Energy&Climate
INTELLIGENCE UNIT

Informed debate on energy
and climate change

ANALYSIS REPORT

The impact of climate change on British farms and farmers' mental health

August 2025

Contents

Context

Like in all other countries around the world, extreme weather is becoming increasingly frequent and severe in the UK. In 2022, we saw record-breaking extreme heat – where temperatures hit 40˚C for the first time – which scientists said was made at least 10 times more likely because of human-induced climate change. In 2023/2024 we had record-breaking extreme rainfall, which scientists said was made 10 times more likely and 20% heavier by climate change.

Now, in 2025, the UK just had its warmest spring on record and sixth driest, and is on track for one of its warmest summers on record that has included four heatwaves. Scientists said that 32˚C temperatures in England during the first heatwave were made 100 times more likely by human-induced climate change. The Met Office predicts that UK heatwaves will become longer and hotter, and that 'the chance of exceeding 40˚C in the UK is accelerating at pace'.

British farmers are on the front lines of our changing climate. In the past four years alone, it's gone from being too dry to too wet and then back again. Such erratic weather is making it hard for them to sow, grow and harvest their crops and to rear livestock. Although many feel deeply proud of and connected to their profession, with ties to the land often spanning back many generations, farms are also businesses and need to make a profit. Extreme weather fuelled by climate change is making that harder, and the stress and uncertainty this causes is having dire consequences for farmer mental health.

To gain a better understanding of these impacts, we designed a survey and commissioned Grounded Research to recruit farmers to take part, to investigate how they are experiencing extreme weather linked to climate change, and how it is affecting mental health in the farming community.

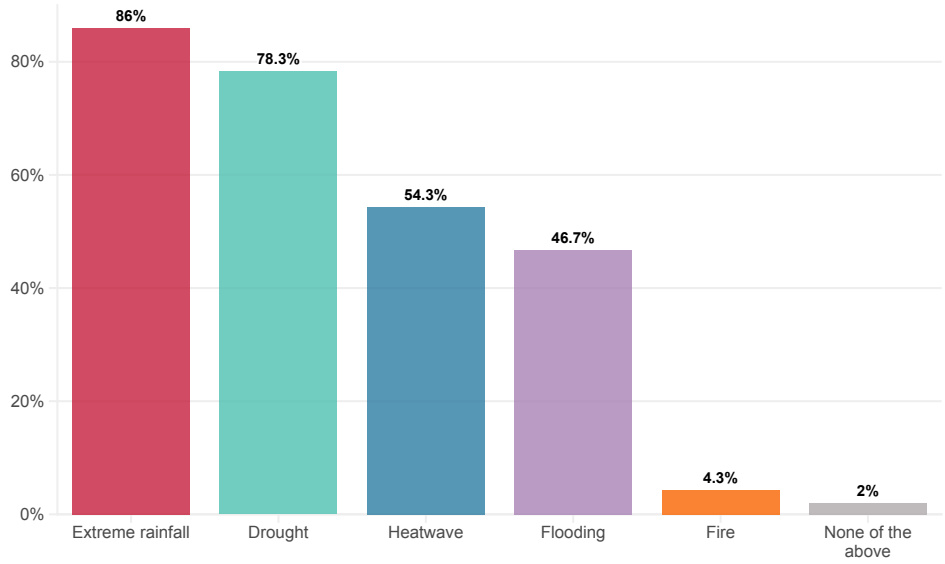
Though extreme weather is just one of many factors affecting farmer wellbeing, it is a significant and growing one. Climate impacts are ramping up worldwide; 2024 was the hottest year ever recorded globally, with 2023 in close second. As early as December last year, the Met Office predicted that 2025 will be in the top three hottest years alongside them. Experts – including the UK's Met Office, Europe's Copernicus Climate Change Service and the World Meteorological Organisation – agree that these extremes are being driven by human-induced climate change. Right now, we are at around 1.3˚C of warming above pre-industrial levels, but our current trajectory is for around 3˚C; double the globally agreed target of 1.5˚C.

Findings

Recent impacts

The results reveal an industry hit hard by extreme weather in recent years, which scientists say is being made worse by human-induced climate change. 98% of farmers have experienced extreme weather in the past five years (Figure 1). The most common experience is extreme rainfall, which has affected more than four out of five farmers (86%), followed by drought which has affected over three quarters (78%). Over half (54%) have been affected by heatwaves, while almost half (47%) have been hit by floods.

Figure 1: Which of the following extreme weather events have affected your farm in the past five years? Select all that apply.



This has been very destabilising for farmers. Almost all of them (92%) said they felt anxious during these periods of extreme weather, with a third (34%) saying they felt 'very anxious' (Figure 2). Additionally, nearly two thirds (60%) said they felt depressed (Figure 3).

Figure 2: During the period of extreme weather, did you feel anxious?

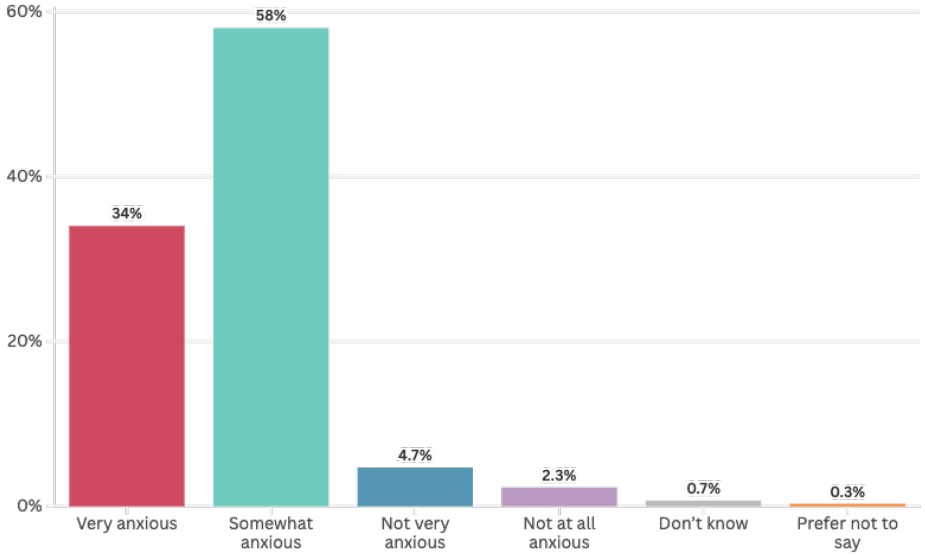
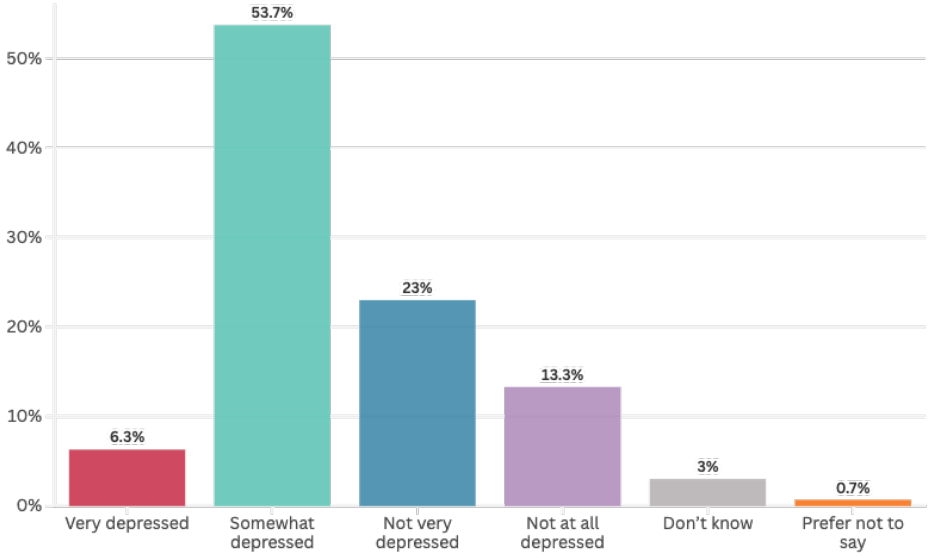


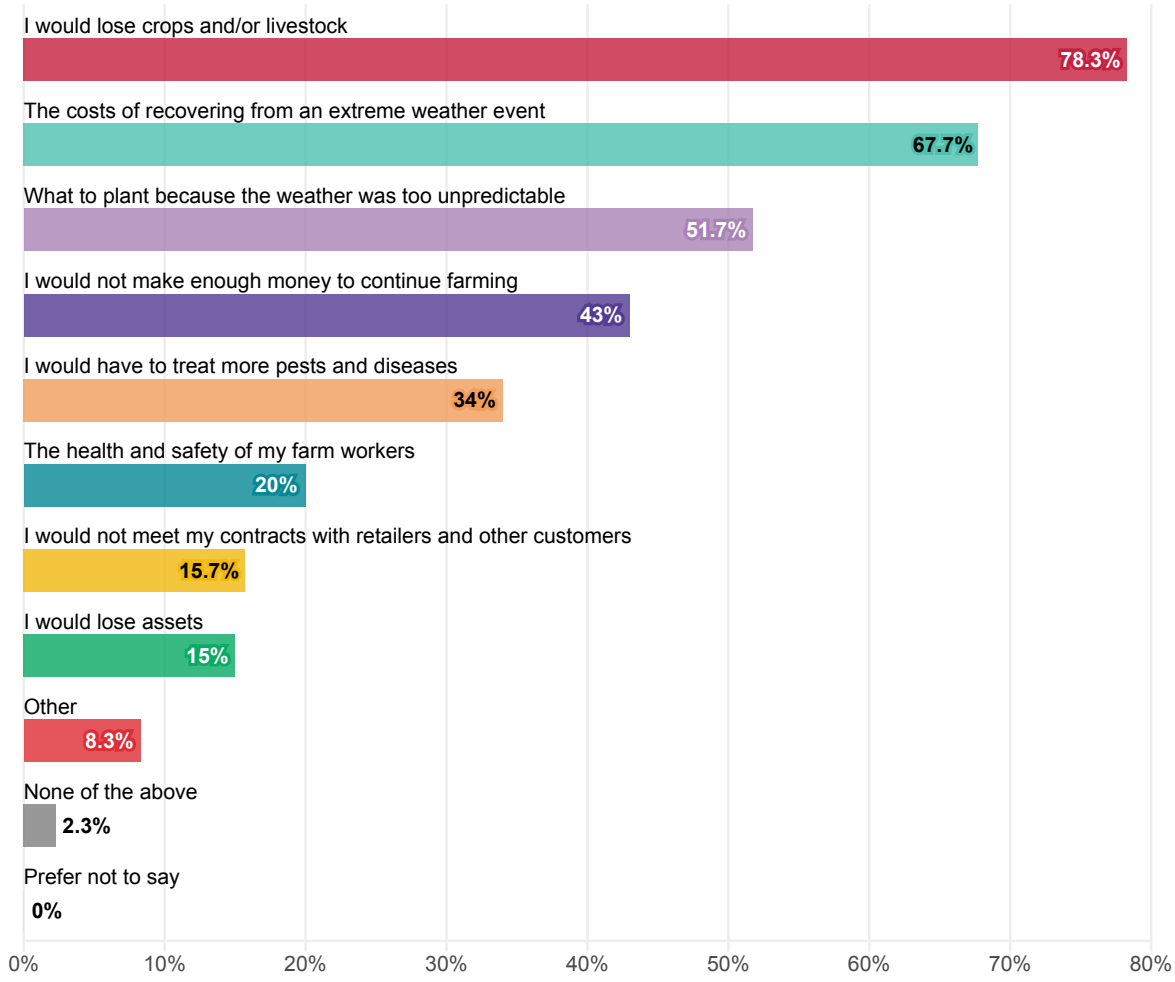
Figure 3: During the period of extreme weather, did you feel depressed?



There were a range of concerns driving this poor mental health (Figure 4). More than three quarters (78%) of farmers were worried they'd lose their crops or livestock, while over two thirds (68%) were concerned about the costs of recovering from extreme weather.

More than half (52%) weren't sure what to plant because the weather was too unpredictable, and over a third (34%) were worried they'd have to treat more pests and diseases. Overall, more than two in five farmers (43%) were worried they wouldn't make enough money to continue farming during these periods of extreme weather.

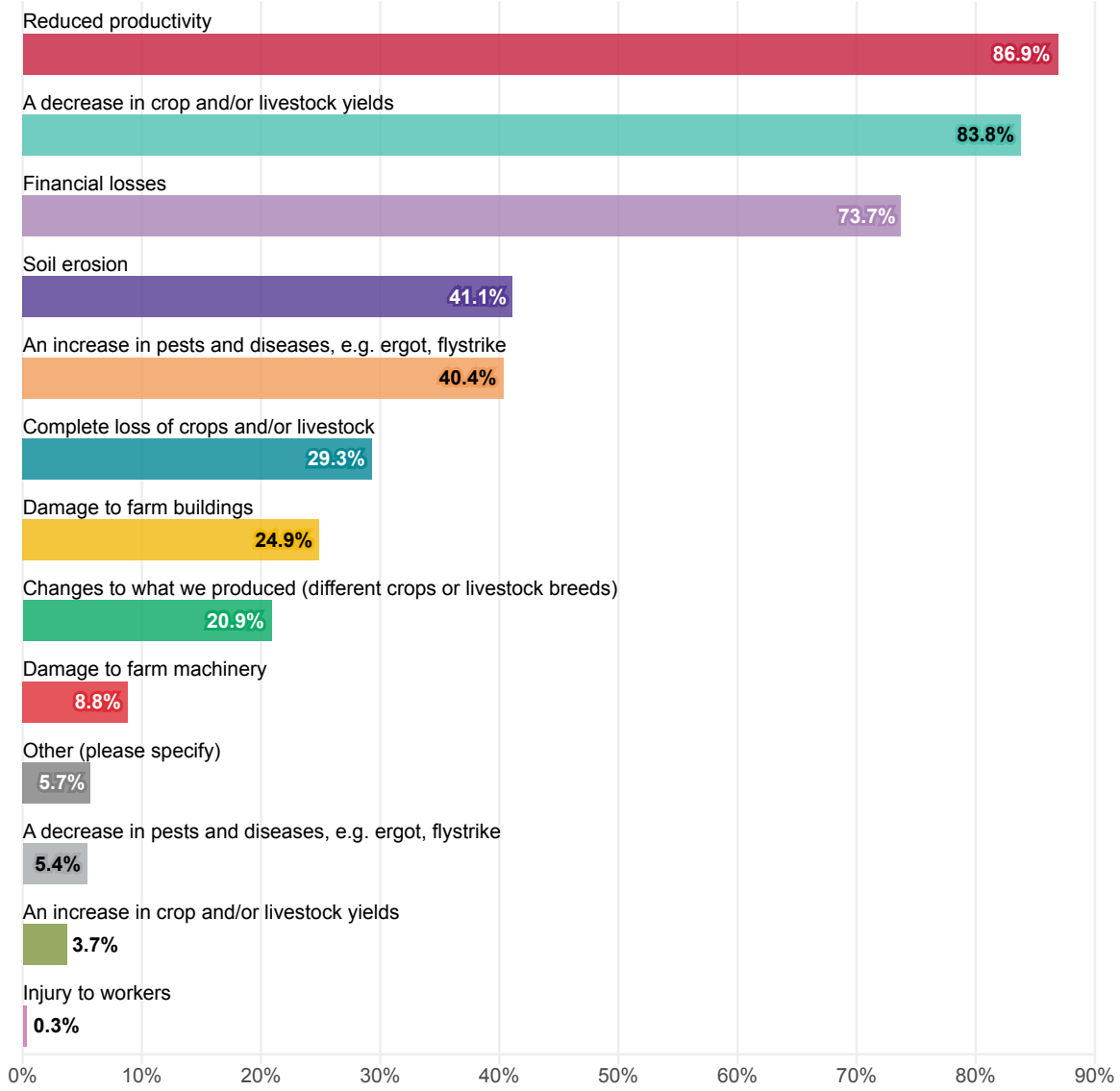
Figure 4: During the period of extreme weather, did you have any of the following concerns? Select all that apply



Many of these concerns became a reality. When asked what impacts extreme weather has had on their farm businesses (Figure 5), more than four out of five (87%) farmers said reduced productivity. Almost the same proportion (84%) experienced a decrease in crop yields or livestock output, while almost a third (29%) suffered complete losses.

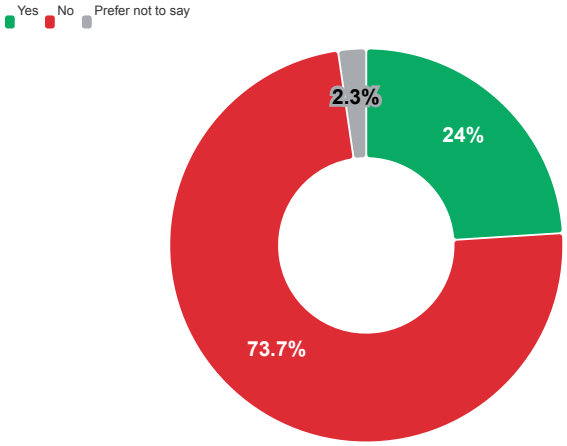
Two in five farmers reported an increase in pests and diseases (40%), while a quarter (25%) reported damage to farm buildings. Overall, three quarters (74%) experienced financial losses because of extreme weather.

Figure 5: What impact did the extreme weather have on your farm? Select all that apply.



Concerningly, despite the fact that 92% of farmers experienced feelings of anxiety and 60% feelings of depression due to extreme weather, less than a quarter (24%) of them sought help for it (Figure 6). This perhaps reflects the typical perception of farmers as 'stoical' in the face of hardship, a concern for many in the industry who work to encourage farmers to seek help for sources of stress and anxiety.

Figure 6: Have you sought help (e.g. peer support groups, professional advice, environmental groups) for the impacts of extreme weather?



Looking to the future

Climate change is making extreme weather increasingly frequent and severe. Given their lived experiences of recent extreme weather events, it's unsurprising that many farmers are worried about the future.

More than three quarters (77%) said that thinking about the potential impacts of future extreme weather on their farms makes them feel anxious, with a fifth (20%) saying it makes them feel 'very anxious' (Figure 7). Just over half (51%) said it makes them feel depressed (Figure 8).

Figure 7: Does thinking about the potential impacts of future extreme weather events on your farm make you feel anxious?

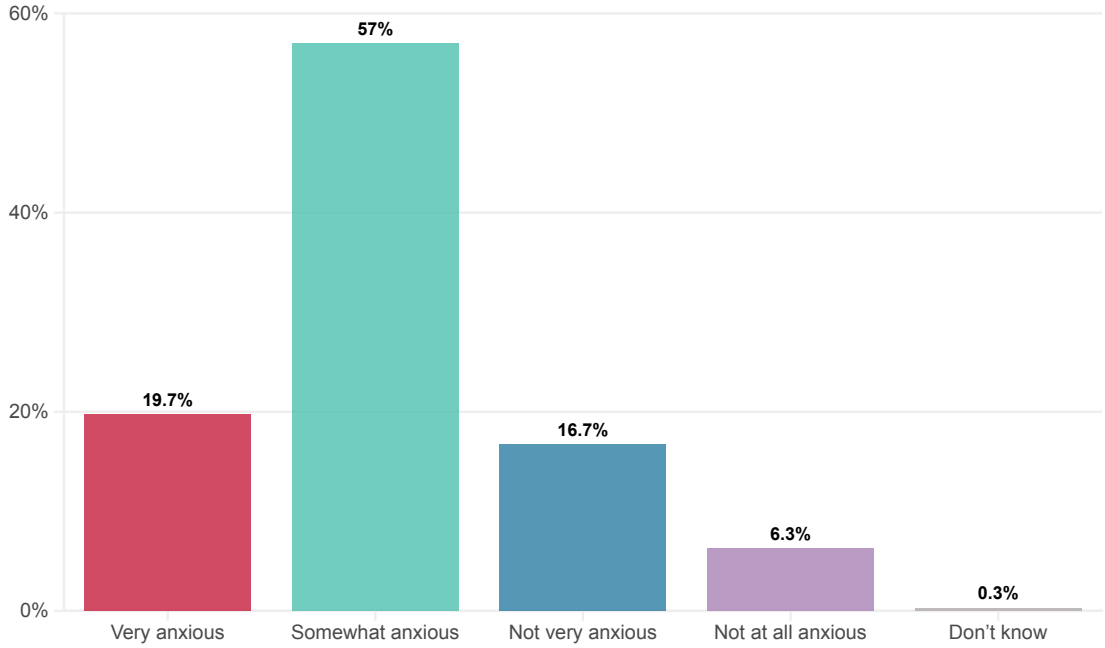
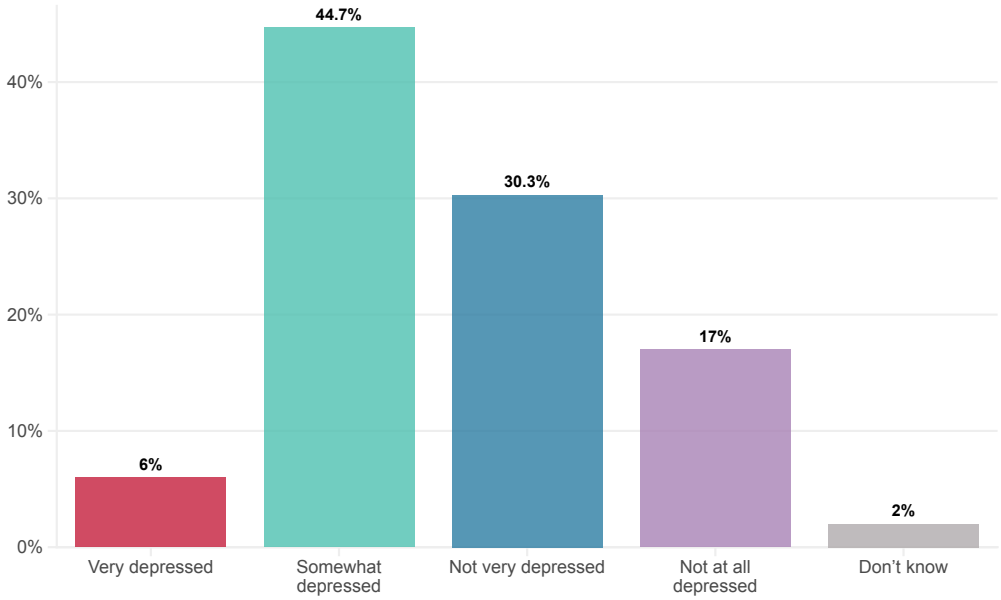


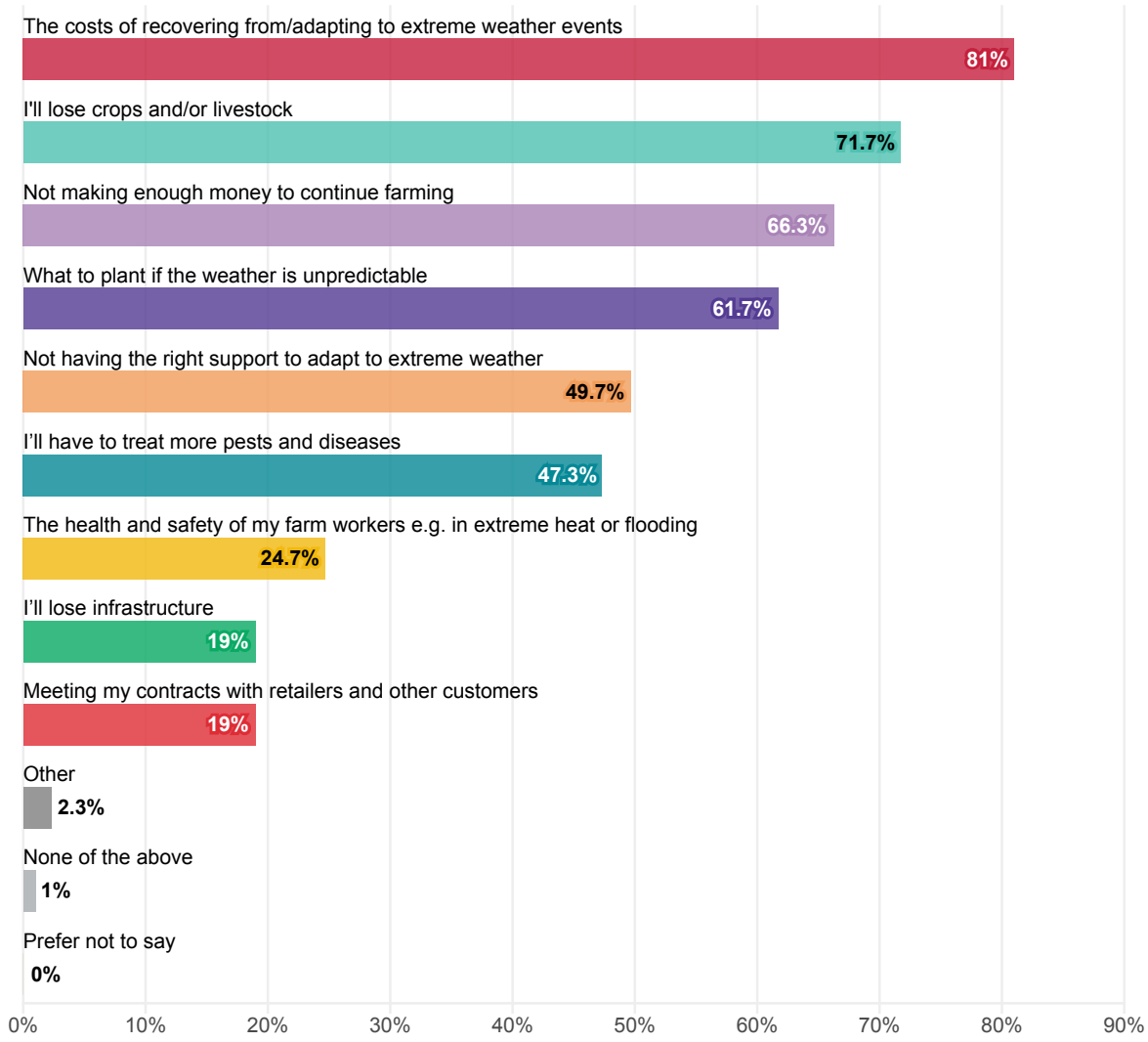
Figure 8: Does thinking about the potential impacts of future extreme weather events on your farm make you feel depressed?



There are several concerns driving these feelings (Figure 9). More than four in five (81%) farmers are worried about the costs of recovering from or adapting to extreme weather. Nearly three quarters (71%) are worried they'll lose crops or livestock.

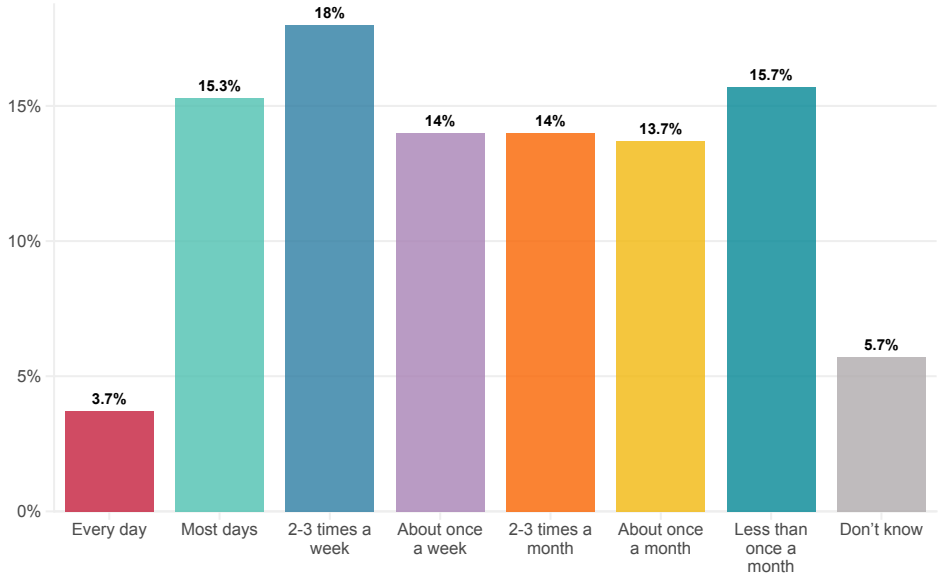
Two thirds fear they won't make enough money to continue farming (66%) or are worried about what to plant given the unpredictability of the weather (62%). Around half are worried they don't have the right support to adapt (50%) or will have to treat more pests and diseases (47%). A quarter (25%) are worried about the health and safety of their farm workers in the changing climate.

Figure 9: Thinking about the potential impacts of future extreme weather events on your farm, do you have any of the following concerns? Select all that apply.



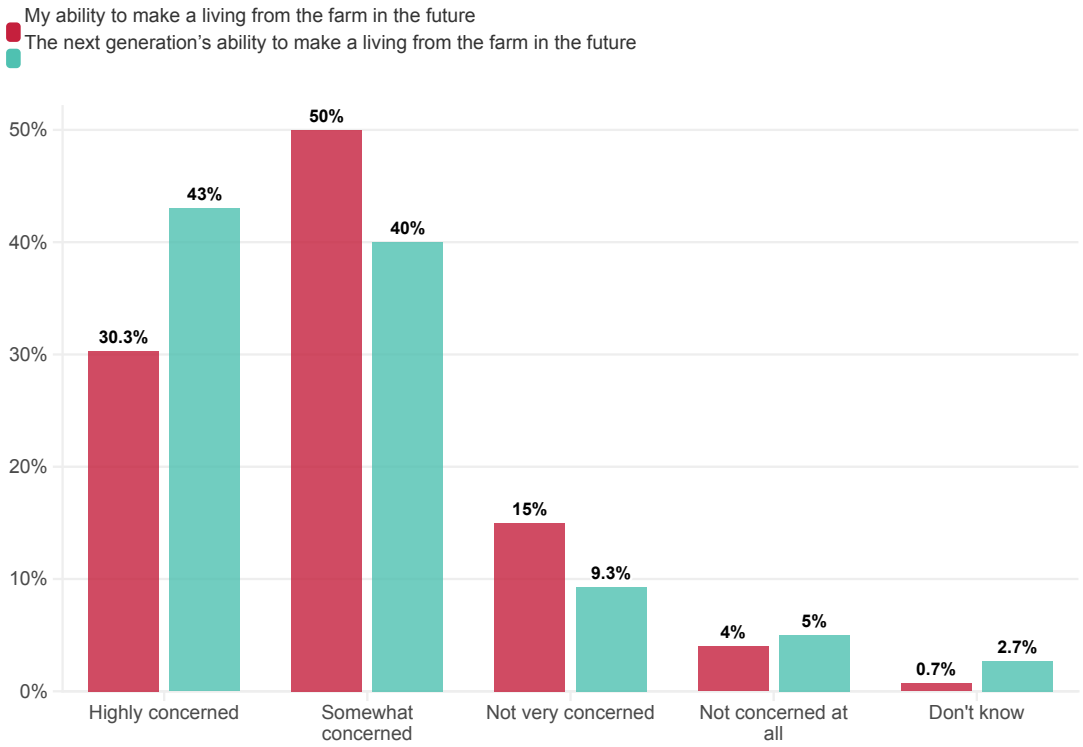
Additionally, the research gave deeply concerning insight into the frequency at which these concerns play on farmers minds. Over half (51%) of farmers say they worry about extreme weather at least every week, with nearly a fifth (19%) worrying about it almost every day (Figure 10).

Figure 10: How often, if at all, do you worry about extreme weather events?



Given these worries, it's unsurprising that four in five farmers (80%) are concerned about their ability to make a living from the farm in the future, with almost a third (30%) 'highly concerned' (Figure 11). More still (83%) are worried about the next generation's ability to make a living from the farm in the future, rising to 43% for 'highly concerned'.

Figure 11: Thinking about the future, how concerned are you about your - and the next generation's - ability to make a living from the farm given the likelihood of increasingly extreme weather linked to climate change?



Discussion

A growing body of evidence

These findings add to a growing body of evidence highlighting the impact of extreme weather on farm businesses and farmer mental health.

In October 2021, charity Royal Agricultural Benevolent Institution (RABI) launched the largest ever research project relating to the wellbeing of people in farming – the Big Farming Survey. The results revealed the extent of poor mental health in the farming community, with over a third of respondents possibly or probably depressed and almost half experiencing some form of anxiety.

The reasons for this were wide reaching, from the loss of subsidies to regulation to the Covid-19 pandemic, but 'bad/unpredictable weather' was the third highest cause of stress. When asked about challenges and opportunities in farming, 'extreme weather/climate change' was seen as the biggest challenge overall.

Trade publication Farmers Weekly runs an annual Sentiment Survey that asks readers to reflect on the year they've had and share concerns for the year ahead. In the 2023 Sentiment Survey extreme weather was the top challenge faced by farmers that year, chosen by a third (31%) of respondents.

This is unsurprising given that, as Farmers Weekly put it, 'it was a year in which records were broken. The driest February in 30 years, followed by the sixth-wettest March ever. A cool April and May, followed by the hottest June on record. Thereafter, the summer was disappointing, but September saw four consecutive days above 30°C, followed by the wettest October this century.' Extreme weather was also the joint second biggest concern for 2024, along with rising input costs.

Sadly, these concerns became a reality. In the 2024 Sentiment Survey, extreme weather was once again the top challenge faced by farmers that year, chosen by two in five respondents (40%). Government policy came in second with 20% of the vote, which is significant given that 2024 was the year the Basic Payments Scheme (BPS) started being phased out, the new Environmental Land Management (ELM) schemes were rolled out, and the new Labour chancellor presented the Autumn Budget that contained changes to inheritance tax (IHT).

In other words, despite major changes to agricultural policy, extreme weather was still seen as the biggest problem. This is perhaps unsurprising given that England faced its wettest 18 months on record, with scientists saying storm rainfall was made 10 times more likely and 20% heavier by climate change. While respondents predicted that government policy would be the biggest challenge for 2025, extreme weather came in second. It is worth noting that in the 2023 Sentiment Survey, when asked about future challenges for 2024, extreme weather also came in second with 18% of the vote (behind government policy and output values as joint first). However, when asked to look back at the end of 2024, it had materialised as the greatest challenge.

The UK Health Security Agency (UKHSA) – part of the government – has recognised the seriousness of mental health impacts on farmers from flooding

and drought, particularly with the increasing frequency and severity of extreme events associated with ongoing climate change. They have recently been addressing the evidence gap in England with Health Protection Research Unit-funded research, including an online survey for farmers and farmworkers in early 2025, alongside other organisations such as the National Farmers' Union. The survey results are due later this year.

However, the direct impacts of extreme weather aren't the only consequence of climate change for farmers. There is mounting evidence that it is also exacerbating the disease and pest pressures that many farmers already face. Grounded Research has been running a survey called 'What Keeps Farmers Awake at Night' since September 2024. They published a summary report in May 2025 that revealed six main themes, one of which was that pests and diseases are threatening livelihoods.

As the climate changes, crops and livestock are battered by extreme weather that can make them less healthy and more susceptible to pests and diseases. Simultaneously, the same climatic changes can enable pests and diseases to thrive. Some common examples of this cited in Grounded Research's survey were ergot
and bluetongue

There was a high risk of ergot fungus in cereal crops following the UK's wet winter of 2023/2024, which was made worse by climate change. Bluetongue virus affects ruminants and is spread by biting midges. Research predicts that the disease will extend further north and have a three month longer transmission season by 2100, while large outbreaks that we'd expect to see once every 20 years in the current climate could be typical every year by 2070. In April 2024,

Defra warned of a potential uptick in bluetongue cases due to warmer weather. After several confirmed cases, a bluetongue restricted zone was declared across Suffolk and Norfolk in August. In September, this was extended to Essex and then to Greater London and Kent. A vaccine had to be given emergency approval. The loss of livestock had a huge impact of farmer mental health, which was reported by the BBC.

We spoke to some farmers firsthand to hear how extreme weather linked to climate change is impacting their mental health.

Case studies

Joanne Coates, livestock farmer
North Yorkshire

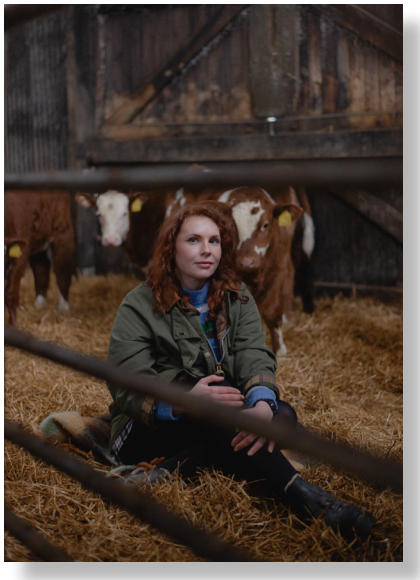


Photo credits: Jack Moyse

Jo's story

Extreme weather is having a major impact on farming in the Yorkshire Dales. Traditionally, this was an area of short summers and long, cold winters, but that reliable pattern has gone. Winter used to run from November to March, but now the weather can swing from wintry to springlike conditions month to month.

Hay cutting, once done late in the season, is now more uncertain, and many farmers worry they won't have enough to feed their cattle over winter. Some are feeding cake, but we're trying to avoid that.

The hotter summers are even causing sunburn on cows' noses, a sign that the changing climate demands more interventions. More seriously, conditions like New Forest Eye are becoming a greater problem. This summer's rapid switches between warm and wet weather create the perfect environment for it, as well as for lungworm.

Sticking to traditional remedies rather than bought-in medicines - part of our nature-friendly ethos - makes these outbreaks even more challenging. And when you've got a small herd, losing an animal's sight to New Forest Eye doesn't just hurt the business - it feels personal. You know every animal, and it's hard not to feel you've failed them.

The impact extreme weather has had

Across the Dales, you can hear people remarking on there being 'less of something' than they would usually expect, or that certain events are happening earlier or later in the year. They don't always name the climate crisis as the cause, but they can certainly see its impact and talk about it.

Many Dales farms have been in the same families for generations. Farmers are fiercely protective of their land and they feel the constant pressure of making the business a success. But each new generation is facing challenges their predecessors never had to consider.

The weather is getting more volatile. This year, I saw how stressful it was for my partner to decide when to cut the hay. Unpredictable weather also makes people more reluctant to leave their farms, in case they need to respond quickly to a sudden flood or other unexpected event. This keeps people away from community spaces, whether that's agricultural shows or the local pub, putting the rural economy at risk and deepening isolation and loneliness

This summer, I have only heard a single lapwing, an iconic upland bird. When I walk the hills, I notice far fewer moths, bugs, and other insects. The countryside's familiar background hum is quieter.

With everything going on, my partner and I can't help but wonder what lies ahead for farming.

Colin Chappell, arable farmer
North Lincolnshire

Colin's story

My family has farmed this land for several generations, and major flooding events were once rare. Since 2000, we've had one roughly every four years. We've broken rainfall records going back 100, 200, 300 - even 1,000 years - and experienced both the coldest (-19.5°C) and hottest (39.9°C) temperatures ever recorded here. This year, we also had a record-breaking drought.

These extreme downpours and dry spells seem to follow one another. The weather has turned into a cycle of boom and bust. When my grandfather and dad were farming, it would rain, then stop, then rain again - there was a rhythm to it. Now, it's either torrential rain or severe drought, with hardly anything in between.

The impact extreme weather has had

As farmers, we're in a business partnership with Mother Nature, but it feels like one side isn't playing ball. That's particularly worrying because the weather can make or break a farm. This constant uncertainty takes a real toll on mental health.

Last year, I genuinely didn't know how we were going to make it through as a business. I thought the farm might go under. It was incredibly tough. Our spring crops yielded only half as much as the winter ones and there were 200 acres where I couldn't grow anything at all. Flooding now regularly affects the nearby town of Brigg, leaving residents anxious every time there's heavy rain. Farmers have nature-based flooding solutions to help tackle this, but we need the support and investment to make them happen. The safety net is vanishing just when we need it most.

For me, the way forward has been to focus on nature and improving soil health - creating sponge-like soil that prevents water pooling and holds onto it for dry spells. But even with all that in place, these record-breaking weather events keep coming. I have to be able to ride out whatever is thrown at me, even when I've done everything I can to futureproof my land and business. That's the biggest mental shift I'm having to make.

What can we do about it?

Farmers are already under immense stress from a range of mounting pressures, including government policy, rising input costs linked to the price of fossil fuels, trade deals, volatile markets and loneliness, to name just a few.

Because of all these pressures, suicide is not uncommon in the farming community. According to data from the Office for National Statistics (ONS) published in 2018, more than one agricultural worker in the UK dies by suicide each week, with suicide rates higher amongst those working in specific roles like harvesting crops and rearing animals. In recent years, there have been several reports of the challenges that lead some farmers to take their own lives (examples here, here and here), as well as farmers themselves speaking out about their struggles to encourage others to seek help.

Extreme weather is just one factor driving poor mental health. However, the findings laid out in this report – and the growing body of evidence from others in the sector – show it is a significant one, and one that is only likely to grow as the impacts of climate change worsen.

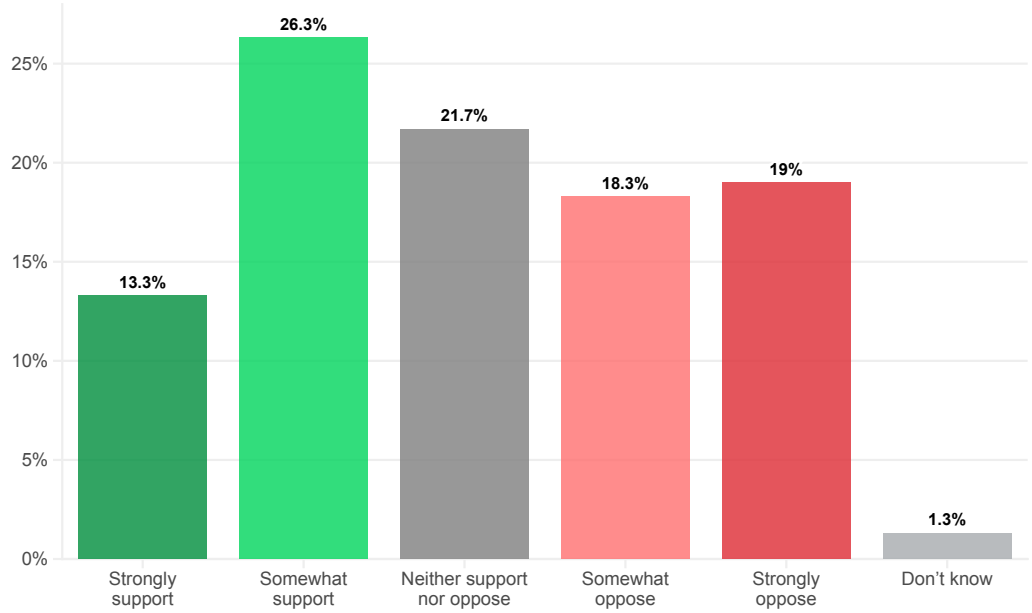
First and foremost, it is vital to support farmers struggling with their mental health; the work of organisations like RABI and the Farming Community Network is indispensable to help farming people now.

Getting to net zero emissions – to stop adding greenhouse gases to the atmosphere – is essential to limit further warming and the extreme weather it drives. The farming community is already suffering because of climate impacts at the current 1.3˚C of warming above pre-industrial levels, and we're on track for double that.

However, high levels of concern about climate change and a nearly universal experience of climate impacts do not translate into similar levels of support for net zero targets. Two fifths (40%) of British farmers strongly or somewhat support the UK's net zero target (Figure 12), compared to two thirds (~66%) of the wider public[1]. Just over a third (37%) somewhat or strongly oppose it. Although this is less than those who support it, it suggests opposition around 10% higher than the general public, with more farmers undecided on the subject than the public at large.

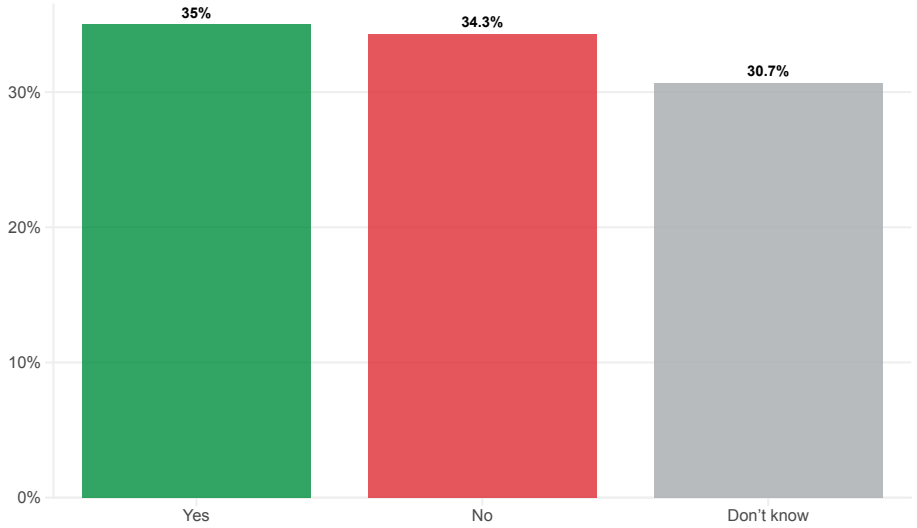
1 https://eciu.net/media/press-releases/2025/local-election-poll-majority-of-reform-voters-back-climate-targets

Figure 12: What is your view of whether you support or not the target of reaching net zero emissions by 2050?



This split opinion on the net zero target compared to the widespread experience of and concern for climate impacts can be partly explained by farmers also being split on whether net zero is needed to stop and limit the impacts of climate change (Figure 13). The farmers surveyed were more or less evenly split on the question of whether climate change can (35%) or cannot (34%) be stopped without the world getting to net zero emissions, with a similar number saying they did not know (31%).

Figure 13: Can climate change be stopped without the world getting to net zero?

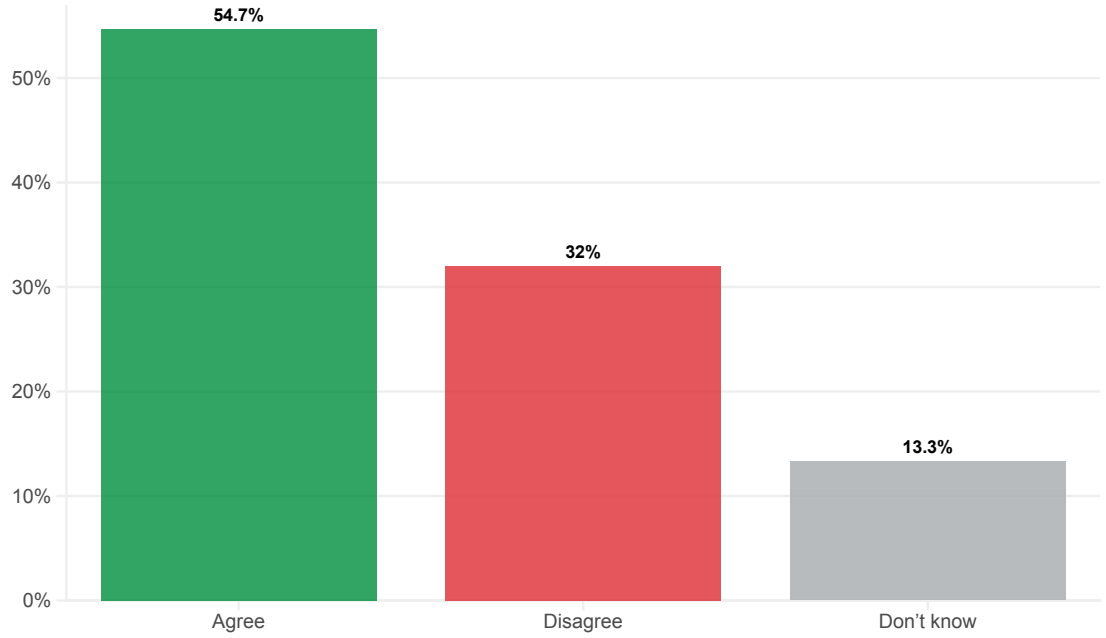


Farmers are on the front lines of the climate crisis, and feel an acute sense of worry about it, but seemingly don't have a unified view on the principal solution as strongly as the wider public. The fact that around a third of farmers (35%) think climate change can be stopped without the world getting to net zero emissions – which is scientifically impossible – suggests there is a lack of understanding in the community about what net zero is, possibly driven by misinformation.[2]

While farmers may be unclear about the purpose of net zero, our survey results show they understand the need for change. When asked whether addressing the risk of climate change is a priority, even if it entails changing what and how we farm in the UK and the food we eat, over half (55%) of farmers agreed, with just under a third (32%) disagreeing (Figure 14). This suggests that when asked about climate change through the lens of climate impacts and extreme weather, farmers are likely to express significant concern and support for change.

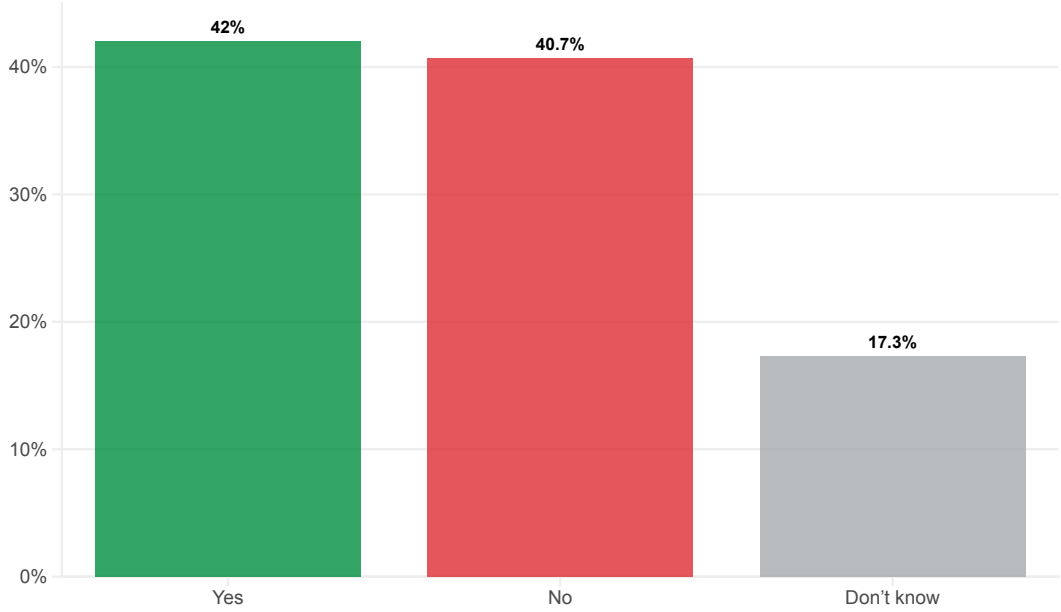
2 Humans are causing climate change by emitting enormous quantities of greenhouse gases (GHGs), for example through the burning of fossil fuels, into the atmosphere. Changes in the concentrations of these gases is driving increasingly extreme weather. Nations have agreed to try to limit global warming to 1.5°C above pre-industrial levels, also known as the Paris Agreement. Although there will still be significant climate impacts at 1.5°C, scientists are clear that beyond this limit extreme weather and its consequences will become devastating. Limiting global warming to 1.5°C can only be achieved through the world getting to 'net zero'. This is a scientific term which means that GHGs going into the atmosphere must be balanced with those being removed, to ensure the net change each year is zero. This will ensure that the concentration of GHGs does not keep rising and driving ever more extreme weather. Reaching net zero by 2050 is not the 'arbitrary target' it is often portrayed to be in the media: it was based on independent scientific advice and consensus to achieve the 'safe' 1.5°C goal.

Figure 14: Extreme weather linked to climate change is having a negative impact on UK food production and the food we eat. Addressing this risk is the priority for UK food security, even if that means changing what and how we farm.



However, when asked about climate change through the framing of net zero and emissions reductions, opinions are more split (Figure 15), perhaps reflecting the fact that – in the information space around farming – policies to achieve emissions reductions and net zero are often reported as a threat.

Figure 15: Do you think that policies to reduce and remove greenhouse gas emissions to tackle climate change are important to safeguard the future of British farming?



For example, farmers are much more likely to support – and be willing to adopt – measures that will reduce emissions when asked about them specifically, as opposed to in aggregate (as is the case above in Figure 15), and when resilience to climate impacts is given as the main reason, as opposed to emissions reduction.

The UK government and devolved administrations agri-environment or 'Environmental Land Management' (ELM) schemes enable farmers to make their operations more resilient to climate impacts. For example, planting trees can shield farmland from storms and floods and provide shade for livestock during heatwaves. Planting herbal leys or cover crops can enhance soil health and protect against erosion. Being part of ELM schemes can also provide financial certainty for farmers at a time when crop yields and livestock output are being battered by increasingly extreme weather.

Our results show that farmers want to take these steps to make their farms more resilient, with two thirds (63%) interested in planting cover crops, half (49%) in planting hedgerows and over a quarter (27%) in planting trees on part of their farms, in addition to what they are already doing (Figure 16). Additionally, 60% would consider using some of their land for habitat creation, such as wildflower margins (Figure 17).

Figure 16: What steps are you taking or would you consider taking to improve the resilience of your farm to extreme weather events? Select up to three

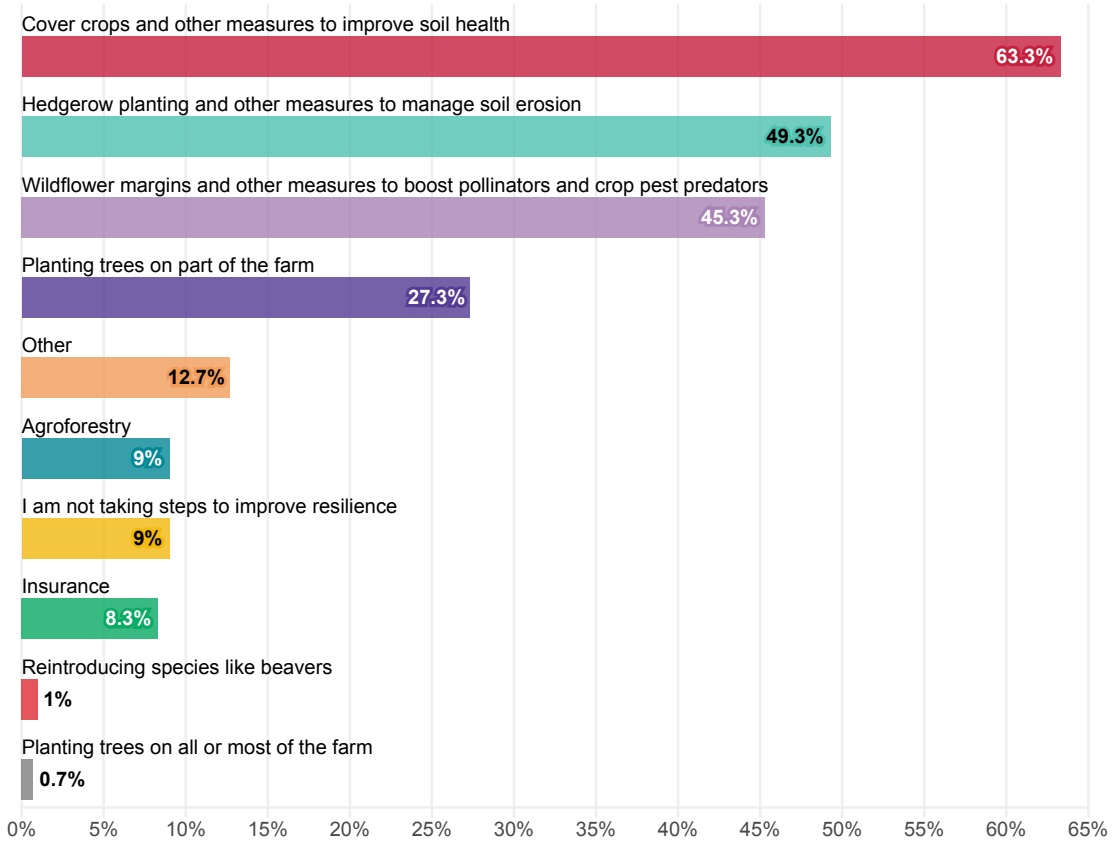
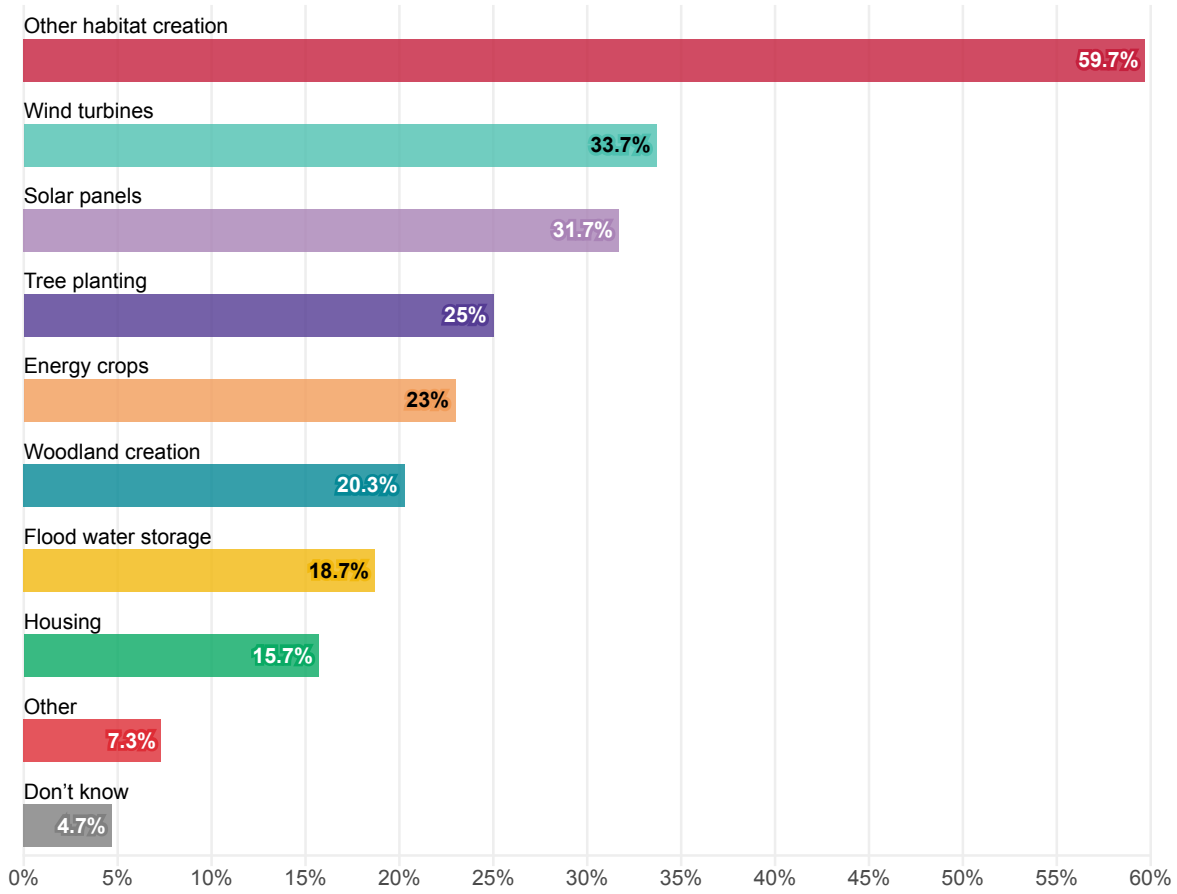
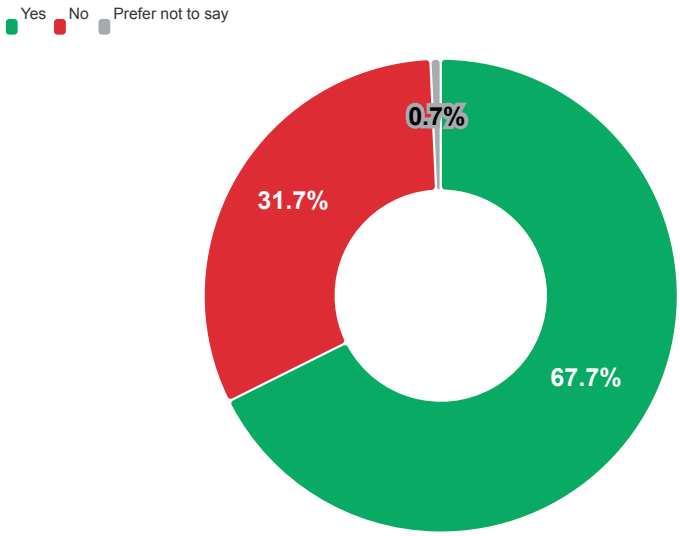


Figure 17: Would you consider using some of your farmland for one or more of the following, given the right incentives? Select up to three.



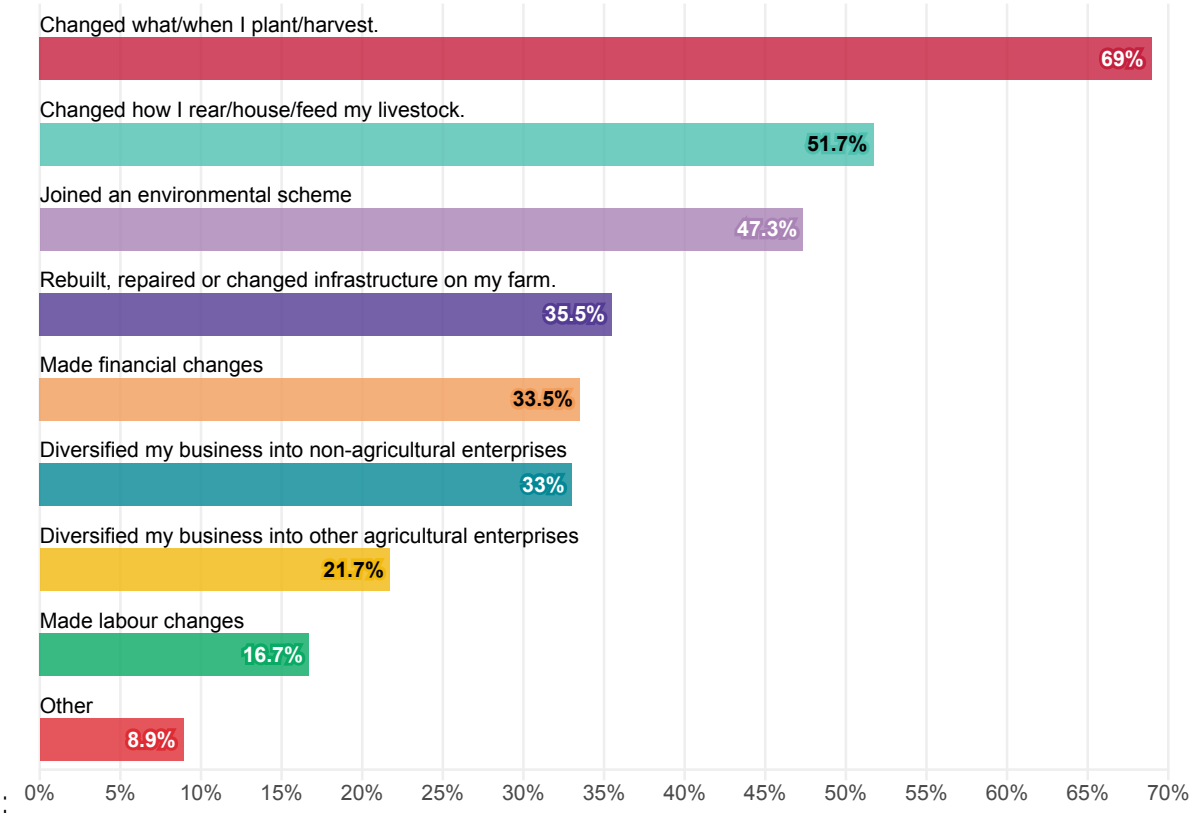
Farmers are already being forced to make changes because of climate change, whether they want to or not. In Defra's 2024 Farmer Opinion Tracker for England, respondents were asked whether external factors had caused them to make changes to their farm businesses: 'weather/climate change' was the second most selected external factor after 'input prices', chosen by two thirds of farmers (66%). This is mirrored in our results, where virtually the same proportion (68%) said extreme weather linked to climate change had caused them to make changes on their farms (Figure 18).

Figure 18: Has extreme weather linked to climate change caused you to make changes on your farm?



Over two thirds (69%) of those farmers have changed what and when they plant or harvest, half (52%) have changed how they rear, house or feed their livestock, and almost half (47%) have joined an environmental scheme (Figure 19).

Figure 19: What change(s) have you made? Please select all that apply.

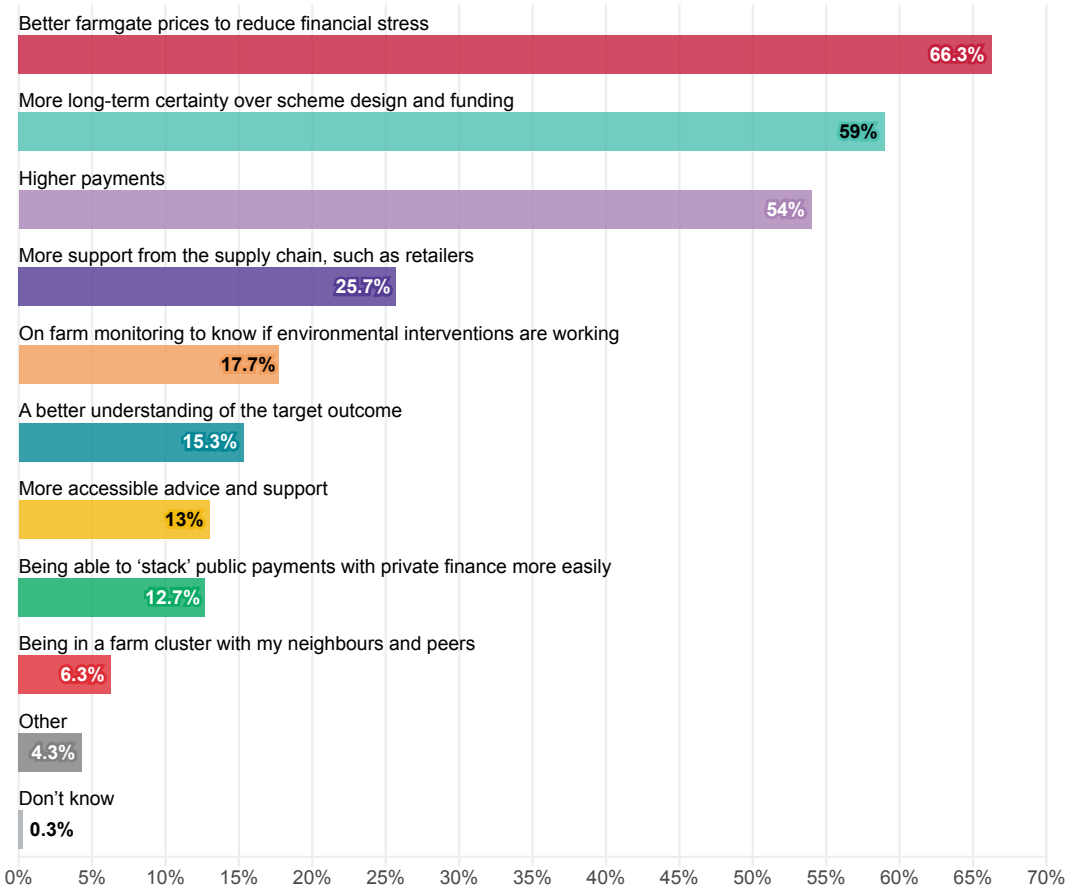


In RABI's 2021 Big Farming Survey, environmental schemes were seen as the biggest opportunity in farming. Concurrent with our findings, Farmers Weekly's 2024 Sentiment Survey found that almost half (46%) of respondents had signed up to one, with a further 13% considering it. In Defra's 2024 Opinion Tracker, the top reasons given for uptake were that agri-environment schemes are attractive financially (62%), they fit easily into how farmers' businesses are run (56%) and they benefit the environment (40%).

However, the abrupt closure of the Sustainable Farming Incentive (SFI) – the entry level ELM scheme in England accessible to the majority of farmers – in March 2025 has eroded farmer confidence. This decision came in the wake of the Autumn Budget 2024, controversial for its changes to farm inheritance tax (IHT) rules, causing 'government policy' to be the biggest concern for 2025 in the Farmers Weekly Sentiment Survey 2024.

General policy barriers appear to be the issues that most urgently need fixing in order to drive ELM uptake, as opposed to scheme specifics. For example, better farmgate prices to reduce financial stress (66%) was the most chosen option to increase uptake of climate and nature measures on farm, followed by more long-term certainty over scheme design and funding (59%), with higher payments (54%) in third (Figure 20).

Figure 20: What would encourage you to do more for climate and nature outcomes on your farm? Select up to three.



Concluding remarks

Our findings show that virtually all farmers have been affected by extreme weather. These experiences drove high levels of concern in the farming community, with the majority reporting feelings of anxiety and depression linked to extreme weather events. These feelings were caused by a range of concerns about the impacts on their farms, many of which then became a reality. Despite such serious consequences for their businesses and mental health, few farmers sought support.

Our findings also show that, given these lived experiences, farmers are fearful for the future as climate change is predicted to drive ever more extreme weather. They are even more concerned for the next generation of farmers entering the profession than they are about their own ability to make a living from their farms.

In the immediate term, support for farmers struggling with their mental health is essential. In the longer term, policies to reduce emissions and enable adaptation to climate change will reduce the burden of extreme weather on their farm businesses and could therefore alleviate some drivers of poor mental health in the industry.

Despite being unclear on the purpose of the UK's net zero, possibly driven by misinformation, farmers understand the need for change and are receptive to various policy options. However, they feel they need more support from government and the supply chain to fully participate in and adopt climate adaptation and mitigation measures.

Methodology

Survey questions were designed by the Energy & Climate Intelligence Unit (ECIU). We wanted to know what climate impacts farmers have experienced, how they affected their farm businesses and wellbeing, and their support for various policy options.

We then commissioned Grounded Research to conduct market research of 300 UK farmers. Grounded Research are company partners of the Market Research Society (MRS).

We then commissioned Grounded Research to recruit 300 UK farmers to take part in the survey. Five Bar Gate, with quotas and screening applied to ensure representation across key variables. Over 1,200 farmers were approached to take part.

A sample size of 300 is considered statistically robust for market research when the population is relatively niche and well-defined, as is the case with UK farmers. At this size, it is possible to achieve a margin of error of approximately ±5.7% at a 95% confidence level, which is widely accepted as sufficient for drawing meaningful conclusions. Unlike general population polling, which often requires larger samples to reflect a broad and highly diverse public, market research typically targets more specific audiences. This allows for greater depth of insight per respondent and often incorporates additional layers of screening, segmentation and behavioural context.

The sample included farmers from a range of farm types (cereals, lowland grazing livestock, mixed, general cropping, dairy, less favourable areas (LFA) grazing livestock, horticulture, specialist poultry, specialist pigs), all UK regions, upland and lowland areas, sizes (20ha to over 1000ha), tenures and farming systems (a range from conventional to organic). The composition aligns with Defra's census data within the scope of the screener questions.

The survey was in the field from 6-19 June 2025.

Credits

This work was supported by UK Research and Innovation's (UKRI) Building a Green Future strategic theme as part of the Maximising UK Adaptation to Climate Change (MACC) programme co-designed by UKRI, Defra, the Met Office and the UK Government's Climate Change Committee (CCC).

With special thanks to Clare Otridge and Marie Charles at Grounded Research.

With thanks to Joanne Coates and Colin Chappell from the Nature Friendly Farming Network (NFFN) for sharing their lived experiences of mental health linked to extreme weather.