Overview and prioritisation of main themes from the Farming Connect baseline survey (2021).

Dr David Cutress

The Knowledge Exchange Hub, IBERS, Aberystwyth University

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Introduction

The Farming Connect baseline survey has been running for the past five years – apart from a break in 2020, due to the impacts of COVID. This report concerns the results of the most recent 2021 questionnaire, which surveyed 647 farming businesses from across Wales. Of the 647 businesses, 283 of these had answered the questions in both 2019 and 2021.

Farming Connect works to deliver information, advice and support to farmers in Wales, drawing upon the latest scientific research and putting key findings into practice on demonstration and focus sites, whilst also managing innovative projects via the European Innovation Partnership (EIP Wales). Farming Connect aims to transform business prospects for farmers across Wales by offering subsidised access to a variety of consultants and specialists, technical and practical training courses, and by connecting local farmers with one another to share best practice.

The baseline survey provides the opportunity to record and analyse the opinions and thoughts of Farming Connect members, which shapes future provision. The key findings of the report indicate that farmers are engaging in activities provided by Farming Connect, and are able to interpret the resulting information to make improvements to their farm business.

NB. For questions 4 and 10, 14, 15 the total number of responses gathered is greater than 647. This is a consequence of respondents offering more than one answer to a given question, as several different options were provided for some questions.

Survey Results

1. Do you have a written business plan for your business?

Response	**Number of responses**	**% responses**
Yes	185	29
No	462	71
Total responses	647	100

All the respondents replied to this question, with the majority (71%) indicating that they do not have a written business plan for their farm businesses. Whilst almost a third (29%) do have farm business plans, this is still a relatively low number. Particularly where farms can be considered a small business, it has previously been demonstrated that small businesses that undertake more planning are less likely to fail as a venture (Perry, 2001). Whilst it has been documented globally that creation and completion of farm business plans can be an overwhelming and difficult task, it is also documented that undertaking training can improve the completion rates of such plans. As the Farming Connect programme offers a range of specific business planning support tools (including training support in this area), it will be interesting to see how these figures change in the future.

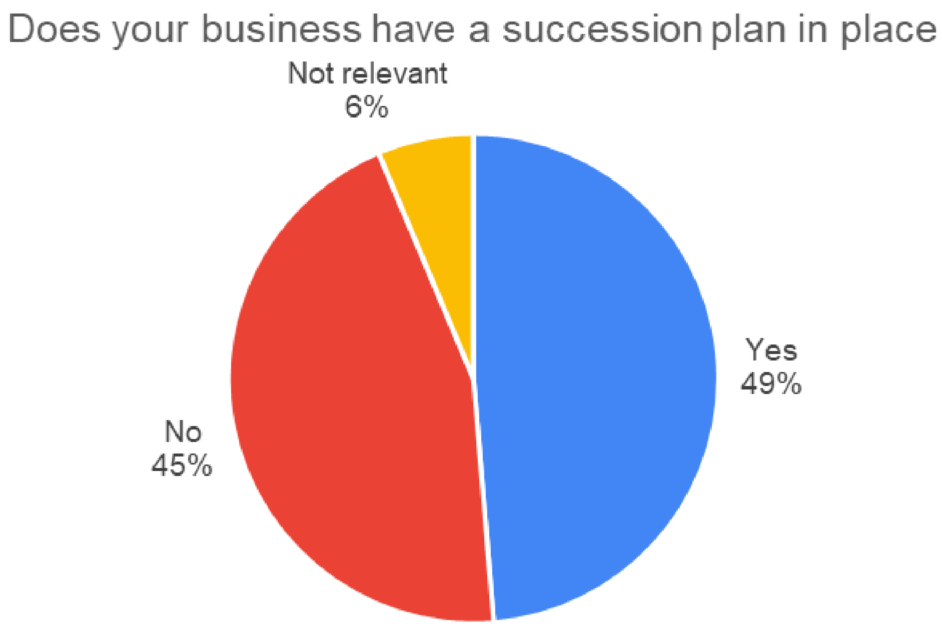
2. Do you benchmark your business performance against other similar businesses for any of the following?

Type of benchmarking	Number of responses	% responses
Physical only	44	7
Financial only	52	8
Physical and financial	118	18
Do not benchmark	433	67
Total responders	647	100
Total non-responses	0	0

From the responses, most (67%) answered that they do not undertake any form of benchmarking to similar businesses, with (18%) answering that they undertake both physical and financial benchmarking. This was followed by 8% undertaking financial benchmarking in isolation, and 7% undertaking physical only. Results indicate that the majority of participants do not undertake benchmarking, with the exact same percentage as shown in the previous survey. Whilst a higher percentage now undertake combined benchmarking of physical and financial factors than has previously been observed, the increase is minimal.

3. Does your business have a succession plan in place (someone to take over from you when you retire)?

Response	Number of responses	% responses
Yes	315	49
No	291	45
Not relevant	41	6
Total responders	647	100



The percentage of responses indicating 'yes' and 'no' were fairly evenly split for this question – with slightly more indicating that they do have a plan in place (49% answered 'Yes', whereas 45% answered 'No'). This indicated no change from the previous survey, suggesting little uptake of support available from Farming Connect – including professional services relating to succession. Whilst this lack of movement in figures may be due to the complications of the stressful period surrounding COVID, it does perhaps provide a case for further highlighting these services to Farming Connect members, or considering alternative options.

4. What type of training or workshop would you like to complete during the next 12 months?

Type of training	**Number of responses**	**% responses**
Animal health and welfare	249	17
Health and safety	141	9
Environmental skills	178	12
Business skills	150	10
Management of soils or grass	274	18
Information and computer technology skills	140	9
Machinery and equipment	154	10
Personal development or behavioural change	67	4
None	149	10
Total responses	1502	100

It is clear from the responses that respondents are keen to make use of the training being provided by the Farming Connect programme; only 10% of respondents indicated that they had no desire to undertake any training at all. From the areas where training is being provided, it is clear that there is a significant desire amongst respondents to better understand soil and grass management and animal health and welfare. Due to the limitations of this question, it is unclear whether the low response rate in certain areas is due to a lack of interest or because respondents have already undertaken the training that Farming Connect offers in these areas.

5. Have you measured the carbon footprint of your business?

Response	Number of Responses	% responses
Yes	119	18
No	528	82
Total responders	647	100

Whilst the direction of agriculture is heavily shifting towards an environmental perspective, with the Agriculture (Wales) Bill indicating such focus (GOV.WALES, 2021), the results of this survey suggest a limited uptake so far. Only 18% of respondents had performed carbon foot-printing on their business (despite the targets set for 'net zero' GHG emissions from farming by 2050 UK-wide, and 2040 targets set by the NFU). It could be argued that this is to be expected, as Farming Connect only included provision for carbon audits through the Advisory Service during winter 2021.

6. If you have not measured your carbon footprint, would you be interested in doing so?

Response	Number of responses	% responses
Yes	283	51
No	268	49
Total responders	551	100

For this section, 23 respondents who previously indicated that they had already performed carbon foot-printing proceeded to respond to this question. From the response, it is clear that over half (51%) of respondents realise the importance of carbon footprint information and are keen to understand their environmental footprint further. This clear desire should make highlighting carbon specific support provided by Farming Connect even more effective moving forwards.

7. On a scale of 1-6, how important is the management of the following to your business: (one meaning not important, six being very important):
   a) Biodiversity and habitats

Value	Number of responses	% responses
1	11	2
2	30	5
3	111	17
4	168	26
5	183	29
6	136	21
Total responses	639	99
Total non-responses	8	1

Of the total responses, 50% fall into the highest two options. This suggests that participants are aware and concerned with biodiversity and wildlife on their farms. However, this is lower than in previous surveys. The reason for this could be that new businesses were added to the survey in 2021. Only 283 businesses answered in 2019 and 2021.

   b) Soil

Value	Number of responses	% responses
1	8	1
2	4	1
3	25	4
4	58	9

5	195	30
6	352	55
Total responses	642	99
Total non-responses	5	1

When asked how important the management of soil is to their farm business, participants responded strongly, with 85% selecting the highest two numbers on the scale. This result suggests a good understanding of the need to monitor and maintain soil in order to maximise productivity and profits.

c) Water quality

Value	Number of responses	% responses
1	6	1
2	16	2
3	38	6
4	85	13
5	213	33
6	283	44
Total responses	641	99
Total non-responses	6	1

The response to water quality is similar to that of soil (although a little less pronounced); 77% of respondents ranked water quality at five or higher on the scale of importance.

d) Landscape

Value	Number of responses	% responses
1	8	1
2	25	4
3	93	15
4	130	20
5	208	33
6	174	27
Total responses	638	99
Total non-responses	9	1

The importance of managing landscapes to participants in the survey is similar to that of the previous questions, showing a normal distribution skewed towards the upper end.

e) Water

Value	**Number of responses**	**% responses**
1	7	1
2	16	3
3	33	5
4	81	13
5	208	33
6	289	46
Total responses	634	98
Total non-responses	13	2

When asked about the importance of managing water overall, participants show clear indication of importance, with 79% of total responses falling into five and six on the scale. However, slightly higher levels of non-response were seen for this question

f) Air quality

Value	**Number of responses**	**% responses**
1	10	2
2	26	4
3	78	12
4	102	16
5	220	35
6	200	31
Total responses	636	98
Total non-responses	11	2

The importance of managing air quality to participants was slightly lower than that of questions (c) and (e). The majority of responses fell at the upper-middle end of the scale (82% selected four, five or six on the scale), and most (35%) selected a level five of importance.

g) Waste

Value	**Number of responses**	**% responses**
1	7	1
2	16	3
3	39	6

4	97	15
5	246	38
6	234	37
Total responses	639	99
Total non-responses	8	1

When asked about the importance of managing waste, the majority (38%) indicated a level 5 of importance on the scale. Overall, most (75%) responses were recorded at the upper end of the scale (5 and 6).

8. As a result of Farming Connect activity, have you made any changes to your farming practices?

Response	Number of responses	% responses
Yes	429	66
No	218	34
Total responses	647	100

It is clear that Farming Connect is having a specific impact on farming practices being employed on farm, with around two-thirds (66%) of individuals indicating that they had made changes based on Farming Connect activity in some way. This is a positive sign, indicating that the provisions and services provided by Farming Connect lead to active impacts in the Welsh farming community.

9. If you have not made any changes to your farming practices as a result of Farming Connect activity, why not?

Reason why	Number of responses	% responses
Not suitable for my farming system	40	14
Lack of capital	28	10
Lack of relevant skills	5	2
Not suitable for my business or change not required at present	120	42
Lack of detail on future Government policy	18	6
Lack of labour or time	37	13
Not enough information provided at the Farming Connect event	13	5
Not enough time has elapsed yet	22	8
Total non-responses	431	0
Total responses	283	100

For the one-third of respondents who had not made any on farm changes based on Farming Connect activity, the majority (56%) indicated that this was due to either advice not being suitable for their farming system, or not required or suitable for their business at present. Further understanding of this 56% could allow Farming Connect to develop activities and advice that is tailored for a currently under-represented section of the Welsh farming community. However, it is unclear which farming systems aren't currently being targeted effectively from this survey. Of the remaining responses, 'lack of labour/time/capital' combined accounted for a further (23%), whilst a significant percentage (8%) indicated that they would be making changes, but that not enough time has elapsed to allow them to do so at this point. Interestingly, 6% indicated that the lack of detail on future government policy was impacting their decision to make changes, suggesting that as government policy solidifies in the coming years that this may change.

10. If you have made changes to your farming practices as a result of Farming Connect activity, what changes have you made?

Changes made	**Number of responses**	**% responses**
Increased animal health and welfare monitoring	132	15.27
Grass measuring	54	6.25
Soil sampling or nutrient management planning	236	27.31
Benchmarking performance	47	5.44
Improvements to the efficiency of the business	134	15.51
Training	142	16.44
Other	119	13.77
Total responses	864	100

By far the biggest change indicated from respondents related to 'soil sampling' or 'nutrient management planning' (27.31%), followed by 'training' (16.44%) and 'improvements to efficiency of the business' (15.51%) and 'increased animal health and welfare monitoring' (15.27%).

11. a) Have you planted trees on your farm in the last 10 years?

Response	**Number of responses**	**% responses**
Yes	330	51
No	317	49
Total responses	647	100

Almost a 50/50 split of respondents indicated that they had taken part in planting trees in the last 10 years.

11.b) Do you plan to plant trees in the future?

Response	Number of responses	% responses
Yes	281	43
No	190	29
Unsure	176	27
Total responses	647	100

Response to this question showed that 43% of respondents aimed to plant trees in the future, with 29% not intending to, and 27% being unsure. Of those in the previous question who answered no to planting trees in the last 10 years, over 50% would either plant trees in the future, or are unsure about it. This suggests that only around 25% of respondents overall had a definite lack of any desire to plant trees.

12. If you do not intend to plant trees in the future, why not?

Response	Number of responses	% responses
Funding/grants/rules/policy	18	9
Age of farmer/retirement	11	6
Enough trees already/previously planted	67	34
Not enough land	17	9
Incorrect land conditions or environment	14	7
Renting land/tenancy agreements	13	7
Land too good/ needed for grazing or food production	19	10
Prefer hedges	16	8
Don't see the point/ Don't need trees	7	4
Not profitable enough	1	1
Interested but need more advice	2	1
Other	14	7
Total responses	199	100

Despite indications from the questions above that around 25% of individuals were lacking the desire to plant trees, around 30% of all respondents answered this question (indicating several of the 'unsure' individuals considered themselves as not intending to plant trees despite saying 'unsure'). By far the biggest reason for not planting trees was the consideration that enough trees had already been planted on their farms or in Wales in general (34%). This was followed distantly by the indication that the land was either too good for trees, required for grazing livestock or that there wasn't enough land in general (19%). Another key driver likely due to the ending of the Glastir support was that there was a lack of desire without funding or policy to indicate benefits to farmers for doing so (9%).

13. Other than bovine TB, what is the biggest animal health issue at the moment relevant to your holding?

Health issue	Number of responses	% responses
Fluke	99	11
Lameness – Sheep	217	24
Lameness – Cattle	64	7
BVD	35	4
Johne's disease	54	6
Pneumonia	60	7
Parasites – e.g. worms	135	15
Avian Influenza	9	1
Mastitis	55	6
Other	185	20
Total non-responses	5	0.5
Total responses	918	100

The most common health concern was lameness in general (31%), with a higher concern in sheep (24%) than in cattle (7%). Alongside this, another (2.8%) from the 'Other' category could also be indicated to be directly or indirectly related to lameness, despite being described as 'foot problems'. The topic of lameness is a broad one, as the causes can be extremely varied. Nevertheless, it is an economically significant issue for farmers: in sheep, it is thought to cost approximately £28 million per year in the UK ([2]NADIS, 2019).

The next biggest issues were seen with parasite burden impact, with 26% overall (11% fluke and 15% other parasites). A significant proportion of this was also indicated to be external parasites, such as lice and scab within the largest parasite grouping. Fluke (particularly liver fluke) are known to be a high economic burden on production. All parasites are particularly influenced by climatic conditions in terms of their survival on pasture, so this increase could possibly be due to weather pattern shifts in the year preceding the survey. However, evidence also suggests that growing resistances and global warming may be hampering our ability to control parasites successfully (Gordon *et al*., 2012, Jones *et al.,*2017). Farming Connect offers information and training on fluke management (workshops, numerous articles, factsheets and technical publications) and are running projects seeking to improve farmer awareness. Highlighting these resources at key times of the year (acute infections emerge August – October, sub-acute from October, and chronic cases from December) with a particular focus on practice for the avoidance of resistance developments could be beneficial.

The ’Other’ section was significantly represented (20%) in the responses; this was further broken down into relevant sections. As can be seen, other than 40% of the respondents indicating ‘other’ due to animal health issues being irrelevant for their farming system or due to having no particular issues, bacterial diseases and fertility issues were the other two highest standalone impacts, with 6% each. Both bacterial diseases and fertility issues are well known to be heavily linked to hygiene and biosecurity, as such these may be areas which require further highlighting and focus in future by Farming Connect training, advice and information resources. Finally, farmers demonstrate clear evidence of the high impact of bTB; despite the question stating “other than bTB”, 3% of other respondents still highlighted TB as the biggest issue.

Other	**Number of responses**	**% responses**
No animals or no major issues	29	16
N/A	45	24
Foot problems	25	14
Bacterial diseases	11	6
Fertility issues	12	6
TB only major issue	10	5
Other diseases	5	3
Other reasons	45	24
Total responses	185	100

14. Have you diversified your business? If so, into what area?

Area of diversification	**Number of responses**	**% responses**
Tourism/hospitality	93	13
Renewable energy	62	9
Food & drink	32	4
Not diversified	385	53
Other	155	21
Total responses	727	94
Total non-responses	6	6

Overall, 59% of total respondents indicated that they have not diversified their business (combining non-responses with negative responses to this question) and 41% have. By far the most common type of diversification within this cohort was ‘other’ (21%), followed by tourism and hospitality (13%) – *e.g*. glamping pods, pitching for tents, renting cottages or holiday homes *etc*. It is estimated that tourism brings in approximately £5.1 billion per year to Wales, making diversification into this area an attractive choice; this option is compounded by the Wales Tourism Investment Fund – investing in new tourism businesses (Business Wales, 2016). Another popular avenue for diversification is into renewable energy (9%). Both of these diversification options show a decline from the 2019 survey percentages, whilst ‘food & drink’ demonstrated a 1% increase to 4%.

Diversification into cafes, pub/restaurants and farm shops seems to be a logical choice, as farmers are able to sell their own products directly from the farm at higher value (NFU Mutual, 2018).

Breaking down the 'Other' response found that of those easily separated into further themes, 'working off-farm or having other businesses' was a key diversification area (26% of the 20% dedicated to 'other'). This was followed by diversifying into different animal livestock systems (19% of the 20% of 'other') and 'Renting out land/creating property or contracting' (10% each of the 20% of 'other').

Other responses	**Number of responses**	**% responses**
Renting out land or property	15	10
Contracting	16	10
Working off-farm or other business	40	26
Change in animals/livestock	30	19
Other	54	35
Total non-responses	155	6

15. Are you planning a diversification project in the next 3 years?

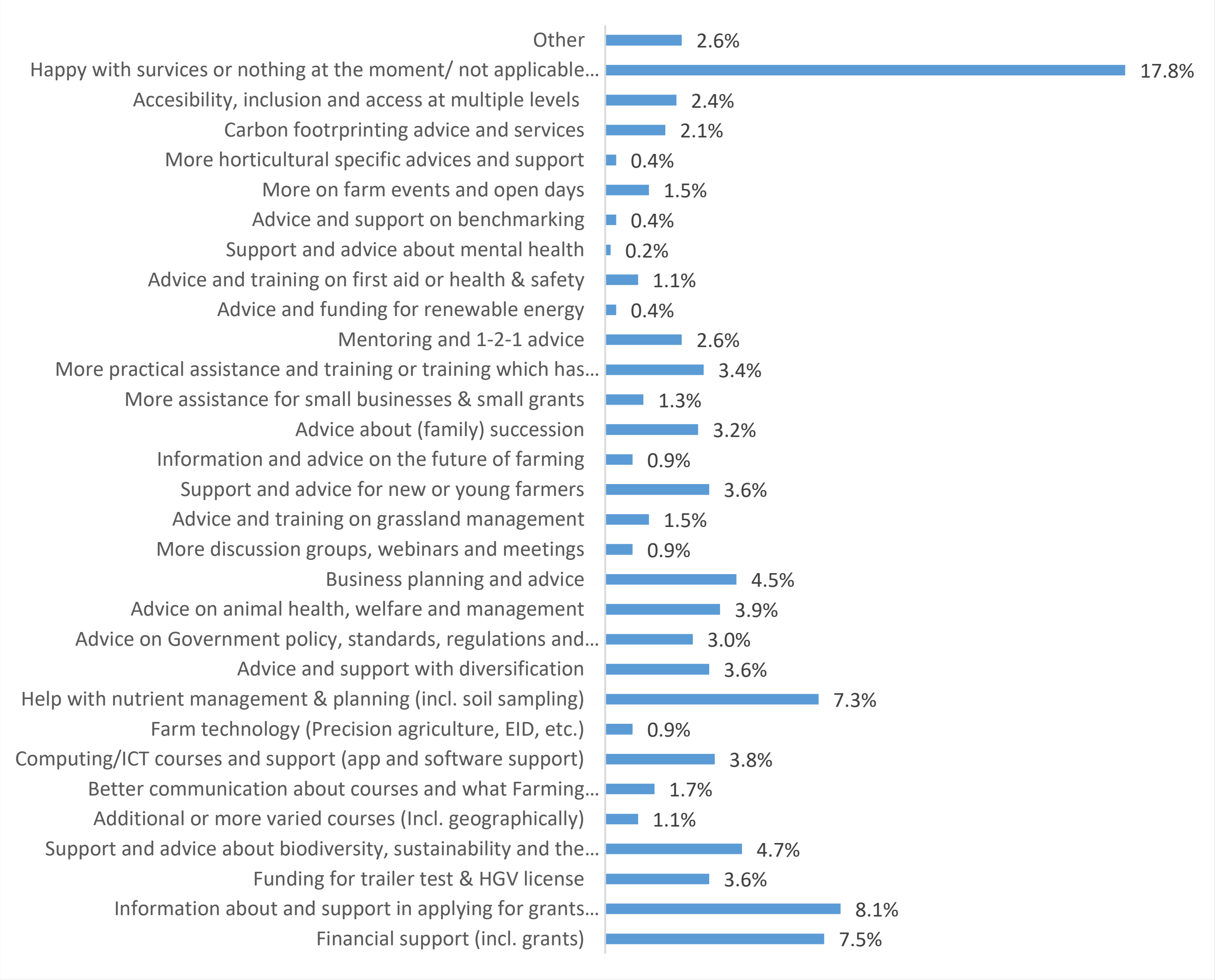
Response	**Number of responses**	**% responses**
Yes	141	22
No	329	51
Maybe	177	27
Total responses	647	100

It is fair to conclude, using data from questions 15 and 16, that of the surveyed cohort, approximately 41% have already diversified their business, and of those that have not diversified (59%), just under half are considering doing so, or have plans to do so, within the next 3 years, whilst the other half are unsure. Diversification offers opportunities for farmers to boost their income and make their business more sustainable, as changes are made to subsidies and international markets are lost as a result of exiting the European Union.

16. What other assistance would you like from Farming Connect to help improve the efficiency and productivity of your business?

Response type	Number of responses	% responses
Financial support (incl. grants)	40	7.5
Information about and support in applying for grants and subsidies	43	8.1
Funding for trailer test & HGV licence	19	3.6
Support and advice about biodiversity, sustainability and the environment (incl. tree planting & woodland management, slurry management)	25	4.7
Additional or more varied courses (incl. geographically)	6	1.1
Better communication about courses and what Farming Connect has to offer	9	1.7
Computing/ICT courses and support (app and software support)	20	3.8
Farm technology (precision agriculture, EID, etc.)	5	0.9
Help with nutrient management & planning (incl. soil sampling)	39	7.3
Advice and support with diversification	19	3.6
Advice on government policy, standards, regulations and system changes	16	3.0
Advice on animal health, welfare and management	21	3.9
Business planning and advice	24	4.5
More discussion groups, webinars and meetings	5	0.9
Advice and training on grassland management	8	1.5
Support and advice for new or young farmers	19	3.6
Information and advice on the future of farming	5	0.9
Advice about (family) succession	17	3.2
More assistance for small businesses & small grants	7	1.3
More practical assistance and training or training which has broader recognition	18	3.4
Mentoring and 1-2-1 advice	14	2.6
Advice and funding for renewable energy	2	0.4
Advice and training on first aid or health & safety	6	1.1
Support and advice about mental health	1	0.2
Advice and support on benchmarking	2	0.4
More on-farm events and open days	8	1.5
More horticultural specific advices and support	2	0.4

Carbon foot printing advice and services	11	2.1
Accessibility, inclusion and access at multiple levels, including public access and farmhands (not just farmers)	13	2.4
Happy with services or nothing at the moment/ not applicable to current situation	95	17.8
Other	14	2.6
Total responses	533	N/A
Total respondents	455	70
Total non-responses	192	30



Responses to question 16 were varied, as a free writing response was allowed. However, the majority could be categorised into slightly wider sub-topics for the purpose of clarity. Whilst individual response was around 70%, within responses there was often more than one suggested area of assistance. As such, respondent numbers and response numbers were collected as separate values. The single response area with the highest percentage of responders (17.8%) was from individuals who felt they required no assistance, or who specifically noted their satisfaction with the Farming Connect programme.

Following this, the most frequent request for assistance was with grants and funding – with 7.5% requesting ‘more grants’ and 8.1% wishing for more support and help during the process of applying for grants. The request for assistance when applying for grants included: help with paperwork, guidance on what makes a good application and notifications about availability.

Regarding the new Control of Agricultural Pollution Regulations, responses followed a strong theme of ‘Help with nutrient management & planning (incl. soil sampling)’ response (7.3%). Within this area, several individuals were asking for more specific advice surrounding the introduction of the new regulations, whilst the others were largely asking for further advice around soil sampling and testing costs and procedures.

Whilst relatively small percentages were attributed to ‘farm open days’, ‘discussions groups’ and ‘1- 2- 1 mentoring services’, within these, a keen interest was noted in starting up in-person physical activities again immediately, following cancellations of many due to COVID restrictions in the previous year. This feeling was further mentioned by several individuals who requested ‘More practical assistance and training or training which has broader recognition’ (3.4%); these respondents noted that they had booked many training sessions that had had to be cancelled for the same reasons, and they hoped all would be restarting again soon. Whilst clearly Farming Connect must consider safety and abide by all rules and regulations, there is a clear desire for in-person activities within a certain group of farmers.

Unsurprisingly, a new sub-topic added from the 2019 survey was that of individuals seeking more advice and information regarding ‘Advice on government policy, standards, regulations and system changes’ (3%), as the agricultural industry is currently in significant flux following Brexit and due to the new environmentally focused agricultural bills in both England and Wales and the shift from BPS. Interestingly, only a handful of individuals specifically referenced Brexit, indicating the biggest interest is in being informed about changes relating to the new environmentally focused payment schemes and regulation as they come in. Many highlighted their need for this information to be presented in as unambiguous a way as possible. This suggests Farming Connect are being looked to by Welsh farmers as a key source of information with regards to translating policy from governmental level down to farm level.

Another frequent request (as has been consistent in previous surveys) is for ICT training, with approximately 3.8% of the cohort expressing an interest. Farming Connect currently offers a variety of computer training – through online courses, group workshops or face-to-face tuition. This flexible approach provides members with options depending on the way they prefer to learn; making this clear to members and providing information well ahead of time may also help farmers to access these. It was interesting to see that more individuals were requesting specific farm applications and software-based sessions, with some even requesting some training towards Artificial Intelligence (AI) applications on-farm, which may be areas where Farming Connect needs to expand its provisions in future.

Another sub-topic that was added by this year’s respondents was an interest in ‘Carbon foot printing advice and services’ (2.1%), indicating that farmers have a growing awareness of need, but experience uncertainty regarding what they should be doing.

Particular responses of note included those feeling that too many varying carbon calculator tools existed, and that Farming Connect should look to help advise which to use.

‘Advice with diversification’ (3.6%), ‘Advice about (family) succession’ (3.2%), ‘Support and advice for new or young farmers’ (3.6%) and ‘Business planning and advice’ (4.5%) all demonstrated a perceived need for planning and advice around future change on farms. Many wanted more specific examples of potential diversification projects from Farming Connect, whilst the only specific unique responses for succession planning included more consideration for succession outside of family situations. For supporting the next generation of young farmers, a couple of respondents noted this should occur from as early an age as possible, indicating Farming Connect could do more with schools and colleges. Where business planning was concerned, responses suggested including more planning advice and direct marketing advice, advice on selling farms and properties and holding workshops with accountants.

Finally, there was a clear group of individual responses which were grouped into a new subtopic ‘Accessibility, inclusion and access at multiple levels’ (2.4%), who noted that the advice given was not always at the right level and should be accessible to both small and large farms. Other responses included the need for more to be done to encourage a positive public image and communication for farmers, more training time options to facilitate different lifestyles, too much push on the Welsh language, information to be provided via post rather than email, and that internet access is an issue in rural areas.

Concluding remarks

Whilst the survey revealed that the vast majority of participants had clear ambitions for their farm business, it also revealed that very few have a written business plan in place. As Farming Connect already offers access to business planning, it may be valuable to increase the promotion of this service, or look at ways to improve its utilisation.

Farmers are particularly concerned with diversification in the face of the current uncertainty surrounding UK economics and politics. There was a request for more assistance with diversification ideas. Where diversification had occurred on-farm, it was largely always perceived to be positive or neutral. It was felt that this message of a lack of detrimental negative impact should be pushed, to encourage more farmers to have the confidence to diversify.

Generally, it appears as though Farming Connect is having a largely positive impact on its members. Interestingly, a few respondents to ‘further assistance Farming Connect could offer’ specifically noted that they would rather Farming Connect continued doing what it currently does well now, rather than attempting to spread to more areas of assistance, if this would move resources away from current areas. Essentially, there was a mindset of ensuring maintenance of what was currently on offer so as not to lose any of this. Overall, this suggests Farming Connect acts as a positive platform of information and support to Welsh farmers.

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