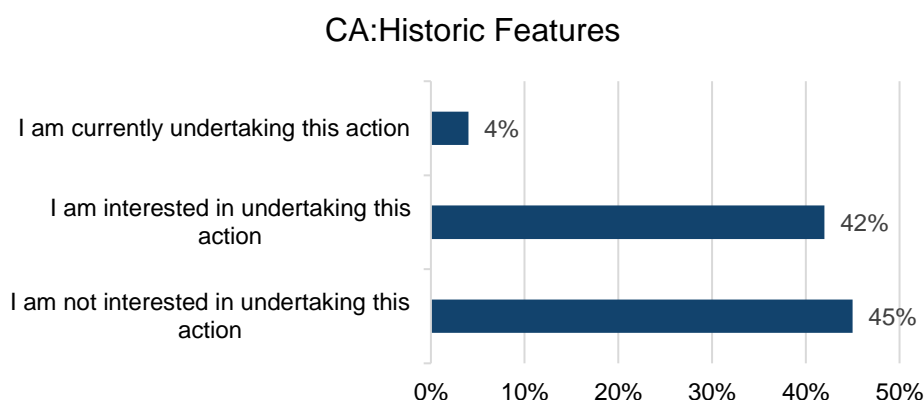
Figure 8.2 Survey respondents' interest in the historic features OA (n=706)



## 8.2.4 CA: Historic features

**CA:** The Scheme will support landscape-based collaborative projects which enhance the historic environment and designated landscape across multiple farms.

Figure 8.3 Survey respondents' interest in the historic features CA (n=405)

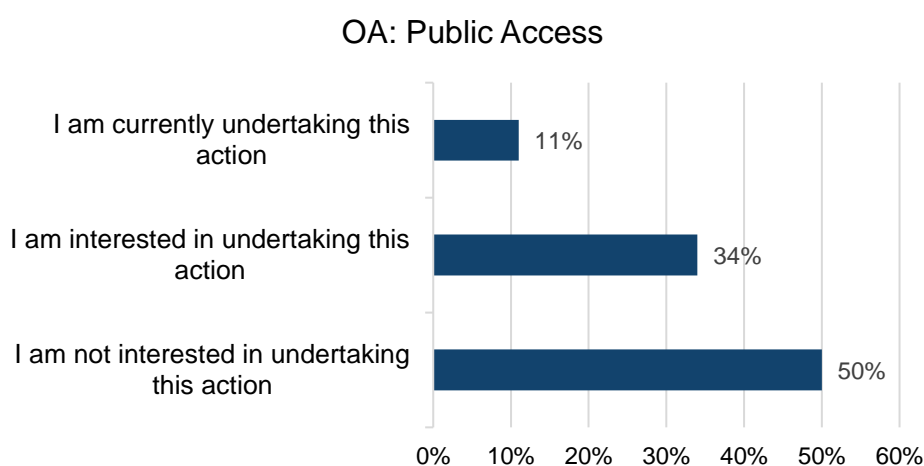


## 8.3 Enabling people to engage with and access the natural environment

### 8.3.1 OA and CA: Public Access

**OA:** Farmers will be able to choose options which help people engage with and access the natural environment.

Figure 8.4 Survey respondents' interest in the public access OA (n=714)



In the survey 50% of respondents indicated they were not interested in undertaking an OA to improve public access (Figure 8.4). This was one of the three least popular OAs.

In the workshops, there were some positive views on improving public access routes that are already available to make them more accessible. Participants



thought that improving public access was an opportunity to educate the public on the farming industry. Participants pointed out that there have been huge opportunities on social media for promoting farming to the wider public in the past few years. Many participants were keen on inviting primary school groups onto farm, however there was concern about support for conducting risk assessments and making sure that appropriate infrastructure such as hand washing stations were in place.

While the positives of this action were discussed, participants were keen to keep this action optional as there were concerns about the behaviour on farm. Strong concerns were raised around biosecurity and negative behaviour associated with greater public access such as fly tipping, increases in rural crime and hare coursing, cutting fences, dogs, noisy motorised vehicles.

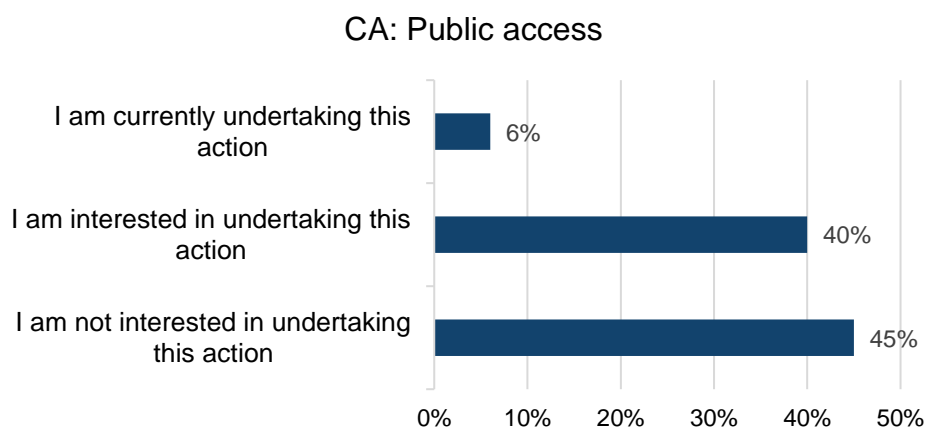
Where public are allowed on the land there should be rules for the public that need to be followed and it was felt that support was needed from the Welsh Government to help enforce this. There were concerns around public and livestock safety during certain times of year, e.g., when bulls are put in with cows. Participants saw these actions as an opportunity for raising awareness among the public in terms of what access can and can't be used for. There was a suggestion that the Welsh Government could assist with educational posters to help raise awareness.

In light of these concerns, participants felt there could be some flexibility in public access so that when appropriate farmers could close footpaths for safety reasons or could move the location of the footpath to prevent biosecurity or rural crime issues.

In addition to support in managing public behaviour, workshop participants raised they would need support for correct infrastructure such as fencing, self-closing gates, stiles would be needed.

**CA:** The Welsh Government will support collaborative projects to improve access for local communities and support national priorities.

Figure 8.5 Survey respondents' interest in the public access CA (n=410)



Workshop participants raised several ideas in relation to collaborative projects to improve access for local communities:

- **Farm and community collaboration:** Schools, photography clubs, bird watching groups
- **Bracken cleaning and shepherding on common land** to increase the number of sheep which can be farmed and provide economic benefits. If these actions

are supported through the scheme then there would be less reliance on national parks.

- **Black Mountains restoration:** Two participants suggested a collaboration project in the eastern section of the black mountains. The participants felt that this area has its own microclimate and would be a good opportunity for a farmer-university type interaction for preserving and protecting these landscapes.

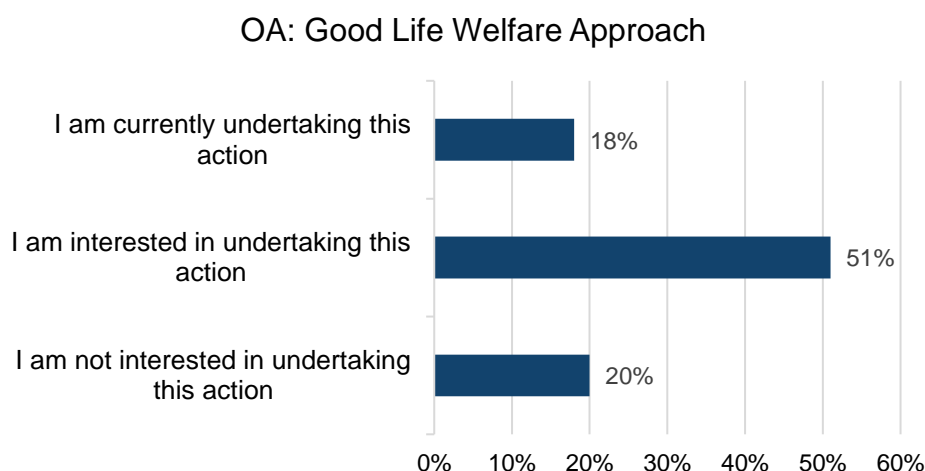
Participants were keen to explore these collaborative ideas but did want further detail on how this type of CA would be evidenced as part of the scheme.

## 8.4 Livestock have a good quality of life

### 8.4.1 OA: Good Life Welfare approach

**OA:** Farmers will be supported to use a higher animal welfare standard. This could include adopting the Good Life Welfare approach (or a similar initiative).

Figure 8.6 Survey respondents' interest in the Good Life Welfare OA (n=711)



51% of survey respondents were interested in undertaking the OA to adopt a higher welfare standard (Figure 8.6). Some workshop participants felt that this action should be a UA as part of the scheme as good husbandry should be done by all farmers. Participants highlighted that the UK already has some of the highest welfare standards in the world but that there is a need to keep these standards moving forward. The goal is to keep lower welfare products out of the market and keep the UK market share. An organic farmer raised that this action should tie into organic farming practice as there is a higher standard of welfare in organic farming than the legal minimum.

Although participants felt this action was important, there was a lack of clarity in the workshop around what this action would specifically entail and what it covers beyond typical good welfare practice.

One participant suggested that lameness is a welfare priority with more research for vaccinations for foot diseases needed and that this could be a big step in improving animal welfare. More support in general with treating and actively managing disease would also be helpful.

## 8.5 Be proficient to practice safely and efficiently

### 8.5.1 UA: Learning

**UA:** Farmers will be required to complete a minimum level of learning, including on Health and Safety.

#### 8.5.1.1 Summary of key findings

Enablers	Barriers	Key Workshop Message
<ul style="list-style-type: none"> <li>• <b>76%</b> of survey respondents were willing to undertake the action.</li> <li>• <b>Top 3 enablers:</b></li> <li>• "I am willing to undertake this action to receive payments through the scheme" (72%)</li> <li>• "I think the action is good farming practice" (62%)</li> <li>• "I am already doing this action on the farm" (36%)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>24%</b> of survey respondents were unwilling to undertake the action</li> <li>• <b>Top 3 barriers:</b></li> <li>• "I don't have the time/labour/material resource to complete this action" (55%)</li> <li>• "I don't want the additional administrative burden" (51%)</li> <li>• "The effort required outweighs the benefits" (37%)</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers thought that health and safety training was very important and were supportive of this action. They would like to see that the action caters to different ways of learning and is flexible so it is relevant to the farmer. Some participants raised concerns about the time required, and recognised that for each farm it would typically be one person completing the action not all of the staff on the farm.</li> </ul>

#### 8.5.1.2 Skills and experience

76% of total survey respondents were willing to complete health and safety learning. Of the 1,091 that indicated they were willing to complete this action 36% were already completing it, and 24% feel that this training would improve their farming outputs (e.g., animal health/ productivity/ profitability).

Participants in the workshop mentioned that they were already completing Health and Safety courses as part of farm assurance, specifically Red Tractor. This was supported by survey findings with respondents in quality assurance schemes more likely to indicate that they were already completing the action. For example, 42% of those in Red Tractor, 39% of those in Quality Welsh Food Certification (QWFC), 38% of those identifying as farm assured and 38% of those identifying as certified Welsh organic were already completing Health and Safety courses compared to 28% of those that are not part of any type of farm assurance.

### 8.5.1.3 Opportunity

Time constraints were a particular barrier mentioned in the workshops with regards to this action.

*“when would we find the time to do it and when the staff would find the time?”*

Time was also the top barrier indicated in the survey by those unwilling to complete this action (55%). Comments were made in the survey about the additional admin burden this type of activity brings both by those who were supportive of the action (n=10) and those who were unwilling to complete the action (n=15):

*“This is good farming practice and something we already carry out. We would not be happy to have increasing administrative burdens put upon us to do things that we naturally do to run a good business. Please bear in mind the amount of additional admin that all the actions proposed in this scheme will have on farmers - who will have animal welfare at the top of their agendas and do not need to have any more time take away to fill in paperwork and tick box exercises.”*

In the workshop participants discussed the practicalities of completing this action and how they would complete the learning course for the farm. While some thought it wasn't necessarily preferable it would be more realistic for one person to attend a training session and then relay the information to the other staff. This was supported in another workshop where participants were in support of per farm learning rather than per individual. This was due to staff continuity and a feeling that the skill set was associated with the farm rather than individuals. In one workshop a few female farmers felt that they would be the ones asked to complete the training:

*“In our situation, the moment it's suggested, they'll tell me to go and tell them what they've learned, but that's not what it's for.” (female farmer)*

*“We don't employ anyone here, just have contractors in to shear and mix silage. I'd have to be the one to go on the course.” (female farmer)*

Participants discussed how people learn in different ways, in-person, online, farm visits, collaborative. The variety of different ways of learning need to be supported to cater to different farmers learning preferences and to encourage others to participate. Having a variety of options could also support those that felt they would be too busy or too far away to attend long in-person courses.

### 8.5.1.4 Motivation

All workshop participants agreed that health and safety learning is very important. Many workshop participants saw this action as a strength of the scheme and were keen to see how learning could be encouraged using different methods such as online or in-person events. This was supported by the survey where the one of the top enablers for this action was “I think this is good farming practice” at 62%. In one workshop, farmers shared their own experiences and examples of accidents on farms and believed that this action would address this situation.

*“Health and Safety is vital for this industry, awful track record of deaths, accidents, etc. ... We need to get our act together as an industry.”*

Similar comments were also made in the survey:

*“Complacency leads to farming accidents and re-education is usually extremely valuable.”*

Although all participants recognised the importance of health and safety training there were mixed views about whether this should be covered as a UA. In one workshop most felt it should be a UA as long as the training was relevant to the farmer and their farm.

*"Health and Safety workshop – is that a UA? I've got no issue with it. I think it's important. If we went every 12 months, having a refresh and it ticks our boxes for UA, I think it's a good thing. Up to the training provider to make it relevant to the people that go."*

However, in another workshop there were more mixed views about whether this should be an OA or UA. It was emphasised that this training would be really important for new entrants and younger farmers. However, some felt that many older farmers were unlikely to change their farming practices and already had a lot of experience. Similar comments were made in the survey by farmers who felt this activity was not needed as they already know what to do (n=31):

*"I am busy, I know what to do, I am 62, I do not want to be made to do training."*

*"Been farming successfully for many years and know what works for me!!!"*

Despite comments made to this affect in the workshop and some qualitative survey responses, farmers that indicated they were 65 years and older were the most willing age group to complete the action with 79% willing to complete the action, compared to other age groups which ranged from 74-75%. Other workshop participants felt that people are never too old to learn, and that machinery and farm equipment were always evolving therefore new health and safety training would be needed.

#### 8.5.1.5 Improvements and suggestions

86% of survey respondents were willing to complete this action as part of the scheme indicated that they would need support. Interview results show that in-person training followed by online training were the most popular types of support for this action.

Workshop participants felt that providing both in-person and online learning was important. In-person learning may be particularly important for machinery training. One participant discussed sessions whereby the trainer goes to the farm and provides training using the farmer's own equipment. Several participants were keen to attend in-person training sessions, although it is important that these are offered locally, to minimise travel time. Another participant raised that it would be important to have some online sessions as they don't have the capacity at the moment to attend events due to managing a small farm and family ill health.

In one workshop participants mentioned several training sessions and subject matter topics that they found useful:

Examples of previous training sessions that have worked well:

- Training at a showground
- H+S executive farmers bootcamp day at Hereford market
- Machinery training
- An on-farm course about the telehandler (forklift/crane)

Helpful topics mentioned:

- Electricity hazards

- How to tie up a bull properly
- Filling fertiliser drills
- Machinery training
- Raising awareness of accidents that can happen on farm may encourage more people to attend training.

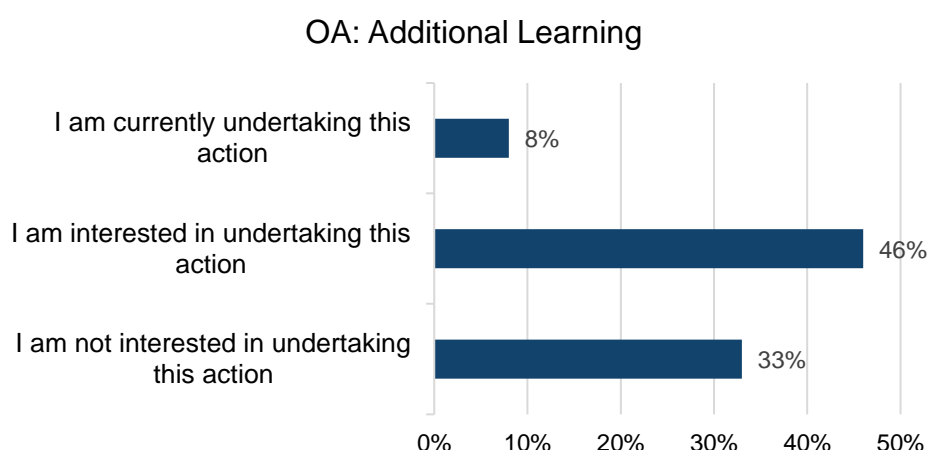
Participants were keen to ensure there wasn't duplication of effort so where farm assurance schemes cover health and safety this is recognised as earned recognition. Participants mentioned that there are lots of new learning opportunities being added to the Red Tractor scheme. In one workshop when discussing how to deliver the scheme a points-based system was preferred over a time-based system to record and evidence training to prevent some from manipulating the system to make it appear that they had completed more hours.

The wording of the action raised concerns with workshop participants. There is a lack of clarity in terms of what 'minimum learning' entails and it implies that farmers aren't already learning. Similar thoughts were shared by some survey respondents who felt that this action seemed patronising to farmers. There were further questions about how flexible this would be, with participants wondering whether they will be required to do a standard course, or whether there will be flexibility to choose something that suits their farming practices and the skills that they want to develop. Improvements to the wording of this action and further flexibility so that farmers could tailor learning to suit their interests and needs could increase farmers willingness to complete this action.

### 8.5.2 OA: Additional Learning

**OA:** Farmers wishing to do more will be supported for completing more complex or higher-level CPD. They will also be rewarded for supporting transferring knowledge to other farmers.

Figure 8.7 Survey respondents' interest in the learning OA (n=416)



Workshop participants were keen to explore this OA but felt that it was important that flexibility was maintained as there were some concerns that there would be too narrow a view about what training is allowed. Participants agreed it should not be too prescriptive, allowing for flexibility and innovation, so farmers can choose training for skills they want to build. To ensure flexibility several participants were keen to do some training that is offered outside of Farming Connect.

Potential ideas that were discussed for different ways to achieve training and learning through this action:

- **Farm Visits:** A participant gave an example of their husband going on trips with a grassland group and visiting different farms to see how they manage their land. Participants agreed that farmers who host people on their farm should be financially compensated for this time and effort as part of this action. When it is done as a collaborative venture, all farmers should receive some income, although it may be difficult to divide.
- **Local markets:** Participants discussed local markets as a support network among farmers and a good place for knowledge to be passed on. It was suggested that this would also be a good place for farmer-led learning about the scheme itself.



## 9 Scheme processes

### 9.1 Eligibility Criteria

The proposed eligibility criteria for the Sustainable Farming Scheme (SFS) are the following:

- must be a farmer undertaking agricultural activities
- the agricultural land must be in Wales
- must farm a minimum of 3 hectares of eligible agricultural land
- must be able to actively perform, at least the applicable Universal Actions (UA) throughout the duration of the contract

In the survey, respondents were asked if they fit the top eligibility criteria (not including UAs) and if not which of the criteria they did they not meet.

94% of survey respondents indicated that they met the eligibility criteria, 2% indicated they did not meet the criteria and 4% were unsure if they met the criteria.

Of those that did not or were not sure if they met the criteria (n=75), they indicated the following criteria did not apply to them:

- Must be a farmer undertaking agricultural activities: 32%
- Agricultural land must be in Wales: 8%
- Must farm a minimum of 3 hectares of eligible agricultural land: 35%
- Unsure: 39%

Out of the 24 respondents who felt like they did not meet the criterion of 'a farmer undertaking agricultural activities', six selected that they had an 'Other' farm type. The remaining 16 did select a main farming sector but still were unsure or did not feel they met the criteria of being 'a farmer undertaking agricultural activities'. This suggests that for some farmers there is a lack of clarity around the definition of 'farmer undertaking agricultural activities'.

#### 9.1.1 Active farmer

In the scheme process workshops, some participants wanted further clarity around what constitutes an 'active farmer'. Some participants felt that their sectors were not covered under the scheme and were unsure if they would be considered as an 'active farmer'. These participants main enterprises were goats, equines or deer and they classed themselves as farmers or were interested in completing the scheme actions. This led to discussions around the purpose of the SFS.

There was some debate around the Welsh Government's aims of SFS when discussing this eligibility criteria and whether people who manage land outside of farming should be considered. When discussing the definition of active farmer, some felt you should have to be considered an active farmer to be able to join SFS, whereas a few others felt that as long as you comply with regulations and can deliver what the Welsh Government want, then it shouldn't be a requirement:

*"Surely if you comply with all regulations and provide what the Welsh Government want, surely it doesn't matter if you qualify as an active farmer or not."*

### 9.1.2 3-hectare requirement

In all three scheme process workshops, participants discussed the 3-hectare minimum requirement. Most participants did not understand the decision behind the 3ha criteria, particularly as it is set at 5ha in BPS and felt like this limit was too small as it would allow what they perceived as ‘hobby farmers’ to enter the scheme. There were thoughts from some participants that this should be raised to 5 or 10ha.

However, some participants suggested that for particular sectors, such as horticulture, there should be an exemption on this requirement. Additionally, some asked whether farmers under 3ha could combine together and join the scheme so that they could reach the 3ha requirement, as they were concerned that some vegetable farmers would be forgotten about if the 3ha minimum limit was set.

In workshops there were discussions around whether there should be an upper limit of hectares to ensure that large organisations couldn’t take advantage of the scheme. There were general concerns around who should be able to access the payments, with participants wanting to ensure that the scheme supports those who they feel are ‘real farmers’:

*“It’s only a small pot of money, which is expectantly becomes smaller, so I’d hate to see a lot of the big firms and big companies... the big bodies, big Landowners, national parks, etcetera, taking a big chunk of the money. I think it really should go to farmers.”*

Some participants described how in their opinion some farmers had different reasons for farming. The participants explored the idea of whether these different reasons should exclude some from receiving government funds. They described some large landowners as “*farming for reasons other than reasons that we would be*” such as food production. This was a concern for some participants due to the potential financial allocations of a perceived small pot of money. However, they did also recognise that these landowners are also often doing a good job at land and environmental stewardship. These participants were primarily concerned about protecting the smaller farmers and making sure that those who need the financial support of the scheme more are able to access the funds.

### 9.1.3 Applying for the scheme

70% of farmers would feel confident applying for the SFS through Rural Payments Wales (RPW) online, 11% would not feel confident and 20% don’t know.

90% of respondents indicated they currently provide basic farm and land information similar to that of a Single Application Form (SAF) or farm assurance scheme. Across the sectors the percentage of farmers that did not provide this information was mostly low. However for those that indicated horticulture as their main farm type, 10 out of 16 farmers do not provide this information. There were also several pig farmers and ‘other sector’ farmers who indicated that they do not currently provide this information.

49% of respondents would feel confident supplying this information online without support and 25% would not feel confident without support.

## 9.2 Sustainability Review

### 9.2.1 Carbon assessment

Only 12% of survey respondents indicated they were currently completing a carbon assessment on farm. Those in Red Tractor assurance schemes had a noticeably higher percentage of respondents, with 31% indicating they completed this action, compared to those who were not part of quality assurance schemes, at 5%.

23% of respondents indicated that they would feel confident completing a carbon assessment using an online tool such as a carbon calculator. 38% indicated they would not be confident and 39% don't know. The survey results and comments from the workshop indicate that support is necessary for this action.

A few people in scheme process workshops had experience completing carbon calculators but the majority had not. In all three scheme process workshops, participants questioned the efficacy of carbon calculators, reporting a lack of consistency and that the results can vary between calculators. One discussed their experience using multiple carbon calculators which all gave different results. An example of an issue that they had encountered was that one tool was dairy oriented and made calculations of carbon based on a dairy cow which would be very different to a suckler cow. They found the most detailed one to be the best, which took three days; however, they and others recognised that using an extensive calculator which requires so many days of work would be a barrier to some. This participant had the motivation to complete the carbon assessment to show the sustainability of their farm and promote the beef industry:

*“sick and tired of people slating the beef industry – wanted to know where we stood, which is why we started it; by the third time, as we have a lot of data on farm, we were approached to take part in the Welsh Way. I was warned it would take a lot of time, but with the final doc that was produced, it gives you a tool to tell people that what you hear in the media isn't right, so far as Welsh farming is concerned.”*

Participant feedback on the carbon calculator referenced in the briefing material ([Carbon Calculators](#)) was that it was too long and difficult to complete.

One participant felt that calculators typically focus on trees and not other potential carbon sequestration areas such as habitats. Similar concerns around the efficacy of carbon calculators were raised in other workshops. Some participants felt that whilst carbon calculators can be good at tracking the outputs of the farm, they are not well equipped at tracking the sequestration of carbon.

*“Carbon footprint and carbon calculator needs to be worded better, some carbon calculators don't work and outputs calculated correctly but inputs wrong.”*

When choosing a carbon calculator for the scheme, participants felt that it should be a standard carbon calculator used across Wales to ensure consistency. However, it should be tailored for the Welsh industry as the sustainability of Wales is thought to be a unique selling point and any carbon calculator should ensure it does not undermine this compared to competitors.

Participants raised concerns about administrative burden of completing a carbon assessment and it being time consuming. In two of the scheme process workshops, some participants felt that the excessive time to do paperwork and needing to provide this level of information before even entering the scheme was a potential disincentive to joining SFS. Both workshops felt that farmers need more time to get

used to what they are doing, as too much work upfront could be confusing and overwhelming. Participants discussed that the scheme needed to give farmers an opportunity to get used to the programme and that the different parts could be phased throughout the contract. Some participants felt ambushed by the scheme and had anxiety about having a lot of work to do before any funding/payments would be received. Participants recommended more of a phased approach, with things staggered between 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year.

Other participants discussed using existing datasets from other Welsh Government schemes to provide this type of information before spending more time and money collecting more data. Another idea raised is that the carbon calculator developed could provide a base level calculation for different farm types across Wales that could be built on by adding actions undertaken (e.g. planting trees and land use change).

## 9.2.2 Habitat baseline assessment

When asked “Have you ever had a professional habitat survey done on your farm? (for example as part of Glastir advanced, Tir Gofal, NRW, or hedgerow surveys)” 33% of survey respondents indicated they had, 60% that they had not and 8% did not know. Those who had been part of an AES were more likely to indicate they have had a habitat assessment (45%) than those who had not been part of a scheme (9%).

Several farmers in the scheme process workshops felt that a habitat baseline assessment was useful to recognise the potential of the land they have. In other workshops, including the tree actions workshops, participants discussed how a habitat assessment would be useful in helping to identify areas of the land to plant trees.

Whilst some recognised the value of conducting this activity, the following concerns were raised:

- **Upfront costs:** In scheme process workshops participants had questions around whether farmers would have to pay upfront for a professional to complete the habitat assessment before signing the contract and were concerned that this would be expensive. There was also a general concern about how expensive it will be to fund habitat assessments on all farms wishing to enter the scheme and the potential impacts of this spending on the payment rates for farmers to conduct actions.
- **Lack of trust:** Many farmers do not trust the ‘experts’ that come on farm to do assessments and there was some scepticism about which bodies and experts would be used. Several workshop participants were concerned about those that conduct the assessments interfering with the running of the business and some had bad experiences with inspectors who lack knowledge or were too prescriptive. Participants suggested that the habitat baseline exercise could be a collaborative task with the expert and the farmer coming to an agreement.
- **Resource and capacity:** Similar to other areas of the scheme, resource and capacity of the industry to support habitat assessments was raised as a concern and that it could create a bottleneck and flood the system if everyone is trying to complete it at the same time. To overcome this, some suggested starting the reviews earlier than 2025 and others using a phased approach so that there was the capacity to complete them. Another participant raised the idea of having an app to gather some of the data themselves.

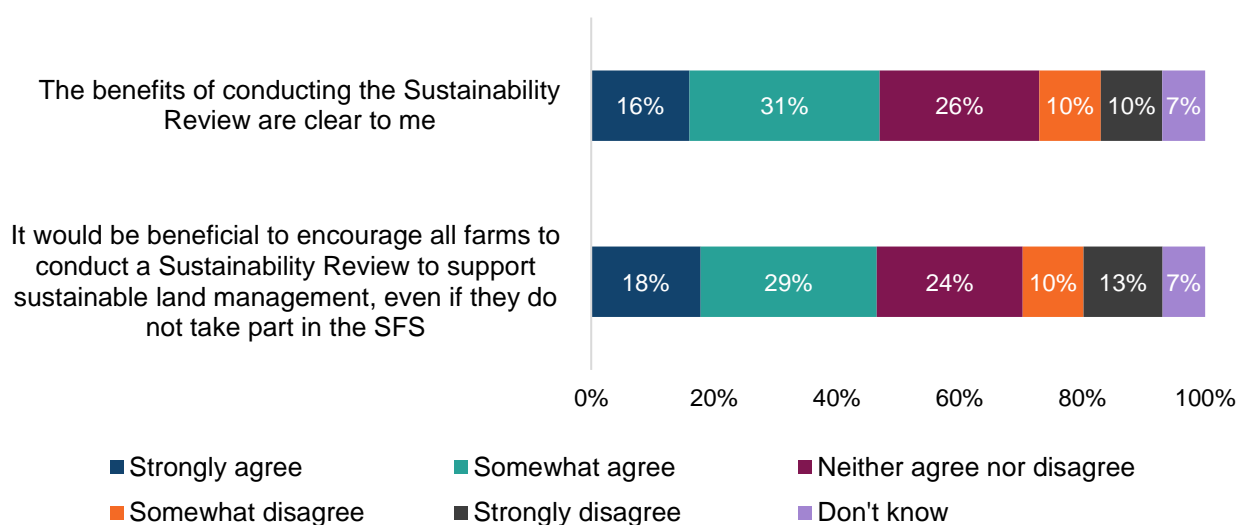
- **Remote imaging and mapping:** There was a discussion in scheme process workshops about using remote imaging to help map out what was present on farm. However, some participants had experience being a 'victim' of mapping in previous years and felt this made them unfairly ineligible for schemes. Some wanted to ensure somebody did come to visit the farm so that they could be more confident that this would be avoided.
- **Concerns around permanent habitat designations:** In one scheme process workshop there were questions regarding whether habitat designations will hold for the duration of the scheme or will be permanent, and therefore potentially preventing them from undertaking certain activities on the farm. These concerns were raised in other workshops in relation to the habitat and tree UAs.

### 9.2.3 Clarity on the sustainability review

In the workshops, participants wanted more clarity on the purpose of the sustainability review. Whilst this was explained in the workshop and with briefing material, some participants were still unsure on its purpose.

In the survey 53% of respondents indicated the benefits of the sustainability review were not clear to them, compared to 47% who felt that they had a clear understanding of the benefits. 47% felt that a sustainability review would be beneficial for all farms to deliver against Sustainable Land Management (SLM) outcomes (Figure 9.1)

Figure 9.1 Survey responses indicating agreement with sustainability review statements (n=1336).



## 9.3 Monitoring and Evidence

In all three scheme process workshops, participants appreciated that some level of monitoring and evidencing of actions is required to make sure that the money to support actions goes to the people undertaking the work. They also appreciated that monitoring their activity is important to show where improvements have been made.

### 9.3.1 Self-assessments

Some participants felt that farmer self-assessments as a tool for monitoring and evidencing actions was useful in certain circumstances. Participants discussed using geo-tagged photographs as one tool for assessments. Another participant raised that it was important to ensure that they had confirmation they were eligible to conduct the activity on their farm by verifying the 'before' picture, as they did not want to conduct work to later discover they were not eligible for that particular action afterwards. In one workshop, some participants felt that the time taken out of farming to self-assess and provide this type of information should be financially compensated as part of the scheme.

In scheme process workshops some concerns were raised that those with poor broadband coverage or older farmers may struggle with using technology to complete self-assessments. A solution was suggested by a participant that the community and farm liaison officers can work together to support older farmers to use the technology.

Satellite mapping was also discussed as a potential tool for monitoring, with participants having mixed success with this in the past, for example shadows from clouds blocking fields.

### 9.3.2 On-site assessments

In one scheme process workshop, the group appreciated that there would be a need for people to come on farm for monitoring and evidencing. However, participants felt that they needed to be a separation between advisors and assessors to maintain a confidential unbiased relationship with advisors and be able to seek advice in an open manner. There were concerns raised about the capacity of advisors and assessors and that this could cause knock-on effects for when farmers receive their payments.

## 9.4 Data

The Welsh Government have indicated that as part of the SFS, data captured as part of the sustainability review will be used by the Welsh Government to provide collective data on the industry's sustainability credentials, providing the evidence to support promotional campaigns highlighting the Wales farming sector as sustainable, as well as providing a baseline to enable the monitoring of progress with SLM outcomes. The data can also be used by the farmer to positively demonstrate to consumers and retailers the sustainability credentials of their farm. They also plan to re-use data already being captured by farmers to reduce administrative burden, and share data they collect with both the farmer and wider industry (after anonymisation) where it adds value.

Use and sharing of data by the Welsh Government was a topic of conversation in some of the workshops. Participants raised concerns about data sharing stemming from a lack of trust in the Welsh Government. Participants had questions and a lack of understanding for why the Welsh Government wanted farmers to input data as part of the scheme.

This was particularly pertinent for KPIs action. In one action workshop many participants felt that they are already recording KPI data themselves and didn't want the Welsh Government involved in this process due to concerns around trust, data



sharing and use of the data. Participants had concerns that data collected as part of the KPI action could be used against them in the future.

*"Why do they need all this info – what does it matter? As long as making profit? Already trying to make us more efficient to increase profit so why do they need all this data?"*

*"Who is going to have all this data and who is going to collect it? What are they going to do with it? Worry about how it will be used as a stick, rather than to help us. Collecting info for info sake, or will it be used productively?"*

*"We need to have trust and I don't know if people trust you [the Welsh Government]. I monitor KPIs in my head. If I start sharing it, what's going to happen? Need to show you're trusted, start slowly, then do it in the spirit of improvement - not sanctions."*

Similar concerns were shared by survey respondents across various actions:

*"Again on the basis that the information was used as information only and not used to victimize underperforming areas."*

In these workshops, participants felt that they already share enough data and without a clear reason they would not feel comfortable sharing this data, especially any economic related data.

*"Need big statement in bold letters saying that this data will not be used to 'beat' you with or compare you to anyone else."*

In extra workshops, where KPIs were explored further, participants expressed concerns about data use. Some participants felt that there was a risk that data submitted through the SFS could be used to influence the supermarket chains and be detrimental to farming businesses. These participants felt that in order to protect their data it should be independent from the Welsh Government.

Participants had further questions about data usage with regard to submitting PPP and IPM data, as well as soil testing. Although some understood and liked the idea of sharing the data to promote the sustainability of Welsh farming, others are still concerned about data collection and have a lack of trust of the Welsh Government.

#### 9.4.1 Data sharing exercise

To explore the topic of data sharing further, as the final exercise of the scheme process workshops, participants were asked their view on different scenarios for sharing data as part of the scheme. These scenarios were just examples to explore farmers willingness or lack thereof to share data, with some scenarios going beyond any requirements or proposals as part of the SFS. For each of the different scenarios' participants were asked to vote and discuss if they would consider sharing their data.

- A) Data inputted is made available for you to use. You may analyse it yourself or choose to share your data. For example, you could share the scheme data with farm assurance schemes, or you choose to do the reverse and share data you have entered as part of a farm assurance scheme with the Welsh Government.
- B) Data collected from the Carbon Assessment is pooled, anonymised and shared by the Welsh Government publicly to highlight how Welsh farms are producing sustainable food and contributing to reducing carbon footprints



- C) Anonymised performance data collected as part of the scheme is shared with organisations such as Farming Connect to help improve benchmarking and provide industry support
- D) You choose to share your habitat baseline assessment data with a University so they can conduct research to investigate what works to improve biodiversity on farms
- E) You have been using new tools and technology to reduce your carbon footprint on the farm. You choose to share scheme monitoring data with a technology company so they can use it to improve how their software/machinery works.

In the first two workshops' participants did not vote for their scenarios but provided some feedback. In one workshop participants saw the benefit in the data sharing scenarios and did say they would consider sharing their data in all the scenarios but that this requirement should be optional so they could make that decision. In another workshop participants felt clarity was needed around who owns the data. There were concerns around the sharing of data to third parties and not wanting the data to be tradable. In relation to scenario A, one participant mentioned that if certain methods reduce admin burden, it is a positive.

In the third workshop on scheme processes participants voted for scenarios that they would consider using data in. There was a total of 11 participants present in the workshop, who voted as follows:

- Scenario A: 5 votes
- Scenario B: 11 votes
- Scenario C: 6 votes
- Scenario D: 4 votes
- Scenario E: 0 votes

Scenario B, sharing data to promote sustainability of Wales was deemed as the most acceptable data sharing scenario for participants. Some participants in other workshops similarly agreed that this would be a beneficial use of data. This suggests that data could be shared in this way as part of the SFS, however clear information and guidance is required to provide clarity for farmers on how this data would be used and shared. It is likely that some farmers would still be hesitant for this type of data sharing due to a lack of trust in government.

In relation to scenario C, there were concerns made around sharing sensitive commercial information particularly in relation to supermarkets being able to access this information and use it against the farming sector.

In relation to scenario D for sharing data with universities, there would need to be more information and an individual relationship between the farmer and the university to build trust and to have clarity on the use of the data.

Participants raised that their data is valuable, particularly for tech companies; therefore, if they were to share their data in this scenario they would like to be fairly compensated for this data.

## 10 Conclusions

Farmers were supportive of the general principle and concept around several of the actions within the scheme. In particular participants felt that having actions in the scheme relating to improving soil health, hedgerow management, renewable energy options, animal health and welfare, and farmer health and safety were important.

*“the strength is that it's looking at long term health of the soil from the sampling rather than just short term increased yields through application of synthetic fertilizer.”*

*“renewables, I think that's very good in terms of strengths ... especially as people are renewing the electric contracts and stuff like that. So we we'd be very keen to invest in solar and wind potentially going forward. And of course, with the animal health I think probably the most important point with that is that it's monitored to showing improvement over time.”*

*“Health and safety is vital for this industry. We've got an awful track record of deaths or, you know, the regional 30 a year plus all these accidents... so it's vital that we do it.”*

Overall, across the Optional (OA) and Collaborative Actions (CA) there was positive feedback and participants were keen to choose actions which they felt could work well and bring benefits to their farm. Some participants were supportive of the idea of a universal layer of actions which would help to bring all participating farms across Wales up to a similar standard, although in several cases participants wanted to see Universal Actions (UA) simplified and many participants raised concerns about a 'one-size-fits-all' approach to these actions.

Most participants recognised the importance of the future scheme being underpinned by principles of sustainability despite having some differences in opinion on how best this would be achieved. Throughout all workshops several participants raised that they were already completing some of the actions. For those that weren't completing the actions they discussed how it could work for them and tried to work through potential practical barriers to these actions on their farms. These insights are included throughout this report and provide useful guidance for the Welsh Government on how to improve the practicality of actions for farmers.

Whilst participants raised strengths to the scheme throughout the co-design process, there were common areas where participants raised concerns. The following sections breakdown the common concerns raised by participants and key areas for the Welsh Government to consider in the development of the SFS.

### 10.1 Lack of clarity around the objectives of the scheme

In both workshops and the survey, farmers expressed that there was a lack of clarity around what the outline proposals were asking farmers to do as part of the scheme and what the objectives are that the Welsh Government are aiming to achieve. Particular concerns included:

#### **Lack of tangible detail in the outline proposals**

Farmers were concerned about the lack of detail within the outline proposals publication, particularly in terms of payment rates and requirements for completing the actions. This was shown through both survey comments and discussions in workshops where participants either specifically noted a lack of detail or were asking lots of questions about the action. In the survey, KPIs had the most comments from

respondents that related to uncertainty around detail of the action with 17 comments from both those who were willing and unwilling to undertake the action. Professional Soil testing had the most comments for uncertainty around payment rates with 39 comments from both those willing and unwilling to undertake the action.

Participants across the workshops emphasised how difficult they found it to comment on scheme actions without payment rate details and for most farmers the payment rate would determine whether or not they enter the scheme. This was also reflected in survey responses, where payment rates were the top enabler for all 14 of the UAs. Workshop participants stated that:

*“I want to make a general point – we all want to do our best, but until we know the money available and how we’ll be supported... when we know what moneys available, then we can plan what we can do. What I will be able to do will depend on the money.”*

*“At the end of the day, a lot of the decisions will be made on a business point of view. Fine to look at what we have already to contribute to the scheme, but until we know what the payments will be, it’s going to be very difficult to make a decision.”*

Workshop participants also expressed their disappointment with the lack of detail within the outline and possibly a lack of innovation:

*“When this report came out [the SFS outline], I read it and read it again and thought I must be missing something – saw nothing new in it. It’s a lot of words, big doc, but it says nothing.”*

Participants concern around the lack of detail was often linked to the timelines for transitioning away from CAP and BPS payments to the new system. Farmers were concerned that the outline proposals publication showed that not enough progress had been made and with key dates approaching farmers felt that more information about the future opportunities should be available.

*“Time is getting short. I would hope these things are shown to us in a more developed form, otherwise what are the chances to come back on it before the scheme is launched.”*

### **Confusion with how the scheme has been described, with certain objectives seeming to be contradict one another**

A number of workshop participants and survey respondents felt unclear what the Welsh Government were trying to achieve through the SFS as several actions appear to contradict one another. One workshop participant noted:

[Participant discussing perceived contradictions between the UA on biosecurity and the OA on public access] *“For Farm Assurance we have a [biosecurity] protocol and anyone officially visiting the farm has to use the tank of disinfectant. What is the difference for those who walk through the fields- why should the protocol be different for them when visitors have to go through the biosecurity measures? There is conflict here between Farm Assurance, biosecurity and these actions.”*

KPIs appeared to have the most contradictions with other actions. Examples included contradictions with the Tree cover and Habitat actions which were perceived to require taking land out of production. It was felt by some that completing what were perceived as more environmentally orientated actions would potentially negatively impact on their KPIs. One workshop participant stated that:

*“Removing 20% of land is going to affect KPIs. If you already have machinery set up for certain acreage and you have to take 20% out for other actions it’s going to put the business under pressure – will be overcapitalised on equipment.”*

Comments were also made about the contradictions between the KPI action focussed on farm productivity and the actions under both Diversify, differentiate, specialise to add value and the Native breeds actions. Workshop participants pointed out that the KPIs presented would show the most favourable results for more intensive farms producing standard high-output crops and livestock and would therefore not show as favourable metrics for farms using specialised or native breeds. There were also concerns that there would need to be data available to conduct benchmarking against a wide range of farm types producing different types of products in order for benchmarking to be of value to the farmer.

In one workshop participants discussed the contradictions and difficulties around completing the actions relating to biodiversity and also completing the OAs around improving public access. Participants understood why both actions were included in the scheme and the benefits of them but felt that they could be increasing biosecurity risks on their farm by increasing public access. This increased risk could therefore be a barrier to some farms taking up the OAs.

Additionally, workshop participants and survey respondents were very keen for the SFS to continue on from previous AESs as seamlessly as possible. One example of where there was a lack of clarity around continuity from Glastir, was with the use of overwinter stubble and wildlife cover crops and whether these would be supported as part of the multi-species cover crops UA. Participants were keen for this to continue as they could see the benefits to their farm and bird populations.

It was suggested that the wording around UAs needs to be carefully put together in order to promote the right management options. One participant gave the example of how with the current wording it can be perceived that the scheme is supporting use of artificial fertilisers:

*“Using artificial fertilisers should be optional, using things which are ‘good’ should be universal. Confusing having artificial fertilisers within universal indicators as making out that everyone should be doing this.”*

A small number of workshop participants also noted confusion around the way that the scheme has been laid out and the actions grouped under characteristics. One workshop participant explained that:

*“In this section, its about ecosystem of the farm, but half of it is about water which is linked to other things (such as slurry management). Why is rare breeds in ecosystem section? If going to put it anywhere, should go in with veterinary stuff. Little niggles but basically symptom of whole scheme being fragmented and crammed. Makes the scheme complicated. Would want simpler scheme.”*

## 10.2 Rewarding existing work and earned recognition

Throughout the workshops participants strongly stated that they would appreciate a system for earned recognition and payment rewards for those who are already undertaking actions. There was concern from some that payments and recognition would not be given to those who are already completing actions or continuing maintenance of features. This was particularly the case for the pond creation action,

peatland UAs, and the livestock “good quality of life” OA. It was felt that many farmers were already doing these actions to a high standard and should be rewarded for their hard work and positive contributions. There was also a suggestion in one workshop that quality of the ponds created should be measured and those creating and maintaining the most ecologically beneficial ponds should receive the most reward.

Where participants were part of other schemes, they were keen on the idea of removing duplication of effort. Farmers were keen to see earned recognition used to reduce potential administrative burdens. Administrative burden was in the top three barriers identified by survey respondents for half of the UAs. Therefore, being able to offer a reduced administrative burden to those already putting in the administrative effort relating to these actions would reduce pressure on some farmers.

*[Participant is discussing the UA around a minimum level of learning including health and safety] “A lot of this is coming in through Red Tractor. We had a health and safety course last week. This action is duplicating effort a bit.”*

*[Another participant agreed and followed on] “In our Red Tractor inspection, the main development from 18 months ago has been in health and safety and training. Everything that is named here as part of SFS, we will have to do for red tractor anyway.”*

Examples given in the workshops of where earned recognition would be possible included:

- Biosecurity evidencing already done through farm assurance and the British Horse Society Accreditation
- Plant Protection Product reporting already done through HSE systems
- Antibiotic testing as part of the AHIC action is already done through farm assurance
- Learning related to health and safety and other farming topic already completed through Red Tractor

In addition, a frequent comment submitted in the survey by those that indicated they were not willing to undertake the UAs, described that they were actually already completing the action or partly completing the action. This was the case for all actions within the scheme, other than for the protected sites UA. Some illustrative examples include:

- 12 comments for Biosecurity
- 17 comments for professional Soil testing
- 17 comments for AHIC
- 9 comments for multi-species cover crop
- 17 comments for H&S Learning

This suggests that some farmers who are already completing or partly completing some actions for their own farm benefit may not be interested in doing them as part of the SFS as they may not wish to be under restrictions.

However, it was also clear from workshop responses that the outline proposals did not make clear to them that payments would be available for those already completing actions and would not just be for new features or methods implemented. Both responses from the workshop and responses from the survey indicate that



better communication is needed to clarify that those already completing the action do not need to do additional work to enter the scheme.

### 10.3 Concern with one-size-fits all approach and UAs

Workshop participants strongly emphasised that each farm context is important and that a one-size-fits all approach would pose barriers to entry to the scheme, add pressure to farmers and not promote maximised sustainability outcomes. There were concerns in workshops as well as interviews about a 'one-size-fits-all' approach in particular in relation to the UAs:

*“Different farms are suited to different things and can make different contributions.”*

Workshop participants particularly had concerns about the generalisations of some actions such as KPIs and the Learning. It was felt that these activities needed to be farm specific in order to be of value to the farmer. It was also suggested that Soil testing could include context specific guidance so that farmers can utilise their results and better understand how to improve their specific soils.

Participants in one workshop also noted that some actions would be much more difficult to complete for certain farm types. One example given was for creation of ponds and scrapes which would be much more costly and difficult to maintain for coastal farmers and those with limestone or silty ground as they would need to buy in substantial amounts of clay.

Within these concerns about a one-size-fits all approach, farmers were also concerned about the concept of 'universal' actions. Some workshop participants felt that by not allowing farmers a free choice on which actions they undertake, barriers to entering the scheme are already created and in particular, some of the larger more intensive farms may be disincentivised to join. Quotes from workshop participants and interviewees include:

*“Fundamentally opposed to the idea of UAs.”*

*“The scheme doesn't incentivise people to do some of these actions if they can't do all of the universal actions. It is payment for all UAs or nothing. Losing the incentive for some types of management.”*

*“For me would be better for scheme to be relative thing to be paid for how much you do. Inflexibility of the scheme. If people can't enter then they do nothing so having a 'halfway house'.”*

This echoed suggestions in some workshops that UAs should be simplified in order to motivate those farmers for whom joining the scheme would require a lot of work as they are not yet completing many of the actions. For example, in one workshop it was suggested that the Soil sampling UA should be simplified in order to not overwhelm and disincentivise farmers who do not yet complete any soil testing.

Where UAs came with a list of exemptions, such as for the 10% Tree cover action where peatland and protected sites were exempted, workshop participants were relieved to see this clarity and thought for differing farming contexts.

Finally, it was suggested by some workshop participants and survey respondents that some UAs and OAs could be interchangeable in order to maximise environmental benefits. It was suggested that the UAs of 10% Tree cover and 10% Habitat creation as well as the OA of Peatland restoration and management could be interchangeable, where it made sense in the context of the farm. This was

particularly the case where farms had a large coverage of peatland or habitat already and preferred to manage or expand these areas than convert these areas to woodland (where allowed) or take more land out of production (as they felt they had already taken out enough to meet their environmental responsibility). The participants argued that by focussing on one or two rather than all three of these actions where they were already managing the feature, they could produce better environmental outcomes and further improve management.

## 10.4 Support for the industry

Workshop participants and survey respondents had a number of key concerns around how the SFS will be supporting the agricultural industry both in terms of monetary support and supporting food production/ local markets.

### Payment rates

Workshop participants and survey respondents wanted to make sure that the scheme sufficiently supported farmers to conduct actions so that they could continue to be viable businesses.

*“I can’t see that the Welsh Government has got enough money to pay anyone enough to make it worthwhile to participate into the scheme.”*

*“If people can’t make profit at the end of the day, it will take people out of the rural economy and rural areas. [It is] important young people have an option to make enough money to stay in the rural economy. Can’t have all this prescriptive stuff without making a profit. If they don’t make a profit, they will have to leave the countryside.”*

As payment rates were the main enabler identified by survey respondents, it is clear that communications and payment rate commitments will be key to increasing farmer confidence in the scheme and their trust in the Welsh Government to deliver a scheme which does financially support farmers. Many farmers felt that future rounds of consultation when the payment rates have been published will be very important.

### ■ Limiting spending on consultants

Participants were keen that, where appropriate, most actions could be conducted by the farmer without the need for consultant support, as they were concerned that the ‘money pot’ for the scheme will be reduced to pay for consultants rather than for farmers undertaking actions.

*“Think it’s important that farmers can carry out a lot of the work in the scheme themselves to keep families home and in the countryside to give them a wage. In the past, there has been too much work in schemes for farmers to be able to do themselves at one time, then getting a contractor in to do the work would result in the farmers being in their loss. Lots of farmers wouldn’t have the cash flow to pay people either to do a large quantity of the work in schemes in the given time period. Important that the work is spread out over a few years.”*

This was clearly shown in the survey results as the questions around the professional Soil testing action produced the most comments relating to uncertainty around the payment rates with many respondents giving short comments such as who is paying for this testing or that the costs outweigh the benefits. Other examples of comments include:



*“Additional cost with no clear benefit to myself or the environment. What is the end goal here? This needs to be financially supported.”*

There were also comments in the survey about the usefulness of the AHIC action in terms of potential increases in veterinary professionals time:

*“The animals are well looked after, vets are called out if and when needed. This action only benefit vets profit margins and will not improve animal health.”*

There was an overall theme that the SFS should be supporting farmers the most and therefore they should be the one receiving the monetary rewards.

#### ■ Food security and food production

Participants in workshops and the survey felt that food production and ensuring food security had not been covered as part of the scheme, in particular in relation to Tree cover and Habitat actions which are perceived to reduce the productivity of farms.

Many farmers see their main role as food producers and as a result feel unsupported by government during very difficult times, as all support payments now come through agri-environmental schemes. A large proportion of survey respondents and workshop participants did not feel the benefits of the actions under the characteristic “Resilient & Productive farms” were sufficient in showing that food production was a priority for the Welsh Government. One workshop participant expressed:

*“The Welsh Government in the last 12 months should have seen a massive turnaround in world food stocks – food is getting scarce, but now we are discussing how to reduce food further. Need to look at this further down the road – droughts around the world, Ukraine war. Need to produce an environment is sustainable and food is sustainable for the Welsh gov. Do others think the same? That food production is going to be thrown out.”*

Farmers understood the benefits of many of the actions under the SFS but were often negative about actions which would require taking land out of production such as the Tree cover or Habitat UAs. Some felt that environmental actions were being prioritised and were concerned that some farming businesses would be forced to follow the money from the SFS and that national food production could decline.

## 10.5 Readiness of the industry and supply chains to support actions

Participants raised concerns about the resource capacity of advisors, contractors, inspectors and parts of the supply chain (providing resource for conducting actions) to cope with the influx of farmers conducting actions as part of the scheme. These concerns related to actions such as Tree cover or Soil testing where assistance from consultants, laboratories, contractors and plant nurseries.

Farmers were concerned about the capacity of Farming Connect and laboratories to conduct the Soil testing action:

*“Soil sampling is seasonal and I tried to do it through Farming Connect on a few occasions but always too long to wait! Sounds good but not always practical.”*

*“Where on earth are you going to get the lab infrastructure to do this.”*

Farmers needed more clear communication from the Welsh Government around how long contracts may be for SFS and whether they needed to already be completing the actions prior to entry into the scheme. This type of clarity was also mentioned around payment rates as there were concerns that some actions could require upfront costs to the farmer and so an upfront payment would be preferred. An example given for this was for seed mix for cover cropping. The importance of capital grants was also highlighted in terms of fencing related to biosecurity and some OAs.

*“The cost of double fencing would presumably fall on the farmer whose boundary it was - the substantial cost of undertaking such action would need to be considered and support made available.”*

In addition, many participants felt that the scheme was too front loaded, and they wanted to be able to simplify the scheme so that farmers could get more accustomed to what is required rather than be overwhelmed in the short term.

## 10.6 Farmers under pressure

Multiple workshop groups raised concerns around the pressure that the SFS could add to farmer's already difficult jobs and the knock-on effect of this on mental health. The farming industry has faced high levels of poor mental health for a long time with many studies highlighting the causes of stress within the industry. Current global and political events are increasing costs for inputs, increasing volatility of prices for produce and creating uncertainty in policy and support payments. This has been highlighted in a 2019 report from Public Health Wales and Mental Health Foundation that the Brexit transition is bringing a high level of uncertainty to the farming industry and is a key moment for those authorities with decision making power to support the farming industry with this transition (Davies, AR. et al., 2019<sup>21</sup>). An interviewee with experience working with farmers on mental health suggested that many farmers are already struggling with the legislation, high regulation and inspections and that poor IT literacy and broadband issues only exacerbate this.

As many farmers see their main role as food producers, many are likely to see any increased burdens from an AES as a barrier to scheme entry. This is demonstrated through survey responses where administrative burden was in the top three barriers for 7 out of 14 UAs.

Workshop participants in both workshops relating to KPIs independently raised strong concerns about benchmarking and the KPI UA. It was felt that farmers conducting benchmarking under a government scheme where data was being submitted to the government could add undue pressure and have a negative impact on mental health.

*“Can you be told you're a bad farmer if you don't comply or?... that's a massive weakness [of the scheme] as well because there will be people that will feel victimised. We hear about mental health a lot in agriculture. So there will be people that take that negatively as well to say I'm not doing a good enough job. I don't compare and it depends how strictly you view that data there will be people that will take it extremely sensitively.”*

<sup>21</sup> Davies AR, Homolova L, Grey CNB, Fisher J, Burchett N, Kousoulis A (2019). Supporting farming communities at times of uncertainty: an action framework to support the mental health and well-being of farmers and their families. Cardiff: Public Health Wales NHS Trust & Mental Health Foundation.

However, concerns were also raised regarding other actions, particularly those which require data to be inputted to the Welsh Government:

*“I'm struggling to ascertain what the information will be used for? Is it purely for the farmer's information or will the data be used and farmers placed in competition with each other? Farmers do not need greater anguish or strain in an already mental health affected sector.”*

Most of the concerns were expressed at a higher level about the scheme as a whole and the potential burden it may put on farmers who may need to be part of this scheme to sustain their businesses and livelihoods.

*“So, I just want to mention the elephant in the room really which is mental health in agriculture. It's diabolical, there was a terrible statistic out, this last week? And you know, I'm really worried, with you know what we've sort of discussed today, but it's going to be even more burdensome bureaucracy wise for farmers. And I think, you know, that needs to be noted. I'm very, very worried about that. And I think we all know somebody who's really struggling at the moment, let alone when these new measures come in so that needs to be really thought about very, very seriously.”*

*“I think we're on the right lines but at 62 I fear the administrative burden, which this scheme will create, will exclude me. I have already had to pull out of Glastir for mental health reasons. I'm going to be very reluctant to sign up to another scheme with the same attitude from Rural Payment Wales still present. Which is a great pity as I am already farming in a way that Rural Payment Wales seem to be taking Wales. This is why I signed up to Tyr Gofal and Glastir years ago, only in Glastir's case to have given Rural Payment Wales another stick to hit me with.”*

Current circumstances such as Brexit, the Covid-19 pandemic and the Ukraine war affecting supply chains, increasing input costs and high interest rates all add to the pressure on farmers.

## 11 Reflections on the co-design process

This section provides some reflections from the ICF and ADAS team on the experience of the co-design process. The definitions and practical applications of 'co-design' can vary with often different degrees of design input and sharing of responsibility across the different contexts. At the public policy level it is often difficult to fully achieve the delivery of co-design due to the parameters of government and institutional systems and political environments. To reflect on this project and the second phase of co-design for the SFS we will reflect on the success of the process across the principles of co-design.

### Inclusivity

Several different methods of engagement were utilised – online workshops, telephone interviews, paper copies and online copies of surveys and face-to-face discussion at shows and markets – to improve the inclusivity of the co-design process and to allow farmers to engage in ways that suited them. To remove the potential barriers of time constraints farmers were given an opportunity to choose which workshop they would like to attend giving options for both morning and later afternoon workshops across several different dates. Farmers who were unable to attend those dates, had to cancel their attendance, or had technology difficulties during the workshop were given the opportunity for a telephone interview at anytime that suited them, including later in the evening. For farmers attending online workshops guidance was given on how to use Microsoft Teams and separate practice technology sessions were offered to everyone so they could join and check they were comfortable using the online platform. Those farmers who were unable to attend the workshops or had to cancel last minute appreciated the opportunity to speak to us in an interview at a time that suited them. The co-design process was provided in both English and Welsh for the survey, interviews and workshops. For workshops farmers had the option of choosing their language preference (Welsh/English or no preference) and were assigned to workshops according to those preferences. Welsh speaking workshops were facilitated by the ADAS team with all PowerPoint and briefing material provided in Welsh. For any interviews where farmers' language preference was known they were assigned to an interviewer with the relevant language skills and where their language was unknown a bilingual interviewer was assigned to them so that the option for Welsh or English could be provided.

### Participation

A co-design process requires stakeholders to be involved in the design process, designing 'with' the stakeholders and not 'for' the stakeholders. There can sometimes be difficulty in this design process as stakeholders have different comfort levels with sharing and developing ideas. Whilst the aim of co-design would be to design the whole policy with stakeholders starting from a 'blank page' in the design process, this can sometimes present a challenge. In this round of co-design, having the outline proposals available which gave initial ideas to build on was useful for the purpose of generating ideas and discussions with farmers. It was important to stress to participants that what was proposed in the outline proposals are at this stage 'proposals' and not final ideas and that their suggestions and ideas are welcomed. Using the actions proposed in the scheme as a starting block generated lots of discussion in workshops, and when participants had concerns or disagreements with the actions proposed, as facilitators ICF tried to prompt participants to share their ideas and suggestions for improvements. This resulted in lots of ideas being shared which are included in this report. Some participants were frustrated that

more detail within the actions could not be provided at this stage as they had hoped to gain more clarity for what is to come so they can plan for the future.

Some workshop participants expressed a feeling of imbalance in the workshops, as the Welsh Government colleagues and consultant facilitators in the workshops were being paid for their time, but farmers were not. Farmers recognised that they were key to the co-design process and were disappointed that their time was not being valued in the same way as others on the call. They emphasised that this is unfortunately normal practice and often limits engagement. Farmers understood that by engaging with the workshops they could be benefitting themselves in the long run as the scheme could potentially be better tailored to them but there was scepticism about the impact that they could actually have. This highlights the importance of the Welsh Government's role in emphasising that farmers have been listened to in refining scheme scope and processes, and that their time and input has been value.

### **Transparency and shared understanding**

The briefing material and introductory presentation given to workshop participants provided a good understanding of the basic premise of the scheme in relation to the UA, OA and CAs and a relatively good level of understanding about the scheme and topics for discussion. In the briefing material extra information provided by Welsh Government policy colleagues and links to external information such as tools and other advice and guidance were included to try and provide further information and policy developments beyond what was already shared in the outline proposals. Whilst some participants had been able to view this extra information, it was not clear that this information was always utilised fully by workshop participants which is likely a result of a lack of time and incentive to go through this extra level of detail. The presentation at the beginning of the workshop gave participants an opportunity to go through the workshop topics and objectives again, which helped to improve the policy knowledge and understanding of the participants. In the workshops farmers were able to provide both general high-level feedback as well as detailed, practical and farm specific feedback and ideas for the scheme which suggests that the briefing material, workshop presentation and facilitation of the workshop provided sufficient understanding and clarity on the SFS and the purpose of the session. Whilst in all workshops there were good discussions and sharing of ideas for the development of the scheme, there were frustrations from some participants that they could not be given more information and ask questions of the Welsh Government about policy development and specifically payment rates. Many participants felt that payment rates and more details on the scheme should have been provided and were disappointed they could not have that level of information at this stage.

### **Trust**

In order for stakeholders to buy-in to the co-design process, they need to trust that their inputs into the design of the scheme will be utilised. This requires stakeholders to trust ICF and ADAS as facilitators of the process to capture and share their inputs and ideas to the Welsh Government and it requires trust in the Welsh Government to consider and deliver against their inputs. The trust in the co-design process will be dependent on the results of this co-design round and the consideration of farmers insights into policy development. Although there were high numbers of survey responses and workshop attendance, there were some signs of stakeholder fatigue with many participants choosing not to respond or attend despite being given the opportunity to. This could be a result of policy fatigue from several previous rounds of consultation and co-design.

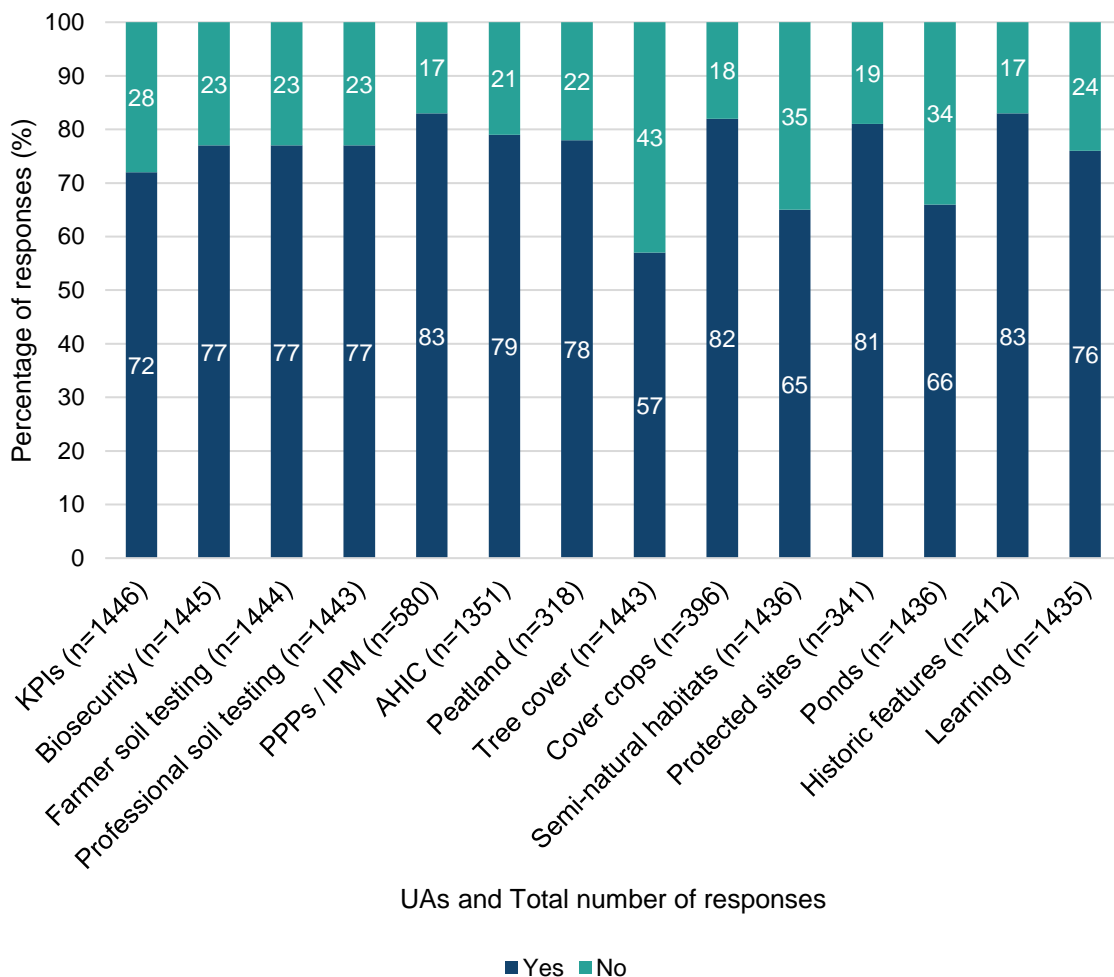
## Annex 1 Universal Actions

For each Universal Action (UA), survey respondents were asked, 'would you be willing to undertake the above action on your farm, as a UA under the new Sustainable Farming Scheme?'. Responses across stakeholders for the UAs ranged from 57% willing to undertake the action to 83% willing to undertake the action.

The UAs with the highest percentage of respondents willing to undertake the action were the PPP/IPM action (83%), multispecies cover crop action (82%) and historic environmental features action (83%) (Figure 11.1). However, these actions had a lower response rate, as they require a specific feature or management measure to be implemented on the farm.

The UA with the lowest proportion of respondents who were willing to undertake it is the tree cover action (57%). This is followed by semi-natural habitats, where 65% were willing to undertake the UA, and ponds and scrapes, with two thirds (66%). These actions were perceived by farmers to require a degree of land use change and loss of food production.

Figure 11.1 Survey respondents' willingness to undertake UAs in the SFS (n=318-



1446)



## 11.2 Summary of Enablers and Barriers to undertake actions

### 11.2.1 Enablers to undertaking actions

In the survey, where respondents indicated that they were willing to undertake an action, they were asked to indicate the key factors that would enable them to do so.

#### *Enablers to undertaking actions*

COM-B Model	Enablers
Capability (Skills and experience)	I have the necessary skills / knowledge to undertake this action
Capability (Skills and experience) /Opportunity	I am already doing this action on the farm.
Opportunity	My farming system lends itself well to this action.
	I have the time/labour/material resources to complete the action on the farm
Motivation	I am willing to undertake this action to receive payments through the scheme
	This would improve my farming outputs (e.g., animal health/ productivity/ profitability
	This would allow me to be more environmentally sustainable
	I think the action is good farming practice.
	Other, please specify.

**The motivation** to complete the action in order to receive **payments**, received the highest responses across all UAs, with between 62%-76% of respondents choosing this enabler across all actions.

Other enablers that received a high response included:

- **Motivation:** because it is perceived as good farming practice and/or because it allows the farmer to be more environmentally sustainable.
- **Skills and experience/opportunity:** because they are able to and already complete the action on farm.

It is worth noting that the five UAs: Tree cover, Habitats, Protected Sites, Ponds and Historical environment did not have 'good farming practice' as a top enabler, though they did have 'environmental sustainability' instead. Workshop discussions suggest that farmers see these actions as heavily environmentally focussed and could require land use change. The survey results relating to barriers and enablers suggest that while some farmers were motivated to complete these actions, the benefits for the farm may require further promotion. In the workshops, some participants did share their thoughts on the potential on farm benefits of these actions but felt that more could be done to promote them.



### Frequency of top enablers for conducting UAs

- *“I am willing to undertake this action to receive payments through the scheme”* – the **top enabler for all 14 actions**.
- *“I am already doing this action on the farm.”* – one of the top enablers for 9 UAs
- *“I think this action is good farming practice”* – one of the top enablers for 9 of the UAs
- *“This would allow me to be more environmentally sustainable”* – one of the top enablers for 8 of the UAs.
- *“I have the necessary skills / knowledge to undertake this action”* - one of the top enablers for KPI action.
- *“My farm type and/or farming system lends itself well to this action”* - one of the top enablers for the Historic Environmental Features action

### 11.2.2 Barriers to undertaking actions

Where respondents indicated they were not willing to undertake the action, they were asked to indicate the key barriers. These varied slightly but mostly covered the following:

#### Barriers to undertaking UAs

COM-B Model	Barriers
Skills and experience	I don't have access to the necessary skills/knowledge/experience to undertake this action on my farm
	I don't have the physical ability to undertake this action (due to a disability or ill health)
Opportunity	My farming system does not lend itself well to this action.
	I don't have the time/labour/material resources to complete the action on the farm
	I don't have control over this type of management on the farm, for example, because I am a tenant / in a contract / commons
Motivation	The action would not benefit my farm
	The effort required outweighs the benefits
	I don't think the action is good farming practice
	I think the action is too restrictive or risky
	I don't want the additional administrative burden
	Other, please specify.

A lack of motivation due to perceiving the effort to outweigh the benefits was the most common barrier to willingness to undertake actions. This is likely, in part, to be related to a lack of knowledge of the payment rates for conducting actions, which are an important component of farmers decision-making. The lack of knowledge of payment rates was a frustration of respondents in the survey as well as for workshop attendees. Another potential reason this could be a barrier is due to some respondents either not perceiving or having a lack of understanding around some of the benefits that these actions could have on their farm system as ‘the action would not benefit my farm’ was another common barrier listed.

The literature suggests that when considering the costs and benefits of schemes, farmers may have a ‘present bias’, i.e. have a disproportionate weight on the immediate costs and benefits than those of the future (Dessart *et al.*, 2019<sup>22</sup>; Lyon *et al.*, 2020<sup>23</sup>). Present bias can be particularly persuasive in the case of sustainable farming practices that entail upfront costs, for example in the form of new machinery or reduced yield, but with benefits that don’t occur until later, whether that be payments for conducting scheme actions or ecosystem benefits such as improved soil health (Dessart *et al.*, 2019; Lyon *et al.*, 2020). This was apparent in the workshops when discussing how some of the actions may relate to tenant farmers who only have the land for a short period and therefore may not have a long-term approach to farm management decisions.

Other common barriers included:

- **Motivation**; not wanting the additional administrative burden
- **Opportunity**: not having the time/resource and the action not being suitable to the farming system.

The lack of motivation to complete actions due to administrative burden was more apparent with actions that required some form of data logging or management plan. Administrative burden was a frequent theme in the workshop (see C section), with some participants raising concerns that certain actions such as KPIs and IPM assessments could just be ‘tick box’ exercises with few on farm benefits from conducting them. There was also a concern about the duplication of effort that some of these actions could have with current farming practices, and workshop participants were keen to see this reduced and for there to be earned recognition where appropriate.

For similar reasons as ‘administrative burden’, the lack of opportunity to conduct the action due to time and resource availability was a top barrier for most actions (except for actions that required land use change as other motivational barriers rated higher). This was a frequent concern in the workshops:

*“I’m looking at a fragmented approach that will require me to fill in a lot of documentation. Which compared to a large farm with a manager, etc. I might struggle. I think it needs to be ‘with above X acres you do this, below X acres do that’. It’s not worth my while, as it’s an admin burden for smaller farmers.”*

*“Issue of time. No one has time, can see some thinking they don’t have time to do it, particularly if they need to get their head round it. Think they’ll look at it and think – how do I do it? What to do? I don’t have time.”*

### **Frequency of top barriers for conducting actions**

- *“The effort required outweighs the benefits”* – was one of the top barriers for 12 of the 14 UAs

<sup>22</sup> Dessart, F., Barreiro-Hurlé, J. and van Bavel, R., 2019. Behavioural factors affecting the adoption of sustainable farming practices: a policy-oriented review. *European Review of Agricultural Economics*, 46(3), pp.417-471.

<sup>23</sup> Lyon, J., Hurley, P., Hall, J., Tsouvalis, J., Rose, D., Little, R., 2020. Inclusive design of post-Brexit Agri-Environmental policy: Identifying and engaging the harder to reach stakeholders, A quick scoping review. Universities of Sheffield and Reading. DOI:10.15131/shef.data.12506582

- *“I don’t have the time/labour/material resource to complete this action”* – was one of the top barriers for 9 of the UAs
- *“I don’t want the additional administrative burden”* – was one of the top barriers for 7 of the UAs
- *“The action would not benefit my farm”* – was one of the top barriers for 7 of the UAs
- *“My farm type and/or farming system does not lend itself well to this action”* – was one of the top barriers for 5 of the UAs.
- *“I don’t think the action is good farming practice”* – was one of the top barriers for the Tree cover action
- *“It is not feasible to plant 10% tree cover on my farm type and/or farming system”* – was the top barrier for the Tree cover action

The table below provides the breakdown of the top enablers and barriers for conducting across all respondents. Where relevant the differences in these enablers and barriers across the different sectors has been referenced throughout the main body of the report. A full breakdown by sector of the enablers and barriers has not been provided due to the variety of variables across these responses making it difficult to draw fair comparisons.

***The top 3 enablers and barriers chosen for each of the UAs across all respondents***

UA	Willing to complete	Top 3 Enablers	Not willing to complete	Top 3 Barriers
KPIs	72%	Payments (76%)	28%	Administrative burden (69%)
		Good farming practice (55%)		Effort outweighs benefits (52%)
		Skills & knowledge (47%)		Lack of time/labour resource (50%)
Biosecurity	77%	Payments (65%)	23%	Farm type doesn’t lend itself well to action (46%)
		Good farming practice (59%)		Effort outweighs benefits (46%)
		Already completing (46%)		Lack of time/labour resource (45%)
Farmer soil testing	77%	Payments (71%)	23%	Lack of time/labour resource (51%)
		Good farming practice (58%)		Administrative burden (50%)
		Environmentally sustainable (43%)		Effort outweighs benefits (41%)
Professional soil testing	77%	Payments (65%)	23%	Lack of time/labour resource (44%)
		Good farming practice (54%)		Administrative burden (50%)

UA	Willing to complete	Top 3 Enablers	Not willing to complete	Top 3 Barriers
		Environmentally sustainable (42%)		Effort outweighs benefits (36%)
PPPs / IPM	83%	Payments (63%)	17%	Lack of time/labour resource (49%)
		Good farming practice (52%)		Administrative burden (49%)
		Environmentally sustainable (38%)		Effort outweighs benefits (41%)
AHIC	79%	Payments (62%)	21%	Administrative burden (48%)
		Good farming practice (55%)		Effort outweighs benefits (42%)
		Already completing (55%)		Lack of time/labour resource (37%)
Peatland	78%	Payments (72%)	22%	The action would not benefit their farm (43%)
		Environmentally sustainable (53%)		Effort outweighs benefits (39%)
		Good farming practice (40%)		Farm type doesn't lend itself well to action (33%)
Tree cover	57%	Payments (73%)	43%	Not feasible to plant 10% tree cover (67%)
		Environmentally sustainable (54%)		The action would not benefit their farm (57%)
		Already completing (52%)		Don't think the action is good farming practice (48%)
Cover crops	82%	Payments (62%)	18%	The action would not benefit farm (37%)
		Already Completing (60%)		Farm type does not lend itself well to action (36%)
		Good farming practice (50%)		Effort outweighs the benefits (36%)
Semi-natural habitats	65%	Payments (73%)	35%	The action would not benefit farm (55%)
		Already completing (52%)		Farm type does not lend itself well to action (53%)
		Environmentally sustainable (50%)		Effort outweighs the benefits (42%)
Protected sites	81%	Payments (67%)	19%	Administrative burden (54%)
		Already completing (61%)		Lack of time/labour resource (52%)
		Environmentally sustainable (40%)		The action would not benefit farm (48%)
Ponds	66%	Payments (71%)	34%	Farm type does not lend itself well to action (52%)

UA	Willing to complete	Top 3 Enablers	Not willing to complete	Top 3 Barriers
		Environmentally sustainable (50%) Already completing (36%)		The action would not benefit farm (50%) Effort outweighs benefits (39%)
Historic Environment Features	83%	Payments (73%)	17%	Lack of time/labour resource (54%)
		Already completing (50%)		The action would not benefit farm (35%)
		Farm type lends itself well to this action (34%)		Effort outweighs benefits (33%)
Health & Safety Learning	76%	Payments (72%)	24%	Lack of time/labour resource (55%)
		Good farming practice (62%)		Administrative burden (51%)
		Already completing (36%)		Effort outweighs benefits (37%)

### 11.2.3 Willingness, knowledge and experience of actions by AES experience

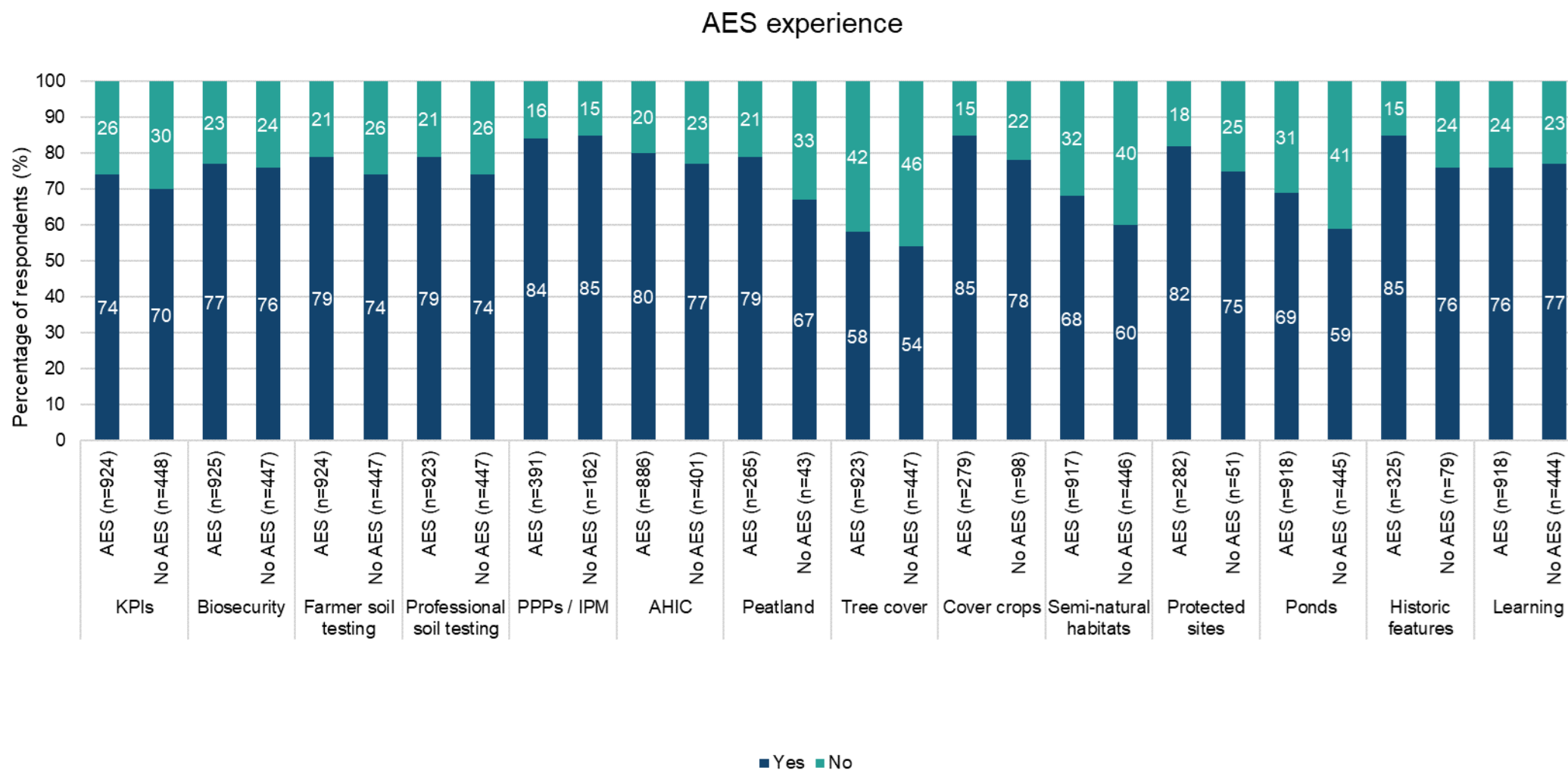
In all UA, except PPPs/IPM and Learning, those with AES experience were more likely to be willing to undertake UAs than those without AES experience (Figure 11.2). For seven of the UAs, the AES experience was marginal and may indicate that actions that have not featured in previous scheme are largely accessible to all survey respondents, regardless of prior AES experiences.

The role of AES experience is particularly evident for the following UAs, where the difference between cohorts ranged from 7-12%:

- Peatland
- Cover crops
- Semi-natural habitats
- Protected sites
- Ponds

These actions have been part of previous AES schemes and it is rational that those with prior experience are likely to have fewer barriers to undertaking them.

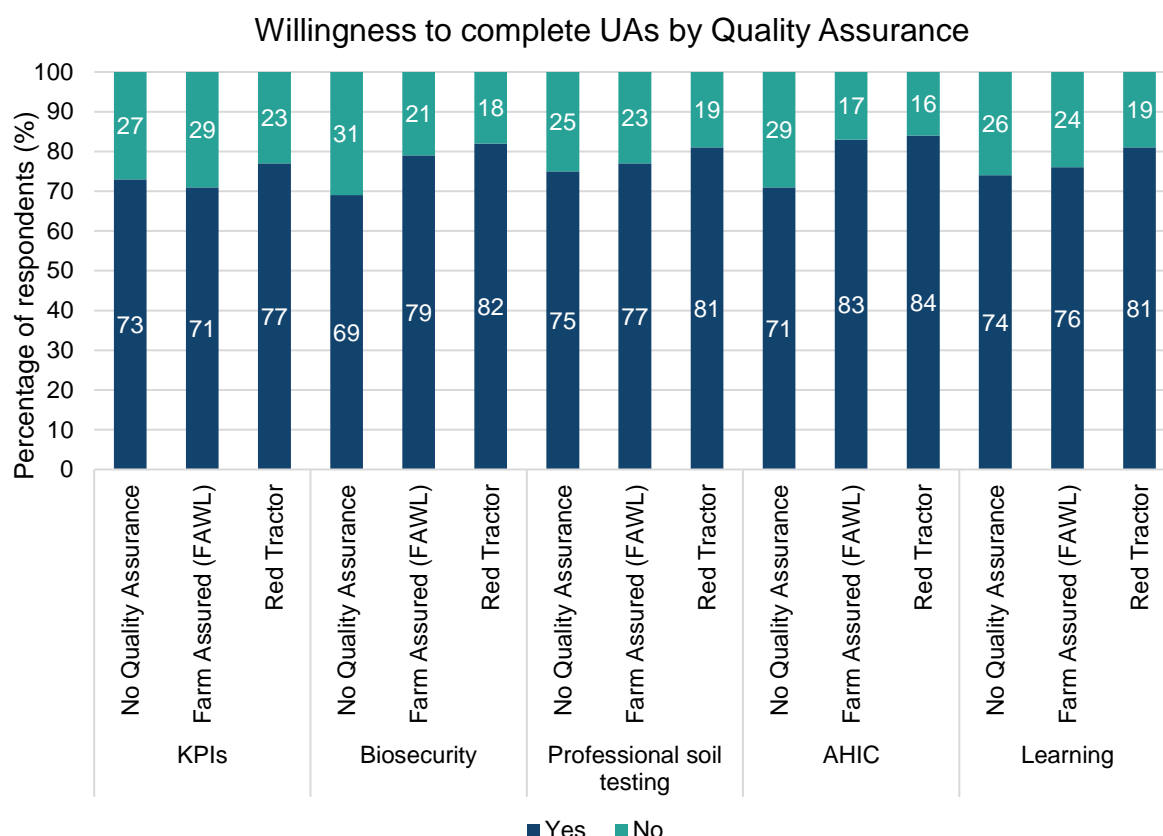
Figure 11.2 Willingness to undertake UAs by agri-environment experience



### 11.2.4 Willingness, knowledge and experience completing actions by quality assurance scheme experience

The quality assurance schemes which had the most survey respondents as members were Farm Assured Welsh Livestock Beef and Lamb Scheme (FAWL) (n= 858) and Red Tractor Assurance (n=249).

Figure 11.3 Willingness for survey respondents to undertake the KPI, Biosecurity, Professional Soil Testing, AHIC and Learning UAs by Quality Assurance scheme experience.



On balance those with either FAWL or Red Tractor assurance were more likely to be willing to complete actions related to farm productivity and animal health than those not in quality assurance schemes (Figure 11.3).

These respondents were also more likely to have skills and experience in completing these UAs compared to those who were not quality assured, with the difference ranging from 14-63% for these 6 actions. The largest difference was for the Animal Health Improvement Cycle where 71% of FAWL and 75% of those with Red Tractor were completing this action compared to 12% who were not part of a farm assurance scheme. For those in FAWL and Red Tractor schemes the enabler 'I am already completing the action' was selected more often than the enabler of "I am willing to undertake this action to receiving payments as part of the scheme". This was also a key workshop finding, with participants asking that, to avoid duplication of effort, these quality assurance schemes should be considered as earned recognition for some of the actions.



However, the survey respondents who were a part of FAWL and Red Tractor generally were less likely to be willing to complete actions perceived as having only environmental benefits than those without quality assurance experience.

## 11.3 Farm sector analysis

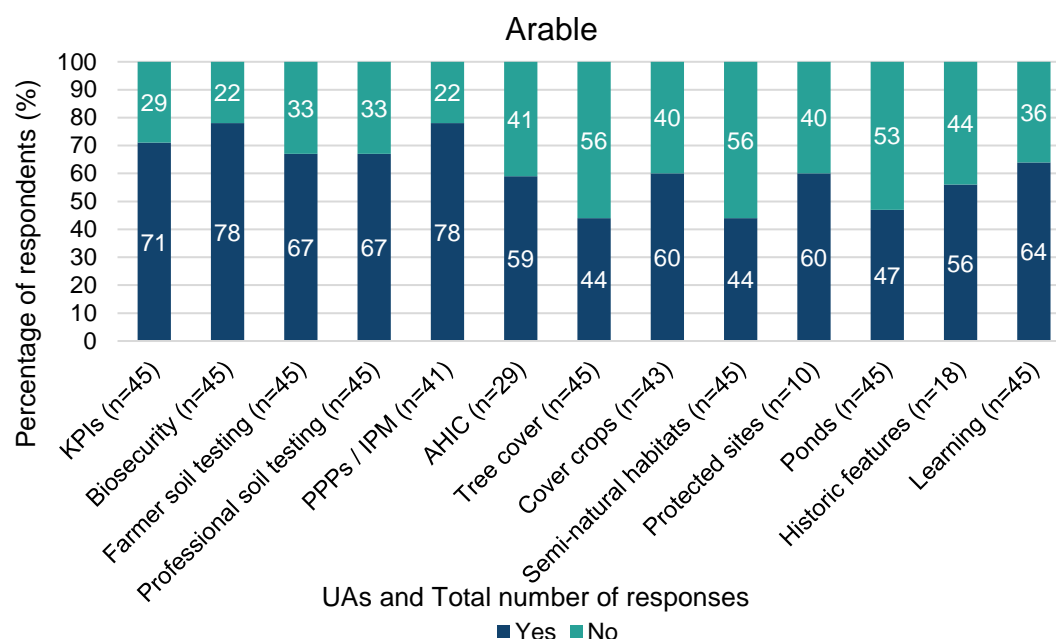
The graphs below provide a breakdown of respondent's willingness to undertake actions by their main farming sector. Breakdowns have not been given for the following sectors due to a low number of responses: pigs (n=5), poultry (n=4). A summary has been provided for the horticulture sector although graphs of the breakdown responses have not been included due to low number of responses (n=16).

There were some variations in the willingness of farmers from different sectors to undertake the different UAs, with the tree planting, semi-natural habitats and ponds actions generally scoring low across all sectors when compared with other UAs. These UAs are the most spatially prescriptive and are perceived to require an element of land use change.

### 11.3.1 Arable

Arable farmers were most willing to undertake the PPP/IPM and Biosecurity actions (Figure 11.4). Of those that indicated arable as their main sector (n=45), 91% indicated that they use PPPs. Both arable survey respondents and workshop participants indicated that this action was good farming practice, and most were already doing this on farm (56% of survey respondents). Arable farmers demonstrated particularly low levels of willingness for tree planting (44%), semi-natural habitat (44%) and pond (47%) actions which is likely due to the more intensive nature of these farming systems.

Arable farmers were less willing than expected to complete farmer and professional soil testing actions (67%). The biggest barrier for arable farmers for this action was the additional administrative burden (73%). Discussions from workshops suggested that the UA could be simplified, and the more advanced tests could become an OA.

Figure 11.4 Arable farmers' responses to the UAs (n=10-45)<sup>24</sup>

### 11.3.2 Dairy

In the survey, over 77% of dairy farmers were willing to undertake actions for 9 of the 14 actions (Figure 11.5), however they had very low willingness to undertake the following actions:

- **Tree planting:** 64% not willing to conduct the action, with the most common barrier being respondents thinking that it is not feasible to plant 10% tree cover on their farm (75%)
- **Semi-natural habitats:** 55% not willing to conduct the action, with the most common barrier being respondents thinking it does not benefit their farming system (68%)
- **Ponds:** 42% not willing to conduct the action with the most common barrier being respondents thinking it does not benefit their farming system 61%.

This is supported by findings from the workshops where a common theme was that these particular actions would be a barrier to dairy farms entering the SFS. A dairy farmer in the workshops felt that the tree cover action would be a barrier to them entering the scheme, which was a shame as they were enthusiastic about other areas of the scheme. Similar sentiment was shared by other dairy farmers, or farmers who knew of dairy farmers:

*"Milk prices are driving businesses hard – will not give 10% land to trees."*

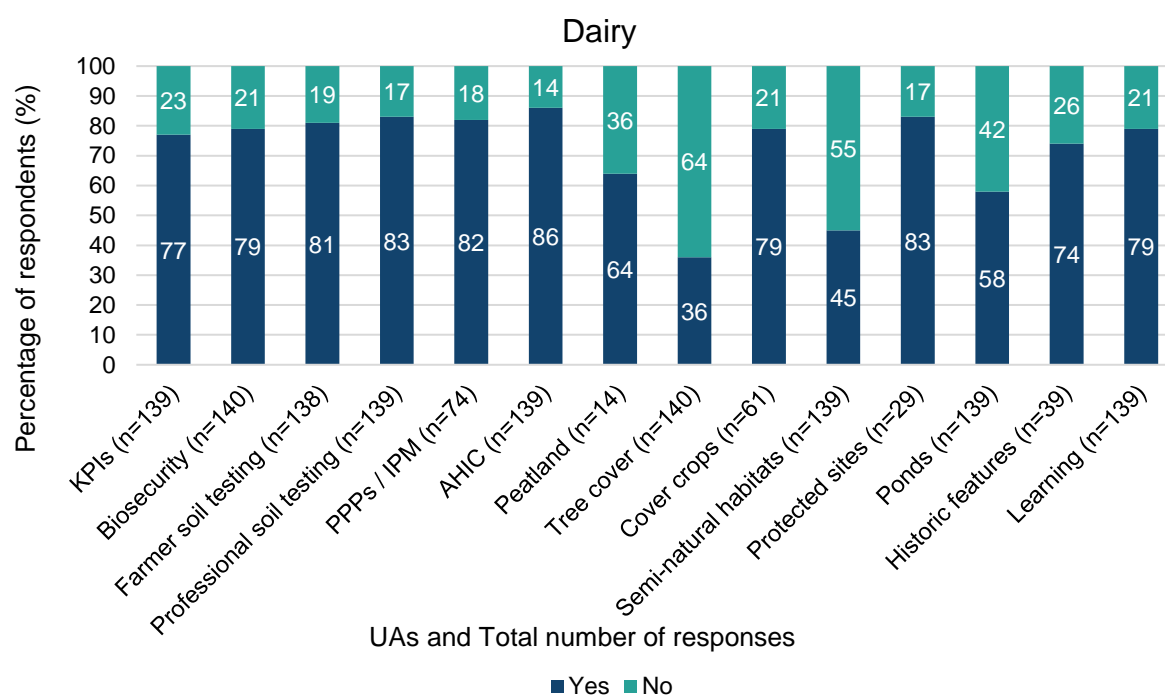
*"The more productive dairy farmers will look at the scheme and walk away."*

Dairy farms however showed the highest willingness to undertake the Animal Health Improvement Cycle (86% of respondents). Of those that indicated they were willing

<sup>24</sup> Peatland UA data removed from graph due to low response numbers and potential for disclosure.

to conduct the action, 87% indicated they were already completing this action on farm. This was the highest enabler to this action for dairy farmers (above payments).

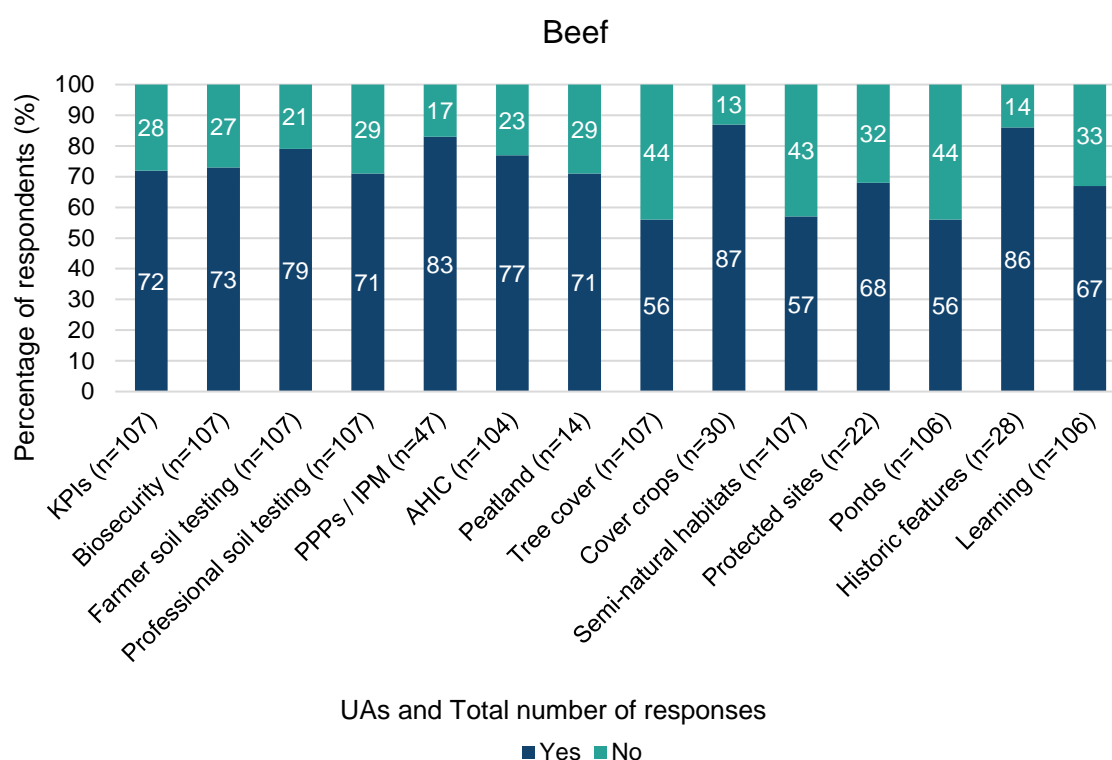
Figure 11.5 Dairy farmers' responses to the UAs (n=14-140)



### 11.3.3 Beef

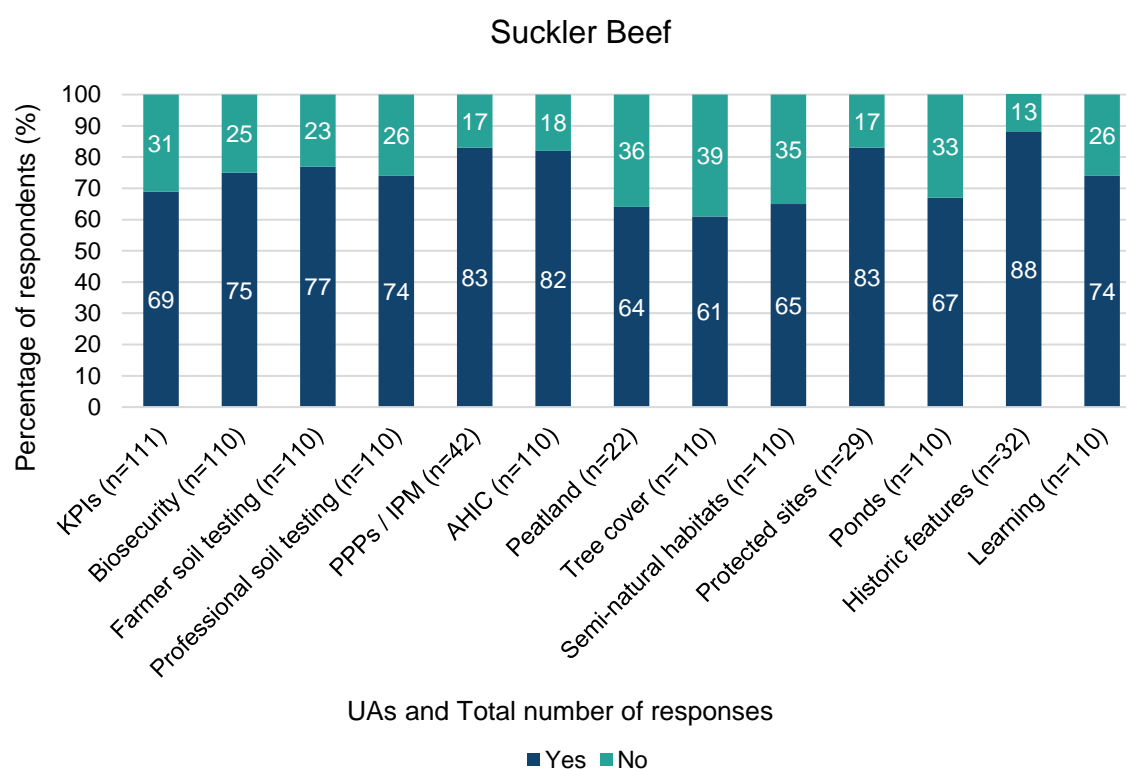
Beef farmers (n=107) indicated that they were particularly willing to undertake the Soil testing, AHIC, Biosecurity and KPI actions (71-79%) (Figure 11.6). Sub-groups of survey respondents whose main enterprise was beef, also indicated strong willingness to undertake actions that were relevant to their farming business such as the PPP/IPM, Cover cropping and Historical features actions.

Figure 11.6 Beef farmers' responses to the UAs (n=22-107)



#### 11.3.4 Suckler Beef

Suckler Beef farmers indicated that they were most willing to undertake the AHIC, Soil testing, Biosecurity and Health & Safety learning actions (Figure 11.7). Sub-groups of the Suckler Beef respondents also indicated very high willingness to undertake the Cover crops, Historic features, Protected sites and PPPs/IPM actions. Suckler Beef farmers (n=111) had a higher willingness to undertake the majority of actions compared with the Beef sector. However, Suckler Beef farmers had lower willingness to undertake actions in comparison to the Beef farmers related to KPIs, Farmer Soil testing, Peatland and Ponds.

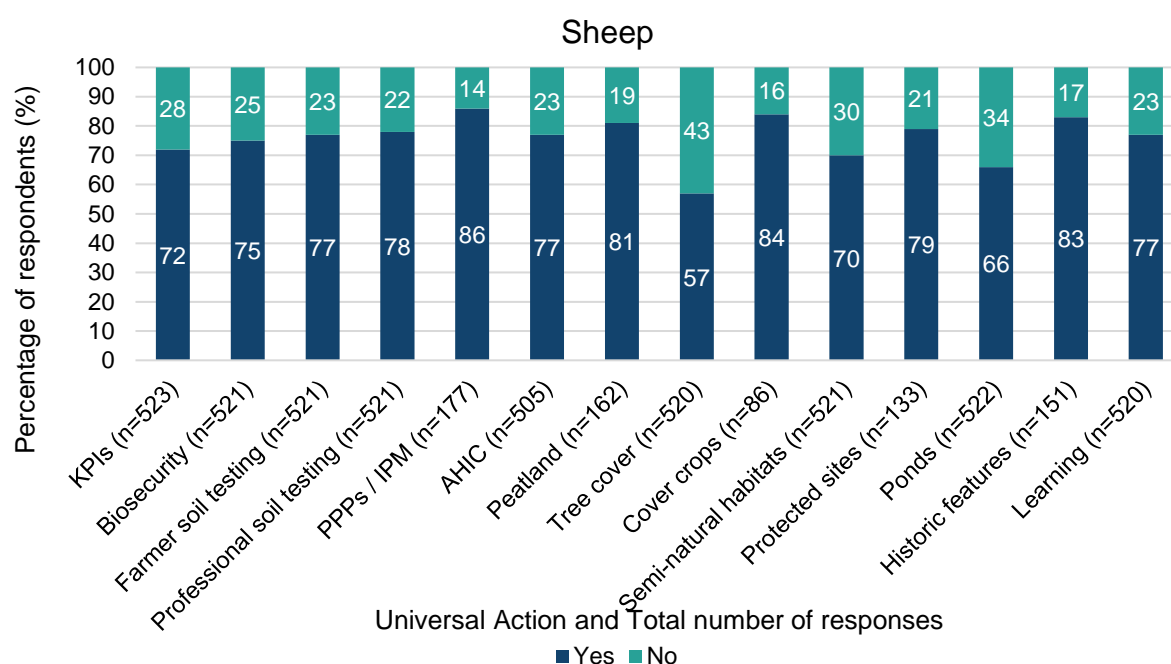
Figure 11.7 Suckler beef farmers' responses to the UAs (n=22-111)<sup>25</sup>

### 11.3.5 Sheep

The survey respondents who indicated sheep as their main enterprise demonstrated the highest level of willingness across all sectors to undertake the semi-natural habitats UA (70%) (Figure 11.8). The Sheep survey sample group were most willing to undertake the AHIC, Health & Safety learning and Soil testing actions. Across most actions the Sheep survey sample group had a similar level of willingness to undertake actions as the Beef survey sample group. They also had a similar relatively low willingness for the Tree cover (57%) and Ponds (66%) actions.

<sup>25</sup> Cover crop data removed from graph due to low response numbers and potential for misleading interpretation in the graph. 23 out of 24 suckler beef farmers indicated they were willing to complete the action.

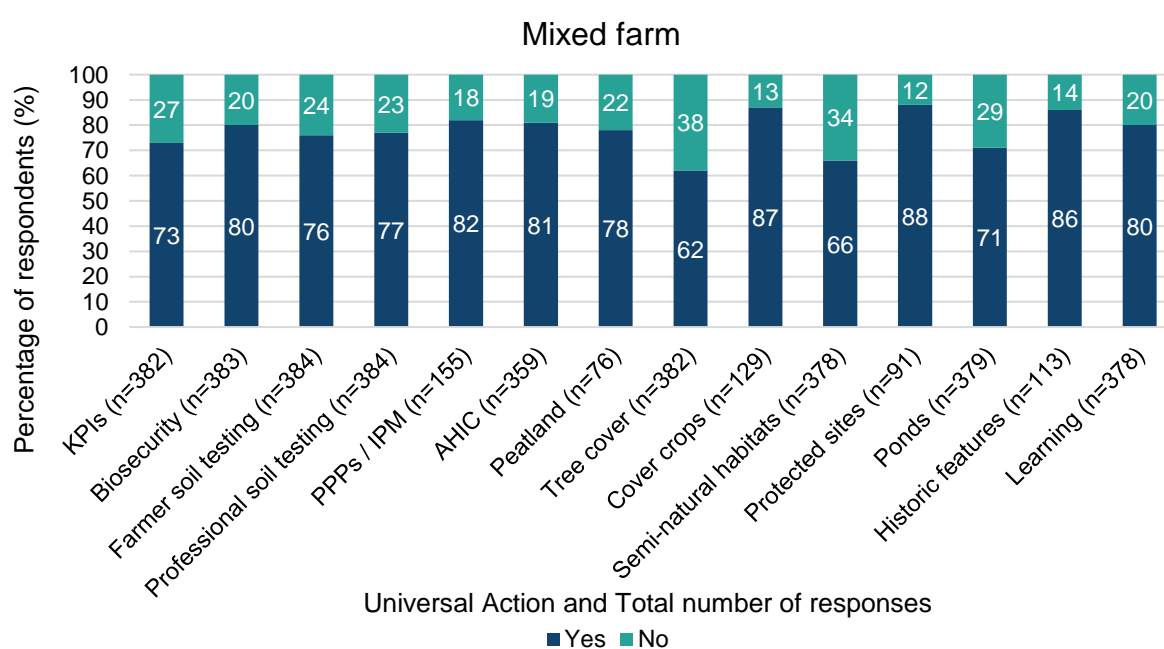
Figure 11.8 Sheep farmers' responses to the UAs (n=86-523)



### 11.3.6 Mixed farm

The mixed farm survey sample group demonstrated the highest willingness across all farm types to undertake the Health & Safety learning (80%), Tree cover (62%) and Ponds (71%) UAs (Figure 11.9). Across the other actions the mixed farm group indicated similar levels of willingness as the livestock sectors. This includes for the AHIC, PPPs/IPM and the Soil testing actions. The mixed farming group also had a lower willingness response to the semi-natural habitats action, which was similar to the Arable, Dairy, Beef and Suckler Beef groups.

Figure 11.9 Mixed farmers' responses to the UAs (n=76-384)



### 11.3.7 Horticulture

There were low response numbers from farmers who indicated horticulture as their main sector (n=16). This low response rate from horticulture sector is to be expected as crops and horticulture represent only a small proportion of farms in Wales covering approximately 4.5% of total agricultural land area in Wales<sup>26</sup>. Most horticulture respondents indicated that they were willing to complete most UAs, although this should not be seen as representative of the whole sector, given the sample size.

There was a small presence of the horticulture sector in workshops. Issues that were raised by the horticulture sector include:

- **Eligibility criteria:** The 3 Ha minimum area is a barrier for some due to horticulture enterprises typically covering smaller areas of land.
- **Soil Testing:** One participant who was representing horticulture emphasised that this type of farming is very different contextually to others. They suggested that horticulture farmers would be more interested in 'higher-level information', such as biological systems and trace elements. They also felt that the complex nature of horticulture systems may be too complex for SFS systems and Rural Payment Wales to cope with.
- **Lack of horticulture representation in KPIs:** Horticulture participants in the workshops suggested that many of the example KPIs presented would not be suitable for their enterprise and that they would be keen to see a set of KPIs tailored to the horticulture sector within the SFS.

### 11.3.8 Other (including non-classifiable)

The 'Other' farming sector group includes a wide range of farm types and therefore cannot be broken down in the same way as the other farming sectors. Those that indicated they were from the 'other' sector could include responses from individuals that are 'non-farmers' or identify as farmers but are not defined as such by agricultural policy. During scheme process workshops, the definition of an 'active farmer' caused some discussion and debate and would require further definition from the Welsh Government to provide clarity on who can apply for the SFS.

This group demonstrated high willingness to undertake the Tree cover (88%), Semi-natural habitat (88%) and Ponds (81%) actions. However, this group also had the lowest willingness to complete the Health & Safety learning and KPI actions, perhaps due to concern over applicability to their niche farm types.

## 11.4 Land Ownership

The potential difficulties for tenants to complete particular actions was a common concern during the workshops. Concerns raised included:

- **Tenancy agreement preventing actions**

Tenants unable to complete actions due to their tenancy agreement preventing certain changes on the land. This barrier is particularly relevant to tree planting and ponds actions.

<sup>26</sup> [Farming Facts and Figures, Wales 2022 \(gov.wales\)](https://gov.wales/farming-facts-and-figures-wales-2022)



## ■ **Confusion between who benefits from actions, landowner or tenant**

There was confusion in the workshops about how the SFS would work practically between a landowner and a tenant and who benefits from the actions. This was particularly apparent with the tree cover action. Some landowners may own the area of land where there is significant tree cover but only rent out the agricultural productive area to the tenant. If the tenant was unable to claim the surrounding tree cover as it is not part of their agreement, then they would have to reduce their productive area for tree planting (if tree planting is allowed as per their agreement). If tenants do have areas of tree cover in their tenancy, there was a concern that landowners would look to remove the tree covered area from the agreement so that they could receive the SFS payment instead of the tenant.

- **Long term nature of actions** – Workshop participants expressed that some actions listed, especially OAs, typically result in short-term losses in yield although they can lead to potential increases in yield long term. For example, the multi-species cover crop OA requires short-term costs and its benefits to the soil are often only seen in the longer term. Some participants felt that due to the potential short-term losses, tenants may not wish to undertake these actions as they may not reap the benefits.

In the survey, the difference in willingness to undertake actions between those who wholly and mostly owned their farms compared to those that were mostly and wholly tenanted, varied. However, for the Tree cover action, Habitat action and Pond action, tenant farms were noticeably less likely to be willing to undertake the action. This is supported by findings from workshops where it was suggested that the lack of control over land use change decisions was the main reason that tenants would be less willing to undertake these actions.

- **10% Tree cover** – 67% of those who wholly owned their land were willing to undertake the tree cover action, in comparison to 46% who mostly owned, 39% who mostly tenanted and 49% who were wholly tenanted. For those who are mostly tenanted and wholly tenanted, lack of control over this type of management is a top barrier.
- **10% Semi-natural habitat** – 72% of those who wholly owned their land were willing to undertake the habitat action, compared to 56% who mostly owned their farm, 50% who were mostly tenanted and 64% who were wholly tenanted. For those who are mostly tenanted and wholly tenanted, lack of control over this type of management is a top barrier.
- **Pond creation** - 71% of those who wholly owned their land were willing to undertake the pond action, compared to 61% who mostly owned their farm, 55% who were mostly tenanted and 57% who were wholly tenanted. For those who were mostly tenanted and wholly tenanted, lack of control over this type of management is a top barrier.

Other UAs where the lack of control over land features in the top 3 barriers for tenant farmers were:

- Biosecurity
- Farmer Soil testing
- Historical environmental features

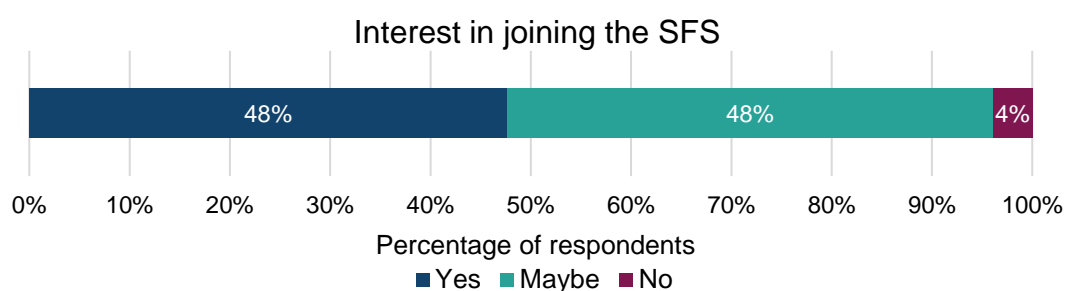
## 11.5 Interest in joining the SFS

The survey gathered data on levels of interest in joining the SFS (Figure 11.10). This allowed for the data to show whether overall enthusiasm for the scheme was related to willingness to complete individual actions or whether individuals were interested in joining the new AES but were not interested in or motivated by the actions currently offered in the outline proposals. The graphs below show that interest in joining the scheme is directly correlated to willingness to undertake the actions. Although this is an obvious link it does potentially show that a strong set of actions have been proposed in the scheme outline and these actions are motivational at least to those who are most keen and possibly most environmentally focussed.

This should also be noted as a caveat of the data that only 4% of respondents to our survey indicated that they were not interested in joining the SFS. As it is currently unclear what interest in the scheme looks like across the whole Welsh farming community it may mean that the data is positively skewed by those who are already willing to enter the scheme and those who may enter the scheme. The outcomes of the data therefore show which aspects of the scheme those who are already at least partially interested in the scheme like or dislike and where they may need support. However, the data only gives a brief indication of what those who are not interested in the scheme do not like about it or which aspects they are interested in but does not do this in a way that is applicable to the total Welsh farming population due to the low sample size in the survey.

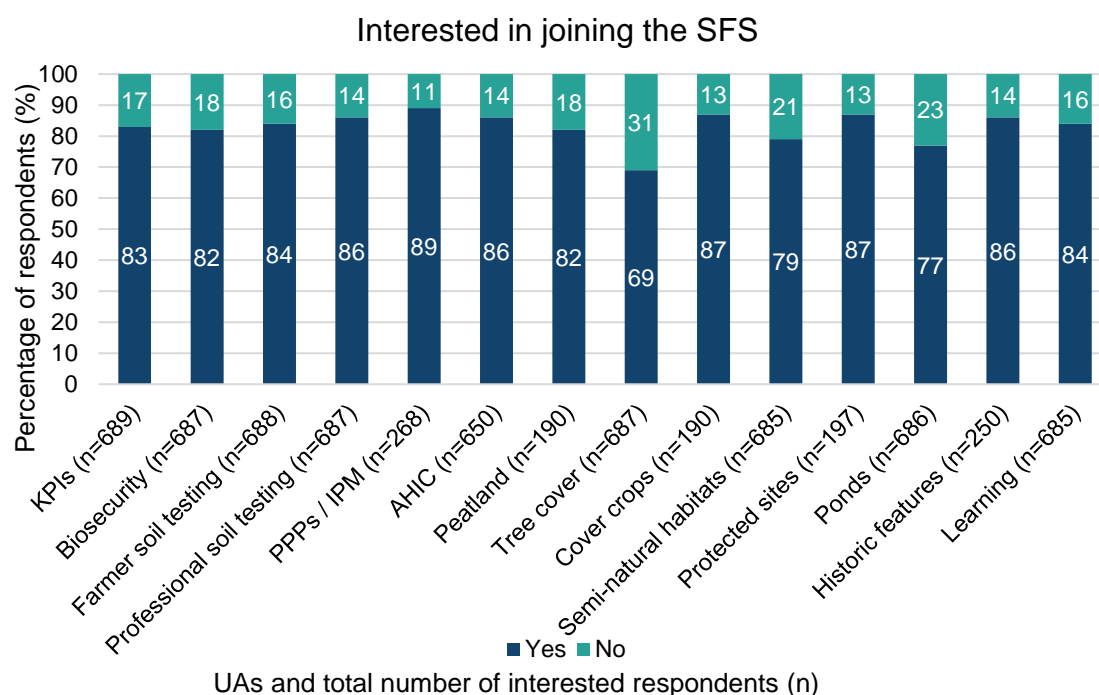
The 4% of respondents who indicated that they were not interested in joining the SFS had livestock or mixed farm types. 52% (n=30) had previous experience with AES and over half of these had at least five years of experience. Additionally, 58% (n=33) of the group were part of the Farm Assured Welsh Livestock Beef and Lamb Scheme (FAWL). 79% (n=45) of the group indicated that they would meet the eligibility criteria for the SFS and 74% (n=42) currently fill out Single Application Forms. Throughout the survey these respondents submitted comments relating to focusing on food security and either feeling unable to complete or opposing the idea of the 10% Tree cover and 10% Habitat UAs.

Figure 11.10 Interest in joining the SFS (n=1453)



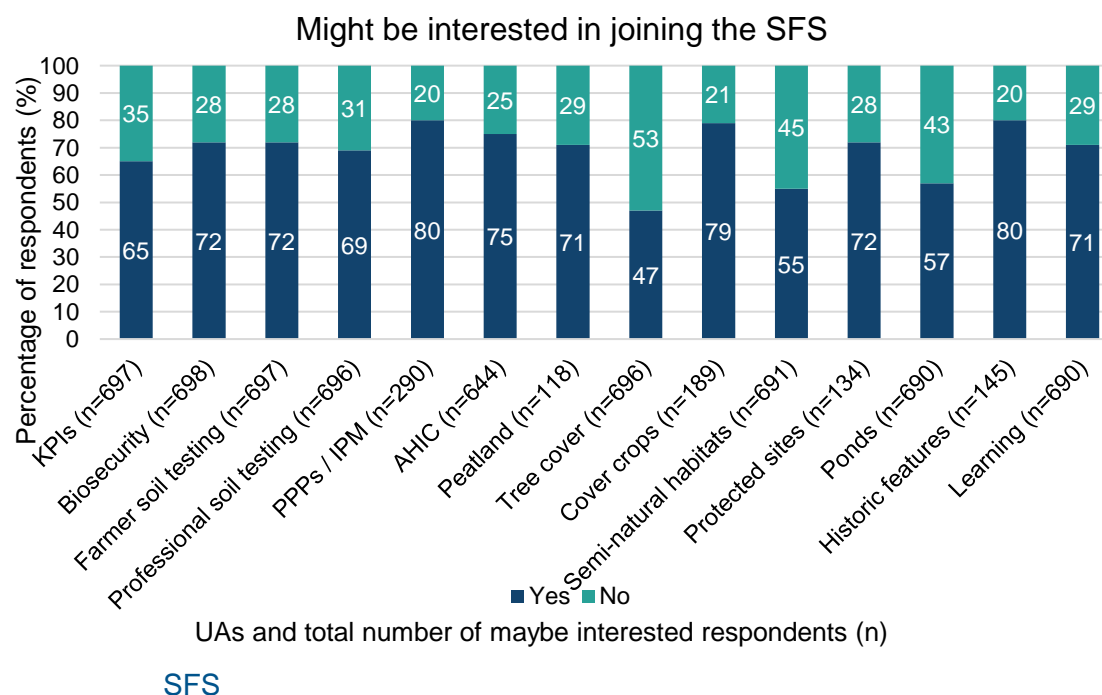
For most of the UAs over 80% of those interested in joining SFS indicated that they were willing to undertake the actions (Figure 11.11). The only actions that received less than 80% willing response rate were Tree cover (69%), Semi-natural habitats (79%) and Ponds (77%).

Figure 11.11 Willingness to complete UAs for those that are interested in joining the SFS



For those who indicated that they might be interested in joining the SFS (n=698), willingness to undertake actions was lower, ranging from 65% - 80% for most actions (Figure 11.12). Again Tree cover (47%), Semi-natural habitats (55%) and Ponds (57%) received noticeably lower willingness to undertake actions.

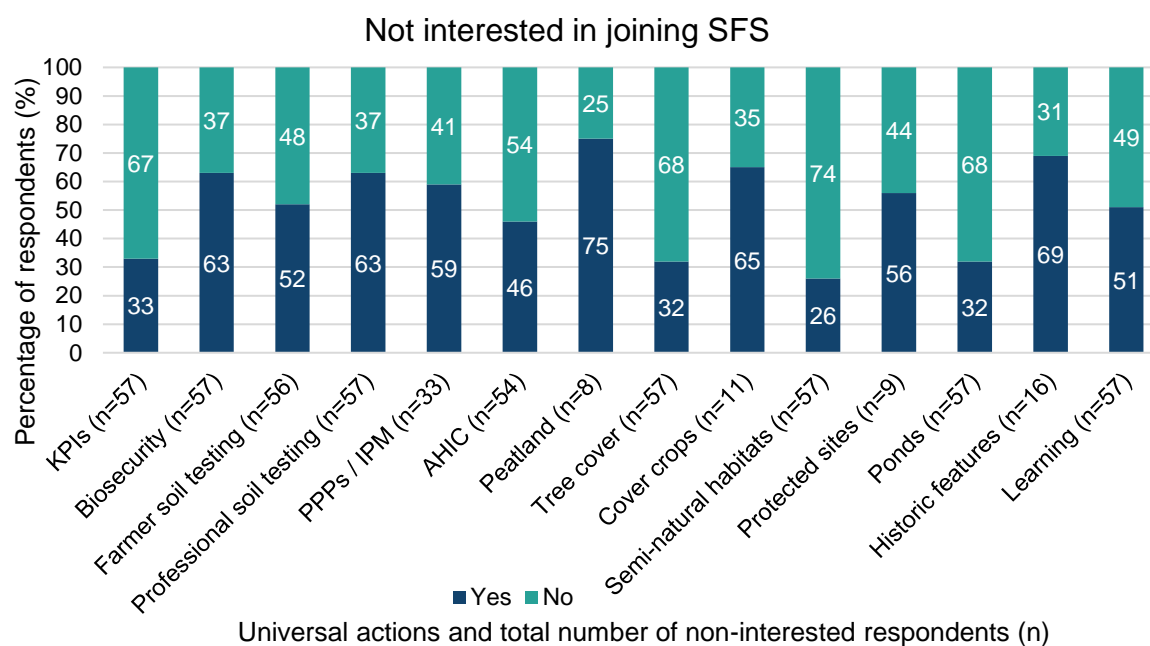
Figure 11.12 Willingness to complete UAs for those that might be interested in



Those who indicated they were not interested in joining the SFS (n=57) were less willing to undertake actions with responses ranging from 33-75% (Figure 11.13).

Tree cover (32%), semi-natural habitats (26%) and Ponds (32%) received the lowest responses again, but also KPIs received a noticeably low willingness response (33%).

Figure 11.13 Willingness to complete actions for those that are not interested in

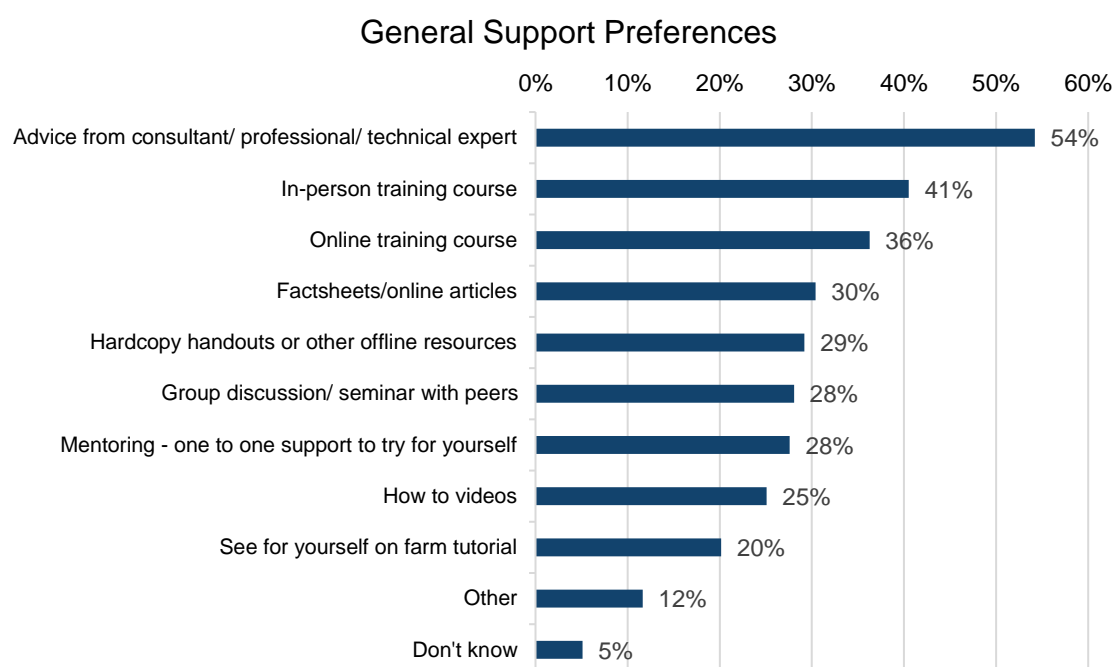


SFS

## 11.6 Support

In addition to the specific support questions related to each UA the survey also included a more general question about support preferences (Figure 11.14). The most selected type of support was 'Advice from consultants/ professionals/ technical experts' (54%).

Figure 11.14 Survey respondents indications of support preferences



Additionally, those who had previous experience of collaborative groups indicated a higher preference for 'Group discussions/ seminars with peers' (47%) than those without experience (21%).

A small number of survey respondents left comments that they find online activities and filling out forms online difficult due to IT literacy and broadband issues. They suggested that they were prefer hard copies to be available and that this can help them with record keeping.

## 12 Optional Actions

740 survey respondents filled out the Optional Actions (OA) survey. This survey was a separate voluntary survey at the end of the main survey and respondents could freely choose which questions they responded to. This should be noted as it is likely that respondents who did fill out this additional survey are the most engaged and possibly most environmentally focussed of the farming community and may not represent the average Welsh farmer and their farming objectives.

### 12.1 Summary of key survey findings

The OA that received the highest percentage of respondents indicating they were already completing it was the action to isolate incoming animals for at least 6 days before mixing with stock (58%).

#### *Top 3 OA currently being undertaken*

OA and total number of respondents	% currently undertaking action
6 day isolation	58
Graze & rest	40
Soil condition	33

The OA that received the highest percentage of respondents interested in completing the action was for farmers to use capital support to take up various energy efficient actions (71%).

#### *Top 3 OAs that survey respondents were most interested in undertaking*

OA	%
Capital support for machinery	71
Support for infrastructure	67
6 day isolation	58

The OA that received the highest percentage of respondents not interested in completing the action was the support to take up actions which restore and manage peatland (66%). This is likely due to this action being dependent on the presence of peatland on farm. When viewing the responses of those that indicated they have peatland on farm and had answered questions in the optional survey (n=170), 53% of respondents indicated they were interested in completing the actions, compared to 23% who were not interested.

#### *Top 3 OAs that survey respondents were NOT interested in undertaking*

OA	%
Restore peatland	65

OA	%
Horticulture Business	60
Public access	50

Finally, survey respondents indicated that aside from actions which involved capital support they would need the most support for undertaking the 3 metre hedgerows OA (41%). They also indicated that they would need the least support for the 6 day isolation of incoming livestock (17%).

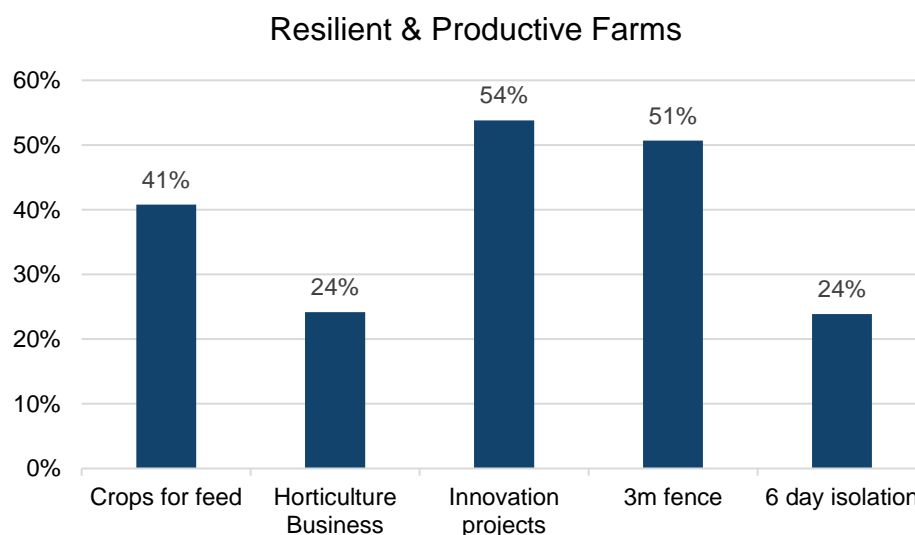
### ***Top 3 OAs where support would be needed***

OA	%
Capital support for machinery	45
Support for infrastructure	41
Hedgerows 3m	41

## **12.2 Breakdown across all OAs by scheme characteristic**

Under the characteristic 'Resilient & Productive farms' the OA relating to support for innovative projects and creation of 3 metre wide fencing had the most interest from survey respondents. The 6 day isolation of new livestock had the lowest interest rate, this may be due to the high rates of survey respondents already undertaking this action.

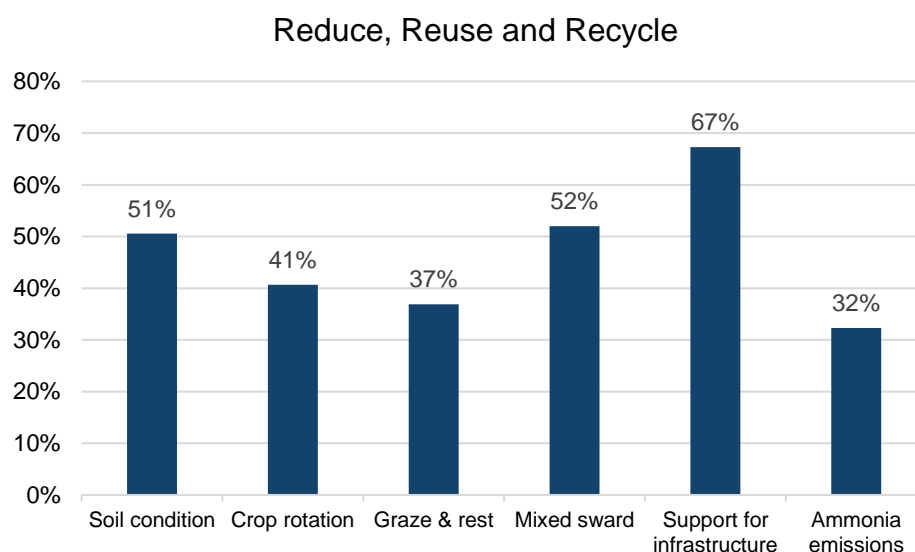
Figure 12.1 Interest in the OAs under Resilient & Productive Farms (n ranges from 740 to 733)



Under the characteristic 'Reduce, reuse and recycle' the support for infrastructure action had the most interest followed by mixed swards and soil condition. Graze and rest as well as the action relating to ammonia emissions had the lowest interest levels amongst survey respondents.

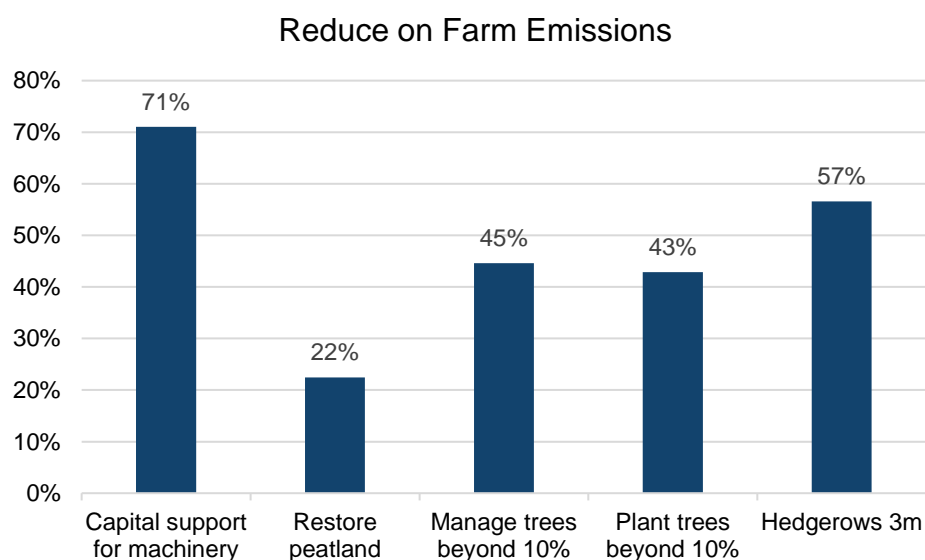


Figure 12.2 Interest in the OAs under Reduce, Reuse and Recycle (n ranges from 726 to 718)



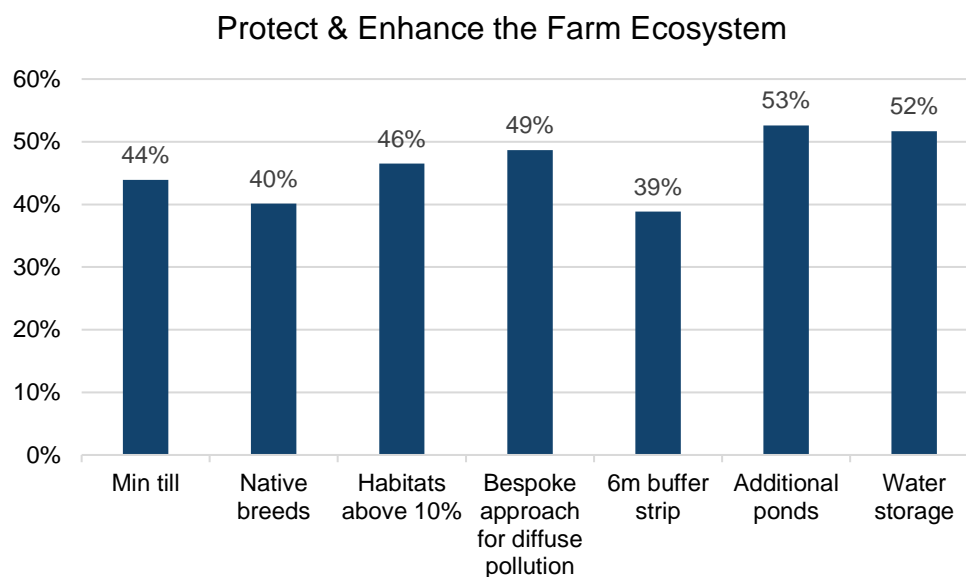
Under the characteristic 'Reduce on Farm Emissions' the support for decarbonised machinery had the most interest followed by the 3 metre hedgerows. Restoring peatland had the least interest, due to its limited applicability.

Figure 12.3 Interest in the OAs under Reduce on Farm Emissions (n ranges from 726 to 708)



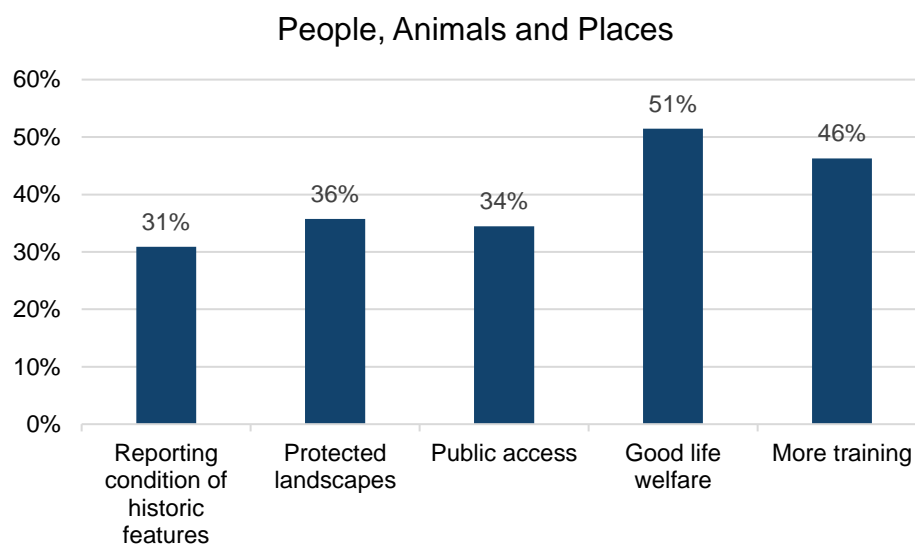
Under the characteristic 'Protect and Enhance the Farm Ecosystem' there was a strong amount of interest across all OAs. Additional ponds had the most interest followed by water storage and support with a bespoke approach for diffuse pollution.

Figure 12.4 Interest in the OAs under Protect & Enhance the Farm Ecosystem (n ranges from 724 to 713)



Under the characteristic 'People, Animals and Places' the Good life welfare OA had the most interest followed by the further training action. Public access and reporting of the condition of historic features had the least interest.

Figure 12.5 Interest in the OAs under People, Animals and Places (n ranges from 714 to 702)



## 13 Collaborative Actions

429 respondents completed the Collaborative Actions (CA) survey. This survey was a separate voluntary survey at the end of the main survey (after the OAs survey) and respondents could freely choose which questions they responded to in this part of the survey. This should be noted as it is likely that respondents who did fill out this second additional survey are the most engaged and possibly most environmentally focussed of the farming community and may not represent the average Welsh farmer and their farming objectives.

### 13.1 Summary of key survey findings

40% (n=171) of survey respondents indicated that they were already taking part in collaborative groups. Those that had experience in collaborative groups felt that group funding (65%) and facilitation (60%) were the most important support mechanisms for collaboration.

#### ***Support required for collaborative groups (n=167)***

Collaboration support	Percentage of responses
Group funding	65%
Facilitation support	60%
Digital tools e.g., mapping and data sharing	32%
Other, please specify	19%
No external support required	13%

Knowledge was the highest voted benefit for undertaking collaboration, followed by improved social contact and peer to peer support.

#### ***Benefits gained from undertaking collaboration (n=167)***

Benefits from undertaking collaboration	Percentage of responses
Knowledge	81%
Improved social contact	62%
Peer to peer support	60%
Improved environmental outcomes	57%
Farm productivity benefits	47%
Community, health and wellbeing	56%
Skills	55%
Sharing of resources, e.g., equipment, machinery, infrastructure	48%
Business profitability	34%

Lack of awareness of collaborative groups and activities (69%) was the biggest barrier to those who were not currently undertaking collaborative activity. This suggests that the SFS has an opportunity to promote and encourage collaboration if there is effective communication of these activities as part of the scheme.

### **Barriers to undertaking collaborative activity for those not part of collaborative groups (n=250)**

Barriers to undertaking collaboration	Percentage of responses
I am not aware of collaborative groups or activities to take part in	69%
I don't have the time and/or resources to take part	34%
I don't want the additional administrative burden	31%
I lack the confidence to approach others to form a new group	28%
I don't think collaboration is likely to be undertaken by my farming peers/neighbouring farms	27%
I lack the confidence to join a pre-existing group	18%
I don't believe collaboration would benefit me or my farming system	16%
I don't want to share information or resources with other farmers	7%
I think collaboration is risky or restrictive	6%
I don't believe collaboration would benefit the environment	4%
I don't think collaboration is good farming practice	2%

## **13.2 Breakdown of CAs**

The CA that the highest percentage of respondents were already completing was working with industry to explore ways to reduce the spread of disease (13%).

**Table 13.1 Top 3 CAs already undertaken**

CA	Percentage of responses
Procedure for demonstrating low risk of disease in new animals (n= 414)	13%
Catchment water quality- collaboration between farmers only (n= 412)	12%
Native breed support (n=408)	9%

CAs relating to lowering ammonia emissions and creating joined up woodland currently had the lowest levels of survey respondents undertaking the actions.

**Table 13.2 CAs with the least current uptake**

CA	Percentage of responses
Lowering ammonia emissions (n=407)	3%
Joined up woodland (n=406)	3%
Protected sites (n=396)	4%
Flood risk management (n=405)	4%
Historic environment (n=405)	4%

The CA that the highest percentage of respondents who were interested in completing was for farmers to work together in a catchment to improve water quality (62%).

### ***CAs with the most interest from survey respondents***

CAs	Percentage of responses
Catchment water quality- farmers only (n=412)	62%
Catchment water quality- wider involvement from stakeholders (n=411)	61%
Interconnected habitats (n=411)	54%
Direct selling and adding value (n=416)	53%

The CA that the highest percentage of respondents were not interested in completing was the support for projects to restore and manage peatland shared by multiple farmers (66%). This could likely because this action is dependent on the presence of peatland on farm. Of those that indicated they did have peatland on farm and completed the CAs survey, 46% were interested in completing this action and 24% were not interested in completing this action.

### ***CAs with the most survey respondents NOT interested in undertaking the actions***

CAs	Percentage of responses
Restore and manage peatland (n=402)	66%
Historic environment (n=405)	45%
Protected sites (n=396)	45%
Local community access (n=410)	45%
Joined up woodland (n=406)	45%

The CA which had the most survey respondents indicating that they would need support to undertake was the catchment water quality improvement actions. The CAs which had the least survey respondents indicating that they would need to support to undertake was restoring and managing peatland. This is likely because most respondents were not interested in undertaking these actions.

### ***CAs where survey respondents feel support is needed***

CAs	Percentage of responses
Catchment water quality- wider involvement from stakeholders (n=411)	42%
Catchment water quality- farmers only (n=412)	40%
Interconnected habitats (n=411)	38%
Lowering ammonia emissions (n=407)	38%
Direct selling and adding value (n=416)	38%

