



Home Grown: A sustainable food system that
delivers for farmers and consumers

PUBLICFIRST 

Authors: Olivia Walsham & Anna Taylor

July 2023



Contents

Executive Summary	2
Introduction	6
Methodology and definitions	8
The Public Care About Food Policy	11
Food Prices	12
Supporting UK farmers	17
Agriculture’s environmental impact	20
The Challenge	24
The Solutions	30
Increasing Productivity	30
More Research and Development	34
Reforming Government Schemes	36
Machinery of Government Change	41
Securing a Skilled Workforce	44
Public Support	46
The Way Forward	49

We thank Associated British Foods for their financial support of this project and the industry expertise they were able to provide during the course of our research. We also thank them for giving us editorial independence; the views in this report are those of the authors alone.



Executive Summary

“The future is so uncertain, everything is so expensive”

Female, 52, receptionist, Yorkshire

94% of the public are concerned about food prices – more than worry about NHS waiting times, and similar to concern about energy prices (96%).

Prices are forecast to get worse. Food inflation in the UK stands at 17.4% and is estimated to remain high for many months. 64% of people say they have not seen the UK government address rising food prices. Food prices will, therefore, be of high public concern at the next election.

At the same time, people know that the agricultural sector matters. There is widespread support for UK farmers, and the public have a strong desire to support food produced in Britain. They want short-term help, and long-term support for British food.

Yet, the two main UK political parties have said little about how they intend to secure the UK’s food system for the future. The limited discussion so far has focussed on measures to ease household costs such as caps on prices. Those policies are important but insufficient. If we want to ensure that the UK has a sustainable food-production industry in the long-term, one that is more resilient to global shocks and therefore insulated against rising prices, then we need to look much harder at the causes of our current discomfort.

Historically our food system has served the consumer well: competition kept prices down and globalisation gave us access to the foods people wanted. But the 2020s have brought a series of shocks demonstrating the fragility of global supply chains and the potential volatility of energy prices. Meanwhile, the methods and technology often used in agriculture risks making us more vulnerable to both through their exposure to global chemical and fossil fuel markets.

With the interrelated energy and climate crises, policy needs to take a long-term view of how the agriculture sector can be supported to be sustainable in the long term – sustainable in the environmental sense, and sustainable in terms of security of supply and delivering for food producers.

Therefore, as well as short-term action to ease pain on households, a responsible government must act to increase food production at home and delink it from fossil fuels as much as possible. And if we want to futureproof British farms and give the sector certainty for the next century, we must introduce policy that reduces agriculture’s carbon emissions, and trains and encourages new entrants into the workforce.



The good news for proactive politicians is that there is a policy package that works and is politically popular. In our extensive opinion research for this project we found there is political gain to be made from a policy programme that:

- **Limits price rises.** We make the UK less vulnerable to the global supply chain shocks which push up our food prices;
- **Ensures more affordable, sustainably produced British food.** We work with farmers and help them modernise so they can grow more British food, more sustainably;
- **Brings more good jobs in the UK.** We create more good quality jobs in the UK, by supporting new industries and safeguarding the future of the agricultural workforce;
- **Decarbonises agriculture.** We incentivise sustainable food production, help farmers to decarbonise their assets, and support innovation in new low carbon products.

We outline the details below.



Challenge	Policy recommendation	Opportunity
Improving productivity and sustainability of UK farms so that we can produce more with less, making UK agriculture more prosperous, sustainable and resilient to global shocks	Significantly scale up the Farming Investment Fund for farmers to invest in sustainable productivity improvements	A farming industry which can produce more food domestically, with less inputs and land, whilst protecting the environment
Delinking food production from fossil fuels and chemicals so the UK is less exposed to volatility in global supply chains, whilst at the same time ensuring the UK is at the forefront of innovation in food production	Significantly increase public funding for R&D investment in agriculture, and target it to support the creation of new domestic industries and the creation of new technologies that will help to insulate British agriculture from future energy price shocks	A farming industry which is not as reliant on fossil fuels and chemical inputs, improving the UK's resilience to global shocks and farming's impact on the natural environment whilst also creating new industries that will provide employment and local growth
Ensuring that the schemes to support UK agriculture currently being phased in do not work against a thriving domestic agricultural industry, but incentivise food production using sustainable practices alongside wider environmental goods	Make sustainable production of food an explicit goal of support for farmers by making sustainable food production a 'public good' and provide long-term certainty that the goal posts of the new support scheme will not be moved	A farming industry where sustainable food production is actively incentivised alongside environmental goods and long-term certainty is a given, safeguarding production for the future
Ensuring that government is supporting rather than hindering a thriving domestic food industry,	Establish a new Cabinet Office unit which brings together every area of government that impacts	A farming industry which has confidence in government decisions, and in its support for UK



<p>so that all departments are working towards one strategic plan, rather than grating against each other</p>	<p>food policy, from trade through to health and safety and environmental policy, with a strategic aim of supporting the development of a sustainable, prosperous food system. This should include oversight of the promised land use framework</p>	<p>agriculture, improving confidence to make long-term investment and business decisions</p>
<p>Improving the skill levels of the farming workforce, and ensuring a pipeline of new entrants into the industry to ensure it can thrive in the future and make agriculture more attractive for the next generation</p>	<p>Work with the Agriculture and Horticulture Development Board and The Institute for Agriculture and Horticulture to increase the number of farming apprenticeships and increase access to continued professional development for farmers</p>	<p>A farming industry which has the workforce it needs to ensure the future of the industry, and where skill levels enable the UK industry to be world leading in sustainable, innovative farming techniques</p>



Introduction

The UK's food security has risen up the political agenda in recent years as unprecedented pressure has been placed on our food system. During the Covid-19 pandemic, the UK's food system rose to the challenge, keeping food staples on supermarket shelves. But the sight of empty shelves across some categories led to a greater appreciation of the need for a strong domestic food system. Around the same time, Marcus Rashford and others' campaigning on free school meals pushed the issue of food security at a household level into the limelight.

Last year, the war in Ukraine again put food security higher up the political agenda with shortages in goods like sunflower oil being felt by supermarkets, household and hospitality businesses, and increased gas, electricity and fertiliser prices, as well as supply disruption, affecting the food system.

Now, as food inflation hits levels not seen for half a century and the cost-of-living crisis inhibits people's ability to afford basic goods, the availability of nutritious affordable food is at the top of the political and public agenda.


At the same time, there is a longer-term awareness that climate change is making, and will continue to make, a significant impact on the UK's food system, affecting both domestic and overseas agricultural production. We need to protect production from the effects of climate change whilst also reducing agriculture's contribution to harmful emissions that will worsen the scale of the challenge.

Both the government and opposition parties are aware of the challenges facing the UK's food system. The Conservative government has published a food strategy which promises a land use framework in 2023, and Rishi Sunak has indicated his desire to increase food security in the UK. Meanwhile, Labour has stated an ambition to support British industries as part of its 'securoeconomics' agenda, making greater use of government procurement to support UK food producers, and has made a climate investment pledge of up to £28bn a year for the next 10 years, fiscal situation allowing, which is largely unallocated.

To address the immediate crisis, the government has held a summit with food providers, and has been in discussion with industry about a potential voluntary cap on the prices of essential goods. The Competition and Markets Authority is also investigating the role of supermarket competition in the current context. Despite these various initiatives, very little concrete action has been taken to help people with the new front of the cost-of-living crisis.²

¹ Cover page image: Red Zeppelin, [Unsplash](#), accessed July 2023

² Reuters, [UK govt to ask supermarkets to cap prices of basic food items](#), 28 May 2023



The Labour Party has called for a fund for energy intensive industries, paid for by a windfall tax on oil and gas giants which would cut energy bills for domestic food manufacturers and processors in the short term. Others have called for increases in welfare benefits to reflect the real cost of living, and more funding for schemes to redistribute surplus food.³

We agree with the need to help families now but resolving the short-term pain must come hand in hand with safeguarding our food sector for the future and solving the root causes of high prices here in the UK.

As parties develop their platform for the next general election, they must understand the level of public concern about the cost of their weekly shop. The UK food system is going to be high on the public and political agenda. We must inject a sense of urgency into our attempts to answer the systemic long-term challenges facing our food system. Our research has purposefully taken a long term view. We have investigated the causes of the current crisis and the wider challenges facing the food system in order to set out an electorally salient policy package which political parties should adopt ahead of the next election.

This project has considered policy expertise, investigated public opinion to develop pragmatic policy solutions and made recommendations in a number of areas with the aim of answering one key question: How do we support a prosperous, sustainable domestic agricultural industry, making us less susceptible to global shocks?

³ Sky News, *Under-pressure government looks at food price cap to bring down rising costs*, 30 May 2023 and FareShare, *1,000 charities back FareShare's call for the Government to tackle food insecurity*, 2 March 2023



Methodology and definitions

Our approach to this project was to first understand the key challenges facing the food sector, and then seek out consensus on practical and popular policy options that would improve the UK's food self-sufficiency with sustainable, affordable food grown and grazed on British land. This report does not offer detailed ready-to-implement policy but rather has sought out policy options that can achieve some consensus in the industry, are popular with the public, and will in the medium- and long-term shield consumers from the kind of price shocks we see today.

During the course of our literature review and later interviews, we identified three key policy goals:


1. Maximising food production, supply chain security and resilience by ensuring and improving the profitability and resilience of British farming and domestic food production, as well as the underlying supply chain infrastructure.
2. Long-term sustainability and security of land, soil and the environment for the future – while also achieving Net Zero goals
3. Ensuring individuals can access nutritious food at a price they can afford

One of the reasons why the UK's food system has historically served the consumer well, is the availability of goods and labour that globalisation secured and it has also enabled UK producers to export all over the world. Our policy goal of maximising domestic food production should not be seen as a criticism of globalisation or a move towards protectionism. We will always need and want to import goods we cannot produce here in the UK.

However the climate crisis, food crisis and energy crisis shows how important it is to 'tilt the dial' slightly and support sustainable food production in the UK. This will reduce our reliance on global supply chains which are often less sustainable and leave food producers and consumers more exposed to global shocks.

Speaking to experts

We interviewed industry and policy experts from the length and breadth of the food supply chain, from farmers, major food producers and supermarkets, to academics and policy experts in government. This gave us invaluable insight into the key challenges they think the food system faces now and in the medium and long term, and their ideas and insights into the policy levers which might address them.



We also ran three workshops with an advisory panel to the project, who reviewed our work at various stages and gave their feedback on our methodology, interim findings and final policy recommendations. This included:

- Jude Capper, Harper Adams University
- Joe Fortune, Co-operative Party
- Ali Gourley, Fare Share
- Rob James, Thanet Earth
- Nick Rowsell, Farmer
- Paul Savage, Arla Foods
- Jack Watts, National Farmers Union
- Andrew Weston, Co-op

Their iterative feedback was incredibly helpful in the development of our recommendations and we thank them for their contribution.

Speaking to the public

We ran six focus groups on 23 and 24 April 2023, targeting three specific types of voters. Two of these groups could be described as Labour's 'target voters' and are a key demographic crucial to securing a Labour majority at the next General Election. We also ran focus groups with the rural communities that would be most intimately involved in food production, and most impacted by any policy change. These groups were:

- Financially insecure, formerly Conservative swing voter group. Living in Bolton, below median household income, voted Conservative in the 2019 general election, social grades C1, C2, D, state they feel financially insecure, one group would consider voting Labour in the 2024 general election, and one group don't know who they would vote for.
- Environmentally motivated, Lib Dem/Labour swing voter group. Living in the London Boroughs of Islington, Stoke Newington, Shoreditch, Angel and Borough, strongly concerned about the environment and sustainability, would consider voting Labour and Liberal Democrat in the 2024 General Election.
- Rural communities connected to the farming industry. Living in the Yorkshire area in a village or smaller, themselves or a close friend or relative work in a job related to agriculture, 6/8 were homeowners, not strongly concerned about the environment.

We then ran a 1,000-sample, nationally representative poll of the UK public in May 2023. This helped us to quantify our findings, understand the scale of the impact of inflated food prices on people's food choices and quality of life, and test messaging around our policies. Find the full tables [here](#).



Definitions

In this report we define **food security** as when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. This definition is widely accepted and originates from the 1996 World Food Summit.⁴

Sustainability in agriculture refers to the ability of a farm or agricultural system to produce food, fibre, or other products indefinitely without damaging or depleting the resources or environment on which it depends. This includes activities such as crop rotation and mixed farming.

⁴ Food and Agriculture Organisation, *Food Security briefing note*, June 2006, accessed March 2023

The Public Care About Food Policy

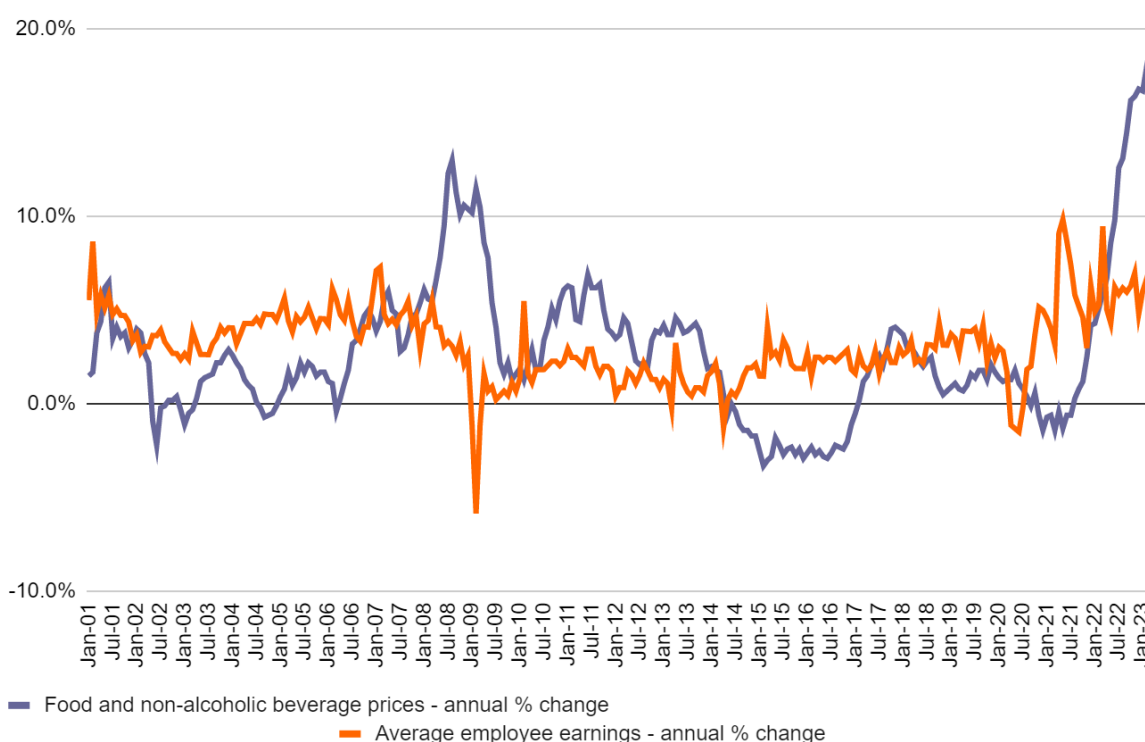
“The cost of the food shopping. That has just gone up by a stupid amount.”

– Female, aged 41, data analyst, Bolton, 2019 Con voter, now intending to vote Labour

When we began this project, the issue of food security was rising up the political agenda but during the course of our work the price of food has spiralled, and the impact of inflation on households' abilities to afford basic foods has heightened.

At the time of writing, food inflation is at 17.4% and wages have not kept pace with this rapid rise:⁵

Annual change in employee earnings and food and non-alcoholic beverages prices, UK, 2001–2023



Recent analysis from the Resolution Foundation suggests that while energy prices and global food commodity prices are coming down, the prices people will pay in the supermarkets will continue to rise through the summer, with food prices driving inflation more than energy prices for the remainder of 2023.⁶ Their analysis concludes that by this

⁵ ONS, *Consumer Price Inflation*, July 2023

⁶ Resolution Foundation, *Food For Thought*, 19 May 2023



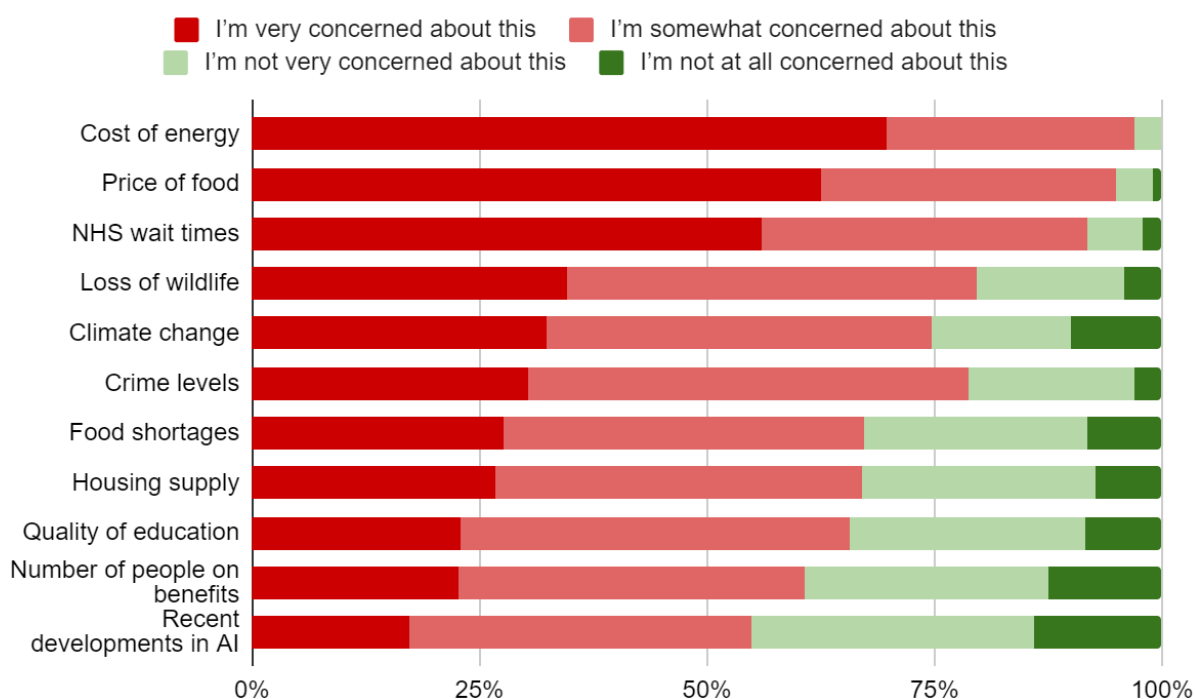
summer food bills will have increased more than energy bills since 2019–20, averaging £1,000 per household.

This is a huge shock to family finances. The political world must wake up to the fact that, moving forward, the cost of food is going to be a major challenge facing the UK public. In this chapter we show the extent of public concern on this pressing issue, before turning to the causes of the current situation and what political parties should do about it in the rest of this report.

Food Prices


Almost every person in our survey (94%) indicated that they were very or somewhat worried about the price of food at the moment; a similar proportion to those stating concern about energy prices (96%).⁷

To what extent are you concerned about the following issues in the UK right now? (All respondents)



As well as a high level of concern about food prices, almost every respondent in our survey said they noticed food items getting more expensive over the last year (97%) – and proportions were the same across demographics. 81% of all respondents said they spend more on food than they did a year ago (with 48% said they spend a lot more). There was some variation across demographics, with the youngest age group and respondents from lower socioeconomic groups slightly less likely to say they now spend more on food than

⁷ Public First, [Public First Poll on UK Food System](#), May 2023



other groups. This is presumably as a result of adjustments in the amount or type of food they buy to cope with increasing prices (i.e. spending more is not an option).

This concern for rising prices was palpable in our discussions in focus groups. Across every demographic and every location we spoke to, food prices were front and centre of people's unprompted concerns. There was also a real sense of pessimism about the future:

"I feel like I'm shocked weekly by how much food has gone up"

- Male, aged 33, software developer, central London, environmentally minded, Labour/Lib Dem voter

"The price of living in general has gone up... you can't live how you used to live and now you think about everything and you worry... the future is so uncertain, everything is so expensive."

- Female, aged 52, receptionist, rural Yorkshire

"The only thing that's worrying me is all the food prices... you change your social life a bit more to accommodate it... work becomes a lot more important to get some on the table for the family."

- Male, aged 25, sales rep, rural Yorkshire

"The weekly shop feels twice as expensive as it used to be"

- Male, aged 28, sound engineer, central London, environmentally minded, Labour/Lib Dem voter

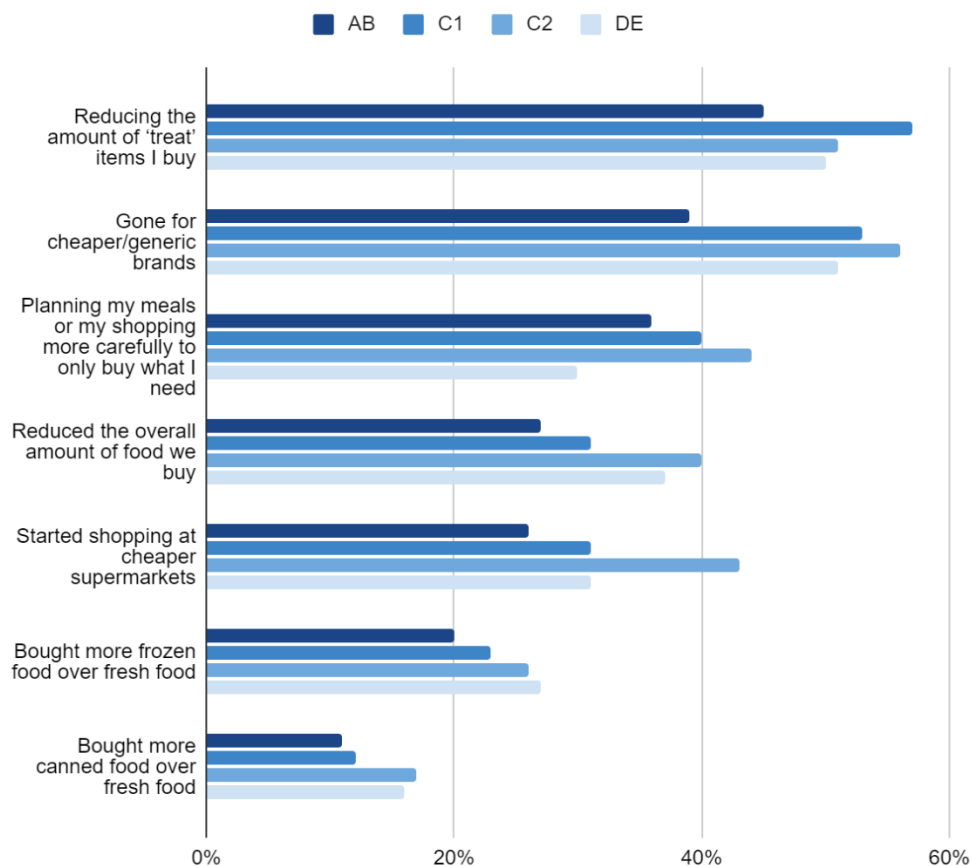
Changing behaviour

A significant number of people have changed their shopping habits in response to the increase. 51% of those who noticed an increase reduced the amount of 'treat' items they buy, 49% have gone for cheaper brands, and 33% have reduced the overall amount they buy. 24% bought more frozen goods over fresh food, and 14% bought more canned food over fresh food. There were some noticeable differences in actions taken between socioeconomic groups. People in lower socioeconomic groups⁸ were more likely to buy frozen food over fresh food than AB/C1 respondents, as well as reducing the overall amount of food they buy.

⁸ Public First uses the NRS system to define social grade, which is standard in UK polling. It is based on the occupation of the chief income earner in a household. It ranges from A (managerial and professional roles) to E (casual workers, those receiving state pensions and unemployed). ABC1 is traditionally thought of as 'middle class' and C2DE as 'working class.'



You said you've noticed that your food groceries have become more expensive. Have you made any of the following changes to your food shopping habits specifically to cope with this? (Respondents who said they noticed that their food groceries have become more expensive)




Similarly, almost everyone we spoke to had made a change to their shopping habits as a result of the increase in food prices, from switching to cheaper supermarkets or brands through to making conscious decisions not to buy certain products:

'We used to always go out to our Tesco and now you find yourself more swaying towards like the Aldi side of things...we used to go shopping whatever you see whatever you fancy you just whack it in and that could be 110, 120 quid but now we're being a lot more cautious my partner she's writing a list on the phone, we're going out and getting what we need'

- Male, aged 27, accounts manager, Bolton, 2019 Con voter, now intending to vote Labour

'I am on a much stricter budget now. There's just things that I can't pick off the shelf, I am having to be really careful what I put in my basket'

- Male, aged 35, wholesale manager, Bolton, 2019 Con voter, now intending to vote Labour



"I now decide, do I really need this? I used to be embarrassed to go to the reduced. But now I go to the reduced and I look at what I can get there and now I'll plan my shopping around that.... Now I see everybody in the reduced because everyone is looking to save a buck where they can"

- Female, aged 58, receptionist, central London, environmentally minded, Labour/Lib Dem voter

We also heard from people who were having to change their diets and feeling they were eating less healthily as a result of increasing prices:

"I don't remember the last time I bought any red meat. Things like prawns are mad expensive. So yeah, I would say that I'm eating more of a veggie diet. But that hasn't been a personal choice. That is a result of me trying to cut my weekly spend"

- Female, aged 26, project manager, central London, environmentally minded, Labour/Lib Dem voter

"These [cost and savings] are things that are important when you're buying food, but we all want to buy quality food as well. And the fact that we're getting restricted from that is a frustrating thing... it's a bit soul destroying in some respect... we're all putting healthiness at the bottom and cost at the top. Your healthiness should be the top priority for everyone. It's really an indictment of society today that it's not"

- Male, aged 51, courier driver, Bolton, previously Con in 2019, now unsure

There was a real sense of unfairness that this was the situation in which working people were finding themselves, as well as concern for the country as a whole:

"I'm finding myself in the reduced section and having to substitute... before it would have been nothing for me to buy Cathedral City, I wouldn't even have looked at Tesco's or Asda's. Now Cathedral City is only going in my fridge if it's on offer. I'm a working person, I've always worked, it shouldn't be like that. I should be able to treat myself to Cathedral City"

- Female, aged 32, compliance officer, Central London, environmentally minded, Labour/Lib Dem voter

"I can't imagine what it must be like for people that have got children and single parents. I feel quite anxious and worried for everyone really in this country."

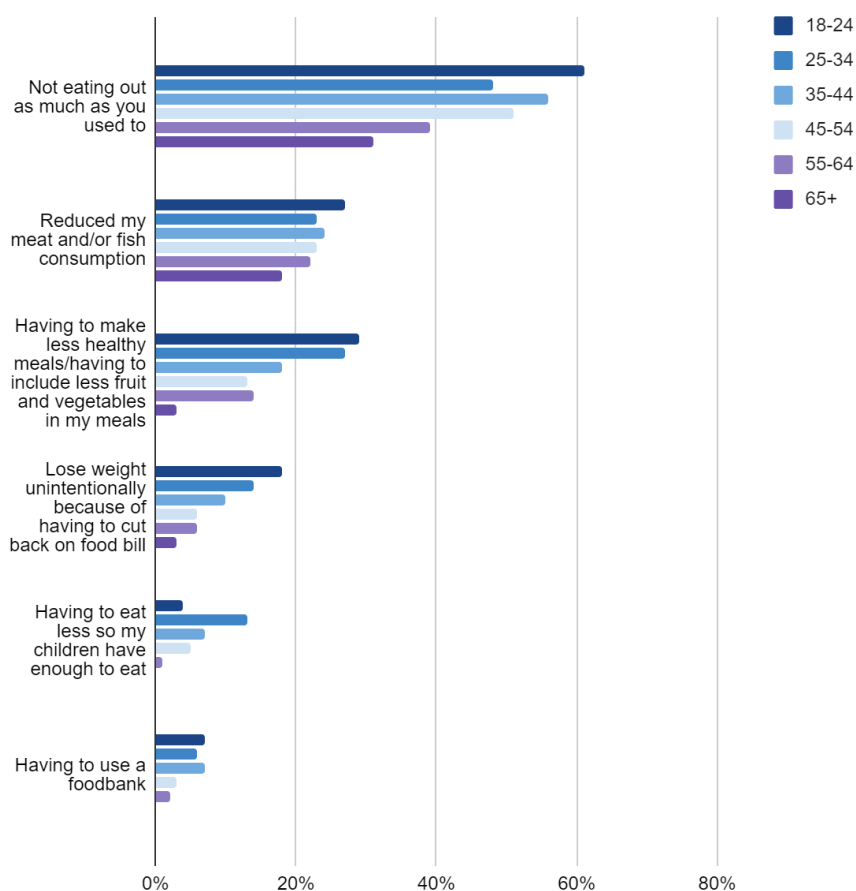
- Female, aged 33, operations manager, rural Yorkshire

Not only are people adjusting their shopping habits, many have also changed their wider eating habits as a result of changes in food prices. Almost half (47%) of those who noticed an increase in food prices in our poll (which itself stood at 97%) said they did not eat out as much as they used to, 22% reduced the amount of meat or fish they eat, and 16% have had



to make less healthy meals. Alarming, 9% said they have unintentionally lost weight, 4% said they were having to use food banks and 5% said they were having to eat less so their children have enough to eat. This was supported in our discussions with one man describing how he had lost weight “because I can’t afford to eat as much as I used to eat”.

And have you experienced any of the below changes in your eating habits as a result of food becoming more expensive? (Respondents who said they noticed that their food groceries have become more expensive)

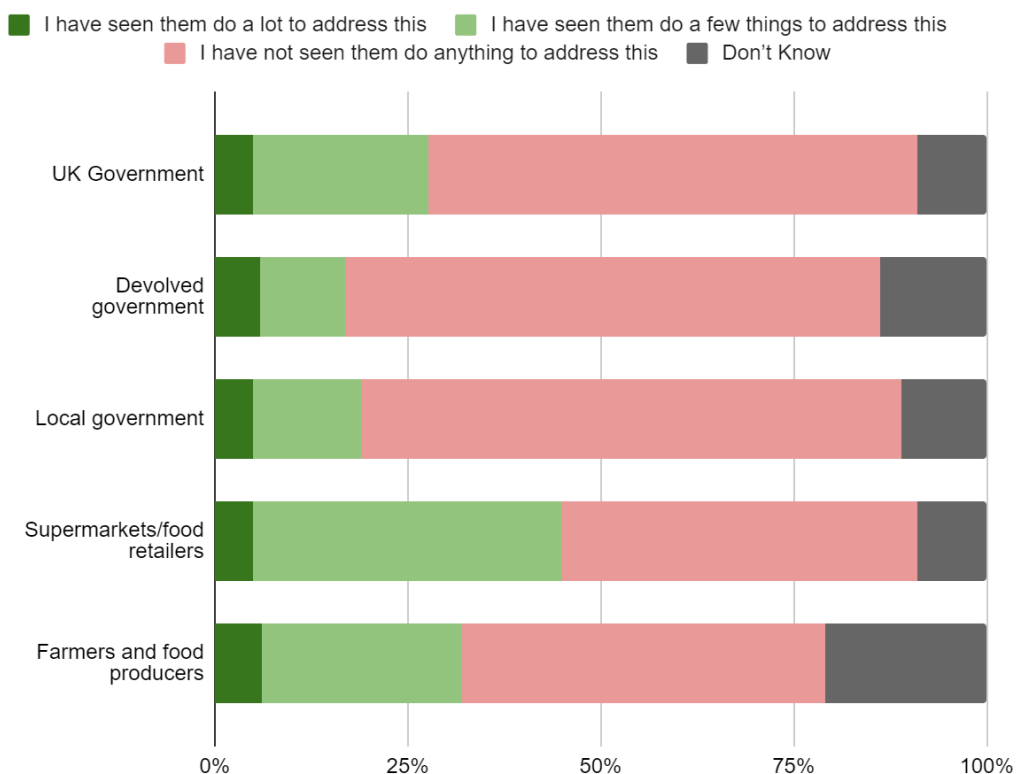


Perceived Action

Almost two thirds (64%) of people said they had not seen the UK Government do anything to address increasing food prices, compared to 45% who said they have noticed supermarkets and retailers do something about it. A majority of people in both 2019 voting groups said they had not seen the Government do anything about it, although it was higher among Lab voters than Con voters (72% vs 57%). Among Conservative swing voters, almost two thirds hadn’t seen the Government do anything about rising food prices (63%).



To what extent have you seen each of the following taking action to address increases in food prices, if any? (All respondents)



Similarly, in our discussions people felt strongly that the government wasn't doing anything to help with the rising cost of food:

"This government is never going to stop corporations making profit, because that's the government that they are"

- Male, aged 35, wholesale manager, Bolton, 2019 Con voter, now intending to vote Labour

"In other places where they're experiencing global things, but at a national level the government is stepping in to try and make things easier. And here it doesn't really feel like that's happening"

- Male, aged 28, sound engineer, central London, environmentally minded, Labour/Lib Dem voter

Supporting UK farmers

Despite their immediate concern about prices, the public wants a thriving British agricultural sector. In our poll, 23% of people in the UK selected 'agriculture and farming' as one of the top 3 sectors which they think is most important to the country's economy. This was ahead

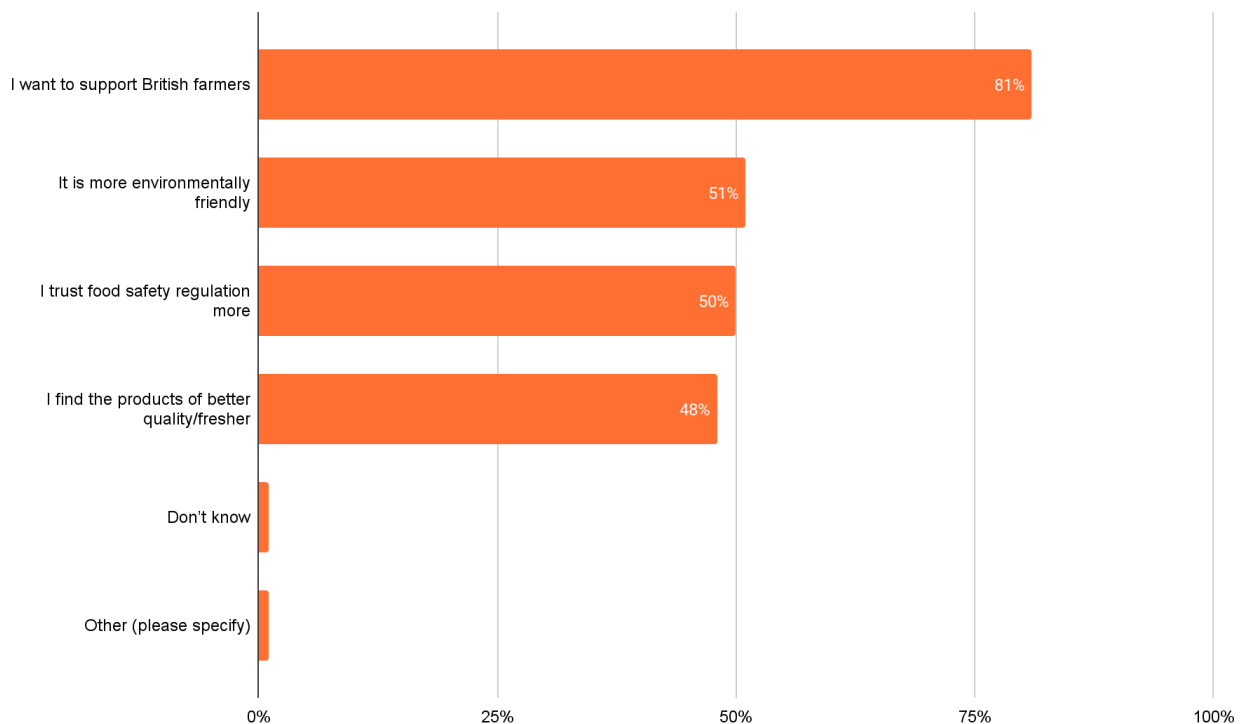
- Female, aged 26, project manager, central London, environmentally minded, Labour/Lib Dem voter

"We don't make anything anymore do we? Is this going to get worse and worse as time goes on? Because we make less and less stuff in the UK. Then you're kind of held ransom to stuff aren't you?"

- Male, aged 50, social housing consultant, central London, environmentally minded, Labour/Lib Dem voter

When asked to choose the reasons for preferring British produced food, 81% of respondents in our survey said to support British farmers, followed by environmental concerns (51%), greater trust in food safety regulation (50%) and better quality (48%):

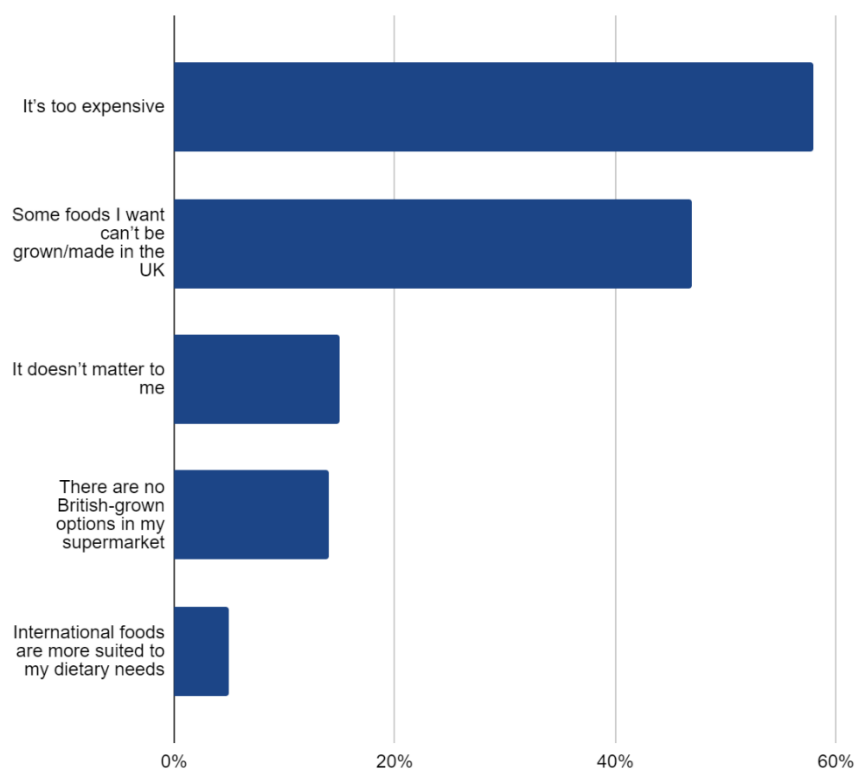
You said that if cost and availability were not a barrier, you would generally prefer to buy British produced food over internationally produced food. Why is that? (BASE: Respondents who would prefer to buy British produced food if cost and availability weren't a problem)



However, the main obstacles consumers report facing for buying food produced in the UK were price (58%) and preference for foods that can't be made in the UK (47%). Only 15% said buying more food produced in the UK did not matter to them.



What barriers, if any, prevent you from buying more food produced in the UK? (All respondents)



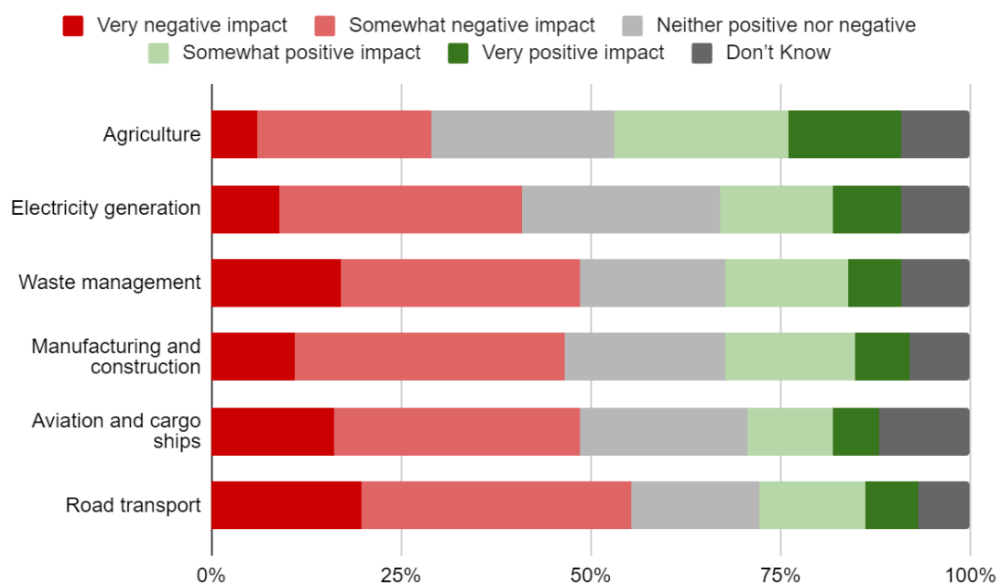
Agriculture's environmental impact

Whilst agriculture makes a significant environmental impact, contributing 12% of UK carbon emissions and effecting biodiversity and water quality, there is very little public understanding of this.⁹ In fact, more people consider the sector to have a positive impact on the environment than negative (38% against 29%) and almost a quarter (24%) believe agriculture has neither a positive nor negative impact. We found that lower socioeconomic groups were less likely to think the sector had a negative impact, as well as those who are less concerned about climate change.

⁹ CCC, *2022 Progress Report to Parliament*, 29 June 2022



To the best of your knowledge, how much of an impact do the following industries have on the environment in the UK? (All respondents)



We found that respondents also had little understanding of the importance of agriculture in decarbonisation (net zero) targets. Whilst 57% of respondents did think that ‘making Britain greener’ involved ‘making farming more environmentally friendly’, this was the least selected of all the options. This lack of knowledge of the impacts of food production on the environment also may explain why, despite high levels of concern for climate change in 55% of the UK public, only 8% said the environmental impact of production was one the most important factors in their product choice when food shopping. Ultimately, environmental impact did not impact the public’s food shop – cost was the deciding factor.

Our qualitative research revealed that respondents were concerned about the high carbon emissions of imported food due to air freighting and therefore assumed British grown food would be better for the environment. Respondents from rural Yorkshire had much higher levels of understanding, perhaps due to their proximity to the industry, and were aware that food production could have negative environmental impacts:

“I agree that we need to produce as much as we can in this country, but we can’t allow farmers to just rip up bits and bobs... but you can definitely have both.”

- Male, aged 46, smallholder farmer, rural Yorkshire

There is overall very low understanding of what the term ‘sustainable farming and agriculture’ means beyond that it was environmental.



Conclusion

Political discourse on the cost-of-living crisis has been consumed by rising energy prices, and policy solutions from government and opposition have focussed on shielding families and vulnerable people from the cost of heating and running their homes. However, our polling finds that the British public is now just as concerned about the rising cost of food as they are about energy prices. This is having a significant impact on the choices they make when food shopping, leading them to reduce the amount of food, and the proportion of fresh fruit and vegetables they buy.

Food prices are forecast to increase in the months ahead, and will continue to be a dominant concern for the public. Whilst it is likely to be a key issue going into the next election, a large majority of the public have not seen the UK government doing anything to help with the crisis. At the same time, there is widespread support for UK farmers, the public see agriculture as an important UK economic industry and they want to buy British food, although the cost of food ultimately decides their product choices..

Political parties must understand the scale of concern amongst the public, and have a policy offer on the UK food system that speaks to the public's priorities - affordable, UK-produced food that is insulated from price shocks, and supports UK farmers. Yet, the two main UK political parties have said little about how they intend to secure the UK's food system for the future - to do so we need to look much harder at the systemic causes behind our current discomfort.

The importance of rural communities as a voting bloc

Rural communities will be an important fighting ground for the next General Election. Whilst rural areas have traditionally been a Conservative heartland, the Labour Party must also aim to capture rural voters in order to succeed in the coming election.

A Fabian Society report in December 2022 makes the connection between Labour's target seats and rural communities - showing that 50 of the 150 target seats identified by the Society have at least 25% of their population living in rural communities. In these seats, winning over rural voters would make the difference at the next General Election. These are spread right across the UK from Dover to Na h-Eileanan an Iar in Scotland.¹⁰

Labour might need the rural vote, but can they win it? Traditionally, Labour's rural vote share has trailed its national vote share. This isn't just because of demographics such as a larger proportion of homeowners and an older population in rural areas. There is a noticeable 'rural effect' where rural communities have a "persistent aversion" to voting

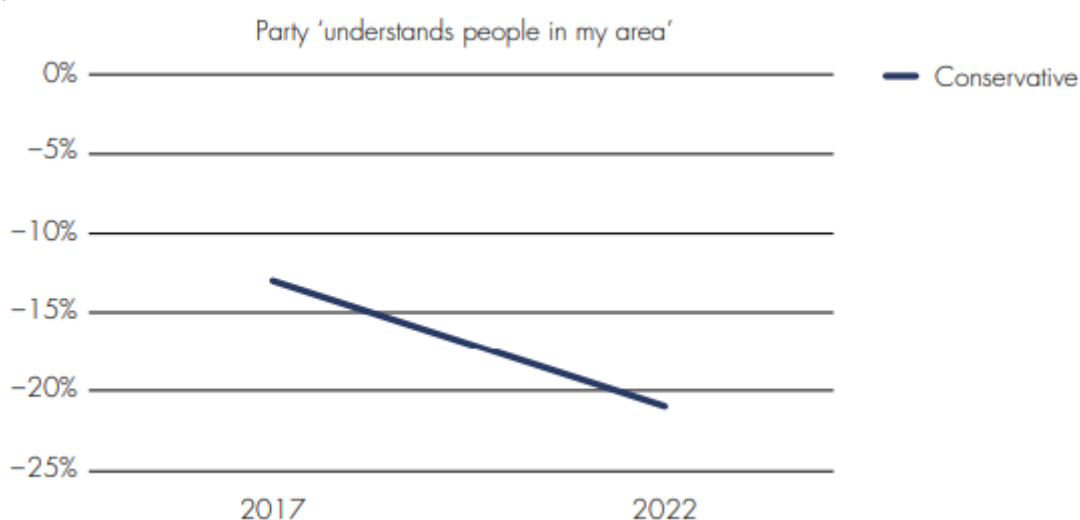
¹⁰ Fabian Society, *Green and Pleasant Land*, December 2022 pp.5



Labour - for example, there is a 16 point gap between rural under-55's intention to vote Labour versus those in urban areas.¹¹

The Conservatives are losing popularity in their rural heartlands and Labour are making ground. But rural voters are unconvinced that either party understands them. In December 2022, every demographic group was more likely to disagree that the Conservatives 'understand people in their area' or 'share their values.'¹² And in turn, whilst Labour have improved in popularity significantly since 2019, 44% of rural respondents said the Labour party did not understand them, and 48% that they do not share their values.

Net proportion of rural respondents believing the Conservative party does 'understand people in my area'¹³



How can our political parties convince rural voters that they understand them? Agriculture and food production are vital to the economies of rural communities, bringing jobs and investment, and they are also a large part of rural communities' identities. A Party that wants to capture rural votes needs to show they are listening to farmers and trying to fix the systemic problems in the food system - as NFU president Minette Batters states: "*not just by saying they support us, but by showing us they do*" with popular and sensible policies that give farmers certainty and support.¹⁴

¹¹ Fabian Society, *Green and Pleasant Land*, December 2022 pp.6

¹² Fabian Society, *Green and Pleasant Land*, December 2022, pp. 5

¹³ Fabian Society, *Green and Pleasant Land*, December 2022, pp. 5

¹⁴ The Guardian, *Britain's farmers battered by Brexit fallout and rising costs, says union*, 21 February 2023



The Challenge

Politicians who want to prevent future spikes in UK food prices must first seek to understand the causes of the current crisis, and the long term challenges facing the UK food system. This chapter sets out our analysis of the challenges described to us by industry and policy experts.

Why have prices risen?

Put simply, global events impacting supply chains and costs have placed upward pressure on prices. As the price of energy increased due to the war in Ukraine, the price of fertiliser, transportation, processing and farm energy costs increased. These costs have been felt throughout supply chains and led to some farmers to make the cost-benefit decision not to produce as much. For example, figures from the NFU show that 40% of cattle keepers and 36% of sheep keepers suggested they would be reducing numbers in the next 12 months, with input costs the primary factor in that decision.¹⁵

At the same time, supply chain disruptions have caused a shortage of fertiliser and inputs into animal feed like wheat, soybean and sunflower meal, again pushing up costs.¹⁶ Extreme weather has impacted crop yields in the UK and across the world, and some fresh fruit and veg have been in short supply, therefore pushing up prices in the supermarkets.

These are external shocks to the food system, but the UK was particularly exposed to these global headwinds. For example, the UK is heavily reliant on importing energy (especially natural gas; the UK imports around 50% of the gas we use from international markets) which leaves us vulnerable to the impact of energy shortages and rising costs.¹⁷ As well as energy, we import many key agricultural inputs. We produce only 40% of domestic fertiliser needs – and this is at risk of worsening with the recent closure of one of the two major fertiliser plants – and we depend on importing 25% of animal feed costs; actual use of feed imports is almost 45%.¹⁸ We aren't self-sufficient in fruit and vegetables that can be grown in our climate; we produce only 54% of the vegetables consumed in the UK, and 16% of fruit.¹⁹ The UK is the world's third largest net importer of food and drink, behind only China and Japan.²⁰

¹⁵ National Farmer's Union, *NFU Livestock farmers help assess input cost impacts*, January 2023


¹⁶ House of Lords Library, *Rising cost of agricultural fertiliser and feed: Causes, impacts and government policy*, 22 June 2022

¹⁷ ONS, *Trends in UK imports and exports of fuels - Office for National Statistics*, June 2022

¹⁸ DEFRA, *United Kingdom Food Security Report 2021: Theme 2: UK Food Supply Sources*, December 2021

¹⁹ DEFRA, *United Kingdom Food Security Report 2021: Theme 2: UK Food Supply Sources*, December 2021

²⁰ Food and Agriculture Organization of the United Nations, *Trade of agricultural commodities 2000–2020*, May 2022



Furthermore, the UK has historically enjoyed relatively affordable food prices, with significant investment into decades of innovation across the food supply chain and supermarket competition putting downward pressure on prices. This has meant profit margins in the UK food sector are slim and consumers generally get a good deal. However, this dynamic market has also meant that farmers face significant downward cost pressures, rendering many smaller family farms unviable. Now that supply chain costs have increased, producers, processors and to some extent supermarkets have little room to absorb them and must therefore pass much of the increase on to consumers.

“A loaf of Sunblest bread was 69 Pence in 1984 and a loaf of Kingsmill in 2020 was 80p ... we have one of the globally best food supply chains anywhere - I mean the fact you can get a loaf of Kingsmill or a loaf of bread from a garage forecourt from Inverness to you know, Cornwall is extraordinary, baked within 24 hours, fresh bread, fresh milk, you know, you don't get that even in places like France... you just don't have that same affordability and availability.”

- Industry Expert

Brexit has also had a particular impact on UK food prices and supply. Supply chains have been impacted by labour shortages, affecting supply costs and yields. A high profile example would be the shortage in abattoir workers leading to the slaughter of hundreds of pigs.²¹ Brexit has also caused an increase in bureaucracy for imported produce, on which the UK is heavily reliant, further complicating supply chains.

A recent ONS analysis of food and energy price inflation showed the UK is an outlier amongst comparable economies; *“UK food price inflation was among the highest across G7 economies in March 2023, second only to Germany”*.²² While global commodity prices are starting to come down, this has not yet filtered through into UK consumer prices. The ONS analysis suggests a number of reasons for this including the UK's import dependence, rebuilding profit margins and transmission lags.²³

²¹ The Guardian, *Hundreds of healthy pigs slaughtered amid UK shortage of abattoir workers*, October 2021

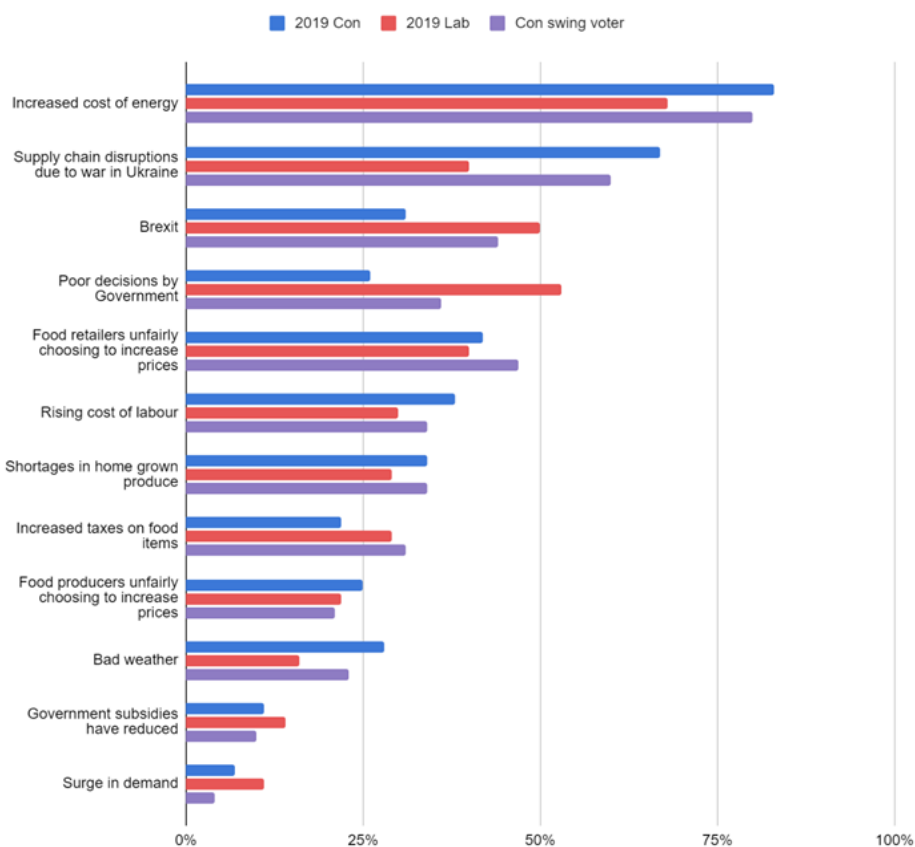
²² ONS, *Food and energy price inflation, UK: May 2023*, 2023

²³ *ibid.*

What does the public think is driving prices?

The majority of people associate increases in food prices with the cost of energy (74%) and supply chain disruptions due to the war in Ukraine (55%). Just under half (44%) blame Brexit, and just over 2 in 5 (41%) think it has to do with poor decisions by the Government. Over a third think retailers are also unfairly choosing to increase prices (37%).

Why do you think food prices have changed? (All respondents)



The current upward pressure on food prices reveals, therefore, a deeper problem in the UK's food system; that we are exposed to global shocks. This vulnerability means that an increase in energy costs or shortages elsewhere in the world rapidly pushes up prices here in the UK. **Going forward we need to foster a prosperous, sustainable agricultural sector. One that is more insulated from global shocks and climate change impacts so that in the long term we are better insulated from rising prices.** The current food price crisis has revealed the urgency by which Britain must meet this long term goal.

Macro policy challenges for UK food security

To insulate Britain from global shocks and climate change impacts we need to understand the macro challenges facing the UK's food system. The UK currently produces around sixty percent of its domestic food consumption by economic value, with actual consumption of UK-produced food closer to fifty-four percent. In 2020, the UK imported forty-six percent of the food it consumed. These headline figures have remained largely unchanged over the last 20 years following a period of decline from a production peak in the 1980s.²⁴

However, farmers are under **unprecedented pressure** and have been for a number of years. Supply chain disruptions caused by multiple external shocks have significantly increased costs with the price of energy, fertiliser and feed rocketing as outlined above.²⁵ And given fierce competition in the sector, food producers cannot simply increase costs to reflect inflation. In our research we heard first-hand how these increases meant that food producers simply couldn't produce as much as they ordinarily would:

"We haven't bought any fertiliser for two years on the farm. Because it's more cost effective to just make less, use less diesel and do less work - and not spend £1000 a ton to try and make more... so we only farm grass and by no means at a large scale."

- Male, aged 47, dairy engineer and farmer, rural Yorkshire

Contribution of agriculture and food production to the UK economy



£43 billion

The value created by the sector in 2022, greater than the entire economies of Nottingham and Bristol combined.



£17 billion

Value of goods exported by the sector. The equivalent of over 170,000 lorry loads of mild cheddar.



1.4 million

The estimated number of jobs the sector supports in the UK.



440

The estimated number of cooperatives in the sector.

²⁴ Sector info box: ONS, *GDP output approach - low-level aggregates*, June 2023.
ONS, *UK gross value added (GVA) and productivity estimates for other geographies*, January 2023
ONS, *UK trade in goods by classification of product by activity time series*, May 2023
ONS, *Regional gross value added (balanced) per head and income components*, April 2023
Cooperatives Europe, *Mapping Key Figures*, April 2021

²⁵ House of Lords Library, *Rising cost of agricultural fertiliser and feed: Causes, impacts and government policy*, 22 June 2022



Not only have supply chains been disrupted, our departure from the European Union and the Covid-19 pandemic have caused severe worker shortages, with the NFU estimating £60 million of food had been wasted on farms by August last year as a result.²⁶ Trade policy has also impacted domestic food producers, with new trade barriers for exporting their produce into Europe, and new trade deals, such as the Australia deal, putting UK producers at a disadvantage.²⁷ These multiple crises pose a real and severe risk to food producers' prosperity, and the future of domestic food production.

At the same time, **climate change** threatens global food production in the long term. In the latest food security report from the government, several risks to the UK's long-term food security were identified with climate change, climate variability and biodiversity loss all expected to threaten global and UK food security:

*The biggest medium to long term risk to the UK's domestic production comes from climate change and other environmental pressures like soil degradation, water quality and biodiversity. Wheat yields dropped by 40% in 2020 due to heavy rainfall and droughts at bad times in the growing season. Although they have bounced back in 2021, this is an indicator of the effect that increasingly unreliable weather patterns may have on future production.*²⁸

Similarly, the IPCC has warned that global warming will undermine "food productivity in many regions on land and in the ocean" and the Climate Change Committee has said that climate change will make it harder for the government to ensure the resilience of UK food supply. Many food producers are already feeling the effects with the record high temperatures reached in the UK last summer impacting their crops and irrigation systems, leading to stunted growth and lower yields.²⁹

Whilst agricultural production is being threatened by climate change, it is also a significant contributor to the emissions that cause it. The agriculture sector accounts for around twelve percent of UK greenhouse gas emissions, and there has been only a three percent reduction since 2008.³⁰

Beyond climate impacts, agriculture requires thriving **natural capital** for its long term prosperity. The UK's long term food security will only be secured if the natural capital in soil, water and biodiverse ecosystems are protected and replenished. Despite this need, the UK is one of the most nature-depleted countries in the world with mass food production having


²⁶ The Guardian, *Up to £60m in UK crops left to rot owing to lack of workers, says NFU*, 15 August 2022

²⁷ Politico EU, *Farmers seen as an 'inconvenience' in UK trade policy, warns top agri lobbyist*, 22 February 2023

²⁸ Gov.uk, *United Kingdom Food Security Report 2021: Theme 2: UK Food Supply Sources*, December 2021

²⁹ Financial Times, *Farmers fight to save stunted crops in record UK heat*, 12 August 2022

³⁰ Edie, *CCC progress report: What sectors (if any) are on course to reach net-zero emissions?*, June 2022



had negative impacts on the UK's nature and biodiversity.³¹ Despite food producers up and down the country caring deeply about the land they farm, mainstream modern farming techniques are now being challenged for the harm they do to our natural environment in the long term. Ensuring farming replenishes rather than depletes the natural environment is key for the future of the UK food system and its environment.

So too is ensuring the food available in the UK is **affordable and nutritious**. Food insecurity has been increasing in the UK. In 2022 there was a 66.7% increase in self-reported severe food insecurity. Data from the Trussell Trust indicates food bank usage had increased 14% in 2021/22 compared to 2019/20, and the number of children eligible for free school meals stands at just over 2 million pupils, 23.8% of all pupils, rising by more than ten percentage points in five years.³² At the same time, obesity in the population has more than doubled since the early 1990s to over a quarter of the population, with the most deprived areas of the country experiencing disproportionately high levels of obesity. This puts more and more people at risk of serious illness like diabetes and heart disease.³³ Ensuring that nutritious food is readily available at an affordable price is a challenge for the UK's food system and food security. However, we must acknowledge that the solutions to this societal challenge go far beyond the food system and into wider socio-economic policy. These wider considerations are outside the scope of this research.

Similarly, whilst ensuring high standards of animal welfare are maintained is vital for the UK food system, this project has not sought to examine this issue.

Conclusion

Historically, the UK food sector has enjoyed a competitive market with prices relatively low, and a large variety of food available in supermarkets the length and breadth of the country. However, multiple crises in the 2020s have shown us that global supply chains are more fragile and the UK food system less resilient than we believed. Many of the methods and technologies used in food production are reliant on global chemical and fossil fuel markets. At the same time, we are at risk in the longer term of climate change and biodiversity loss undermining our ability to produce the food we will need in the future.

As well as short-term action to support households through the current crisis, we therefore need a much longer term strategy to foster a prosperous, sustainable agricultural sector. One that is more insulated from global shocks and climate change impacts so that in the long term we are better insulated from rising prices.

³¹ Natural History Museum, *UK has 'led the world' in destroying the natural environment*, September 2020

³² Gov.uk, *Academic year 2022/23: Schools, pupils and their characteristics*, 8 June 2023

³³ Institute for Government, *The government needs to implement long-term policies that tackle obesity*, 27 January 2023

The Solutions

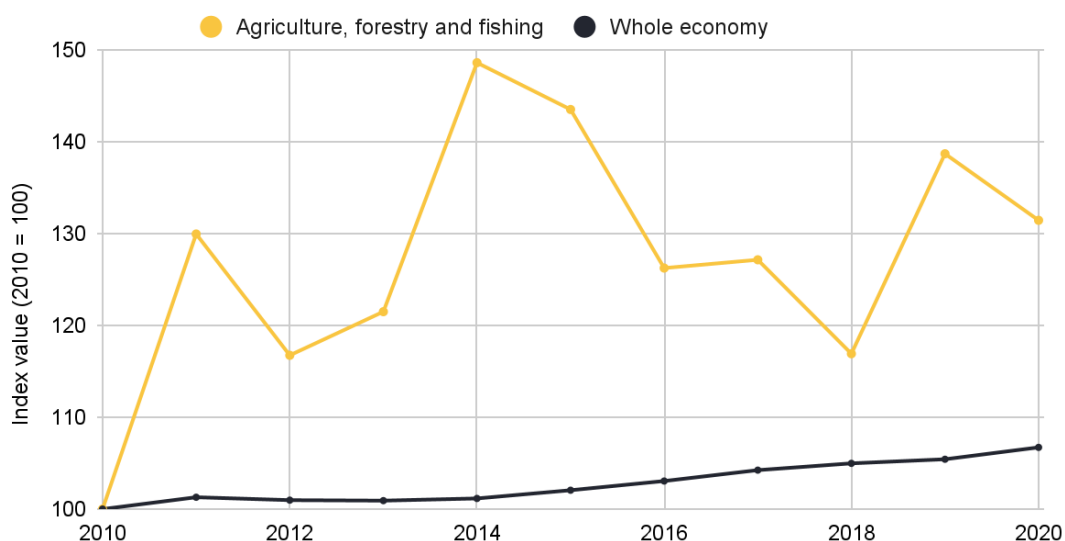
To tackle these challenges and secure our food system for the future, a responsible government must act now to increase food production at home and delink it from fossil fuels as much as possible. We must also nurture the land we are growing on so British farms continue to flourish into the next century. In this section we explore the barriers to tackling the big-picture challenges set out in the preceding chapter and make recommendations across five priority areas for action:

- Increasing productivity
- More research and development
- Reforming government support
- Machinery of government change
- Securing a skilled workforce

Increasing Productivity

Productivity growth in the agricultural sector has exceeded that for the UK over the past decade but these gains have been from a relatively low base. While the sector has made improvement at a rate which has outpaced the overall economy, it has been consistently less productive overall and is lagging behind other comparable economies.³⁴

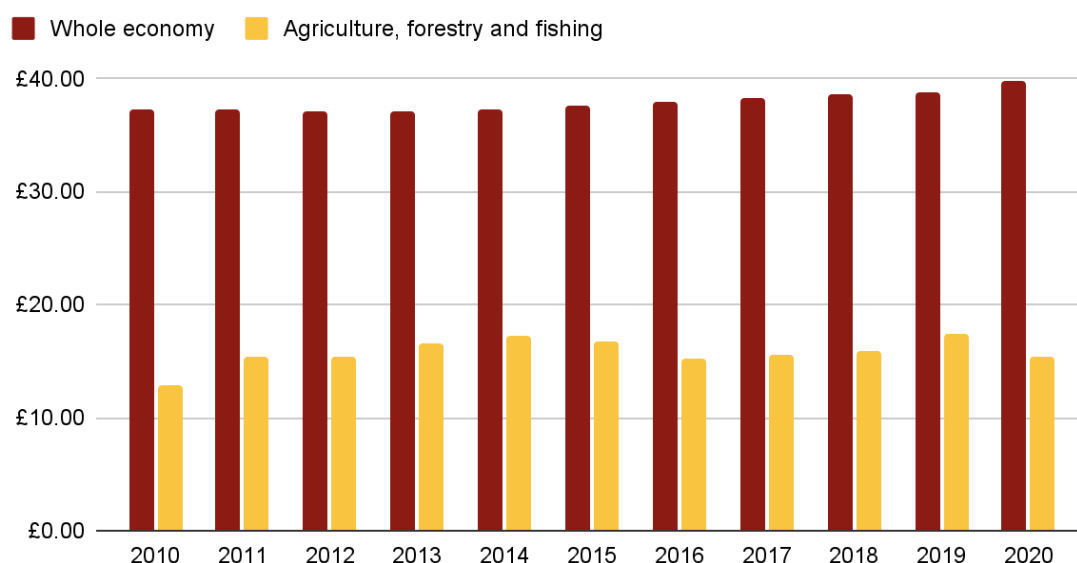
Productivity in the Agriculture, forestry and fishing sector has fluctuated in the last 10 years. Real output per house index, 2010–2020, UK



³⁴ USDA, *United Kingdom Agricultural Production and Trade Policy Post-Brexit*, February 2023



The sector has consistently been less productive compared to the overall economy. Output per hour (2020 prices), 2010–2020, UK

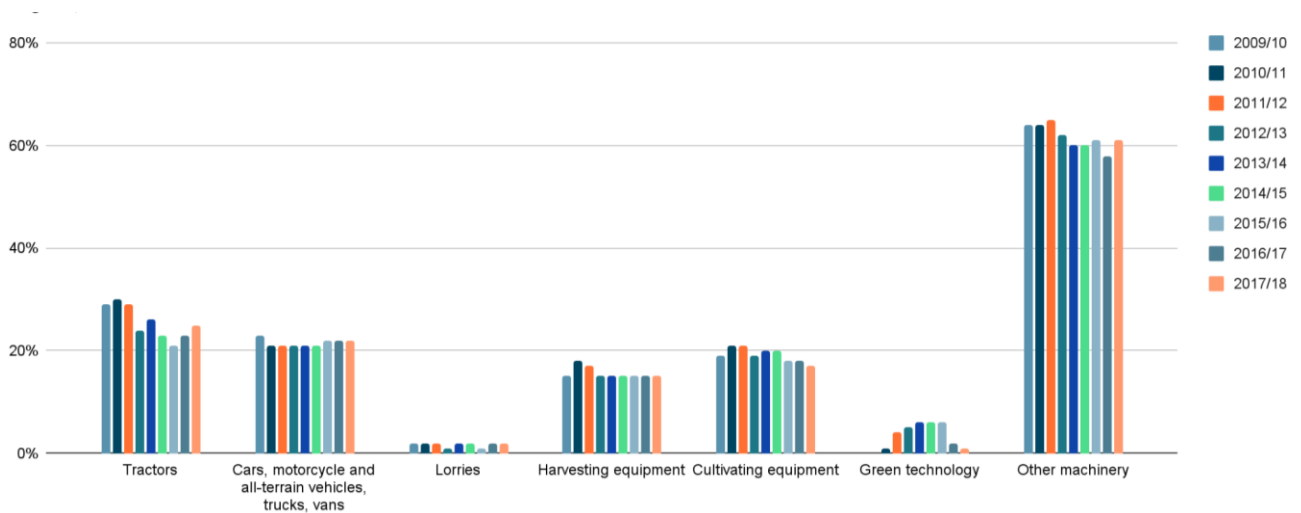


Whilst agricultural output is highly volatile due to weather factors, increasing overall levels of productivity are required to drive up growth. That is true in any sector but in agriculture there is a unique reason why high productivity is even more necessary. If we are to produce the same amount, if not more, of our food in the UK whilst also diversifying land use for nature restoration and carbon sequestration, then the way we farm land will have to become more efficient. This is known as land sparing. UK producers will simply have to produce more with less, and one way to achieve that is by helping food producers to make productivity gains. In doing so, the UK will be able to produce more domestically whilst preserving the natural capital required for future production and reducing climate impacts, making our food system more resilient to global shocks.

One way to drive up productivity is through increased adoption of technology. Our research shows that technology diffusion on farms is fairly limited, and investment in green machinery in particular has historically been very low:³⁵

³⁵ DEFRA, *Machinery investment on farms in England 2009/10 to 2017/18*

Proportion of farm business purchasing any machinery. England, 2009/10 to 2017/18



This means that there is a bottleneck where new and innovative technology exists but is not readily available or being taken up by food producers, who therefore cannot benefit from the potential productivity gains. This came up frequently in our interviews with industry and policy experts:

“I think a lot more could be done around interfacing food producers with crop outputs to try and optimise that process all the way through. I’m not convinced aspects of the agri tech process and the KTN’s are set up well to facilitate this...Making interventions between government R&D funding, and the food industry and farming more systemic and easier to access I think would be a really sensible win. You increase your food security capability and you increase your industrial competitive capability as well.”


- Industry Expert.

“They [government] want Britain to be seen as a science and tech superpower - but in agriculture and food we aren’t there. We have a lot to do on additional investment, and we have great science, but we aren’t translating that into science that’s good for the industry.”

- Policy Expert

In our public opinion work, participants felt farmers needed extra support to modernise and invest in their businesses, with focus groups participants suggesting unprompted that this would be an initiative they would like to see:

“I’m wanting more help for farmers. The other scary thing here is the way supermarkets squeeze them. They pay the least amount for the perfect product... They’ve got a monopoly on it... if the farmers could command a decent wage for



their crops and produce then they could afford their own machinery”

- Male, aged 51, courier driver, Bolton, previously Con in 2019, now unsure


“You do hear these things about us being behind other countries in terms of the way parts of our economy work. More could be done.. And if that gets the double result of making them more productive and bringing down food prices... that’s the most appealing to me”

- Male, aged 28, sound engineer, central London, environmentally minded, Labour/Lib Dem voter

There is a common misconception that greater productivity in farms will mean negative environmental consequences. However this position fails to understand that the future of the agriculture sector relies on nature and is particularly vulnerable to climate impacts. There are two key ways that improving farmers efficiency, and therefore productivity, can bring environmental benefits and allow farms to move towards net zero carbon emissions. Firstly, if farms are more productive then it can unlock land to be used for natural capital which the Environmental Land Management scheme currently incentivises, such as rewetting former flood plains. Secondly, technology can help farmers to be more sustainable by improving their efficiency, for example using less fertiliser or ensuring the fertiliser is not wasted at point of application which is the prime suspect for polluting runoff into waterways. It can also be used to electrify machinery, giving food producers the ability to transition away from their dependence on fossil fuels just as heavy good vehicles in other industries are beginning to. In this way, ensuring farmers have access to the most innovative technology will lead to productivity gains, and will support the long term sustainability of the food system in the face of the interrelated climate and energy crises.

The government has pledged a small amount of funding through the Farming Investment Fund which provides grants for certain investments, but if we are to truly see a revolution in UK farming practices we need to be more ambitious in our support for farmer’s capital investment.

We propose significantly scaling up the Farming Investment Fund to support food producers to make capital investments to improve the sustainability and productivity of UK farms. The capital grants could, for example, be used to support electrification of farm machinery, on-site generation and storage of power, diversification into horticultural production, machinery which supports regenerative agriculture and more effective deployment of precision agriculture equipment and techniques. At the same time, subsidies for machinery which inhibit decarbonization of the industry should be withdrawn over time. For example, the subsidy for red diesel use in agricultural vehicles which permits the use of rebated diesel fuel in farming.



Alongside this investment, food producers should be supported to train to use the new technology on their farms, as part of the workforce skills recommendation set out further on in this report.

Crucially, the scaling up of the Farming Investment Fund should be carried out on an incentive basis, in increments, with each increase coming on the condition that measurable increases in productivity are being achieved in the agricultural sector over the next decade.

More Research and Development

Across our research, we heard that, in the country's journey to decarbonise the agriculture sector and reduce its environmental impact, is a real economic opportunity for the UK to become a market leader in sustainable agriculture. In doing so, we can de-link food production from its reliance on fossil fuels and the volatility associated with supply chain costs and therefore make the UK more resilient to global shocks.

To increase the sustainability of food production there are going to need to be great innovations in inputs such as fertiliser, pesticides and animal feeds. There will also need to be innovation in the techniques and practices used in farming, such as in the application of fertiliser or the energy intensity of production. For instance, the development of green ammonia used for nitrogen fertiliser development. Across our expert interviews we heard the opportunities available to the UK:

"Farmers in the UK are pretty sophisticated on average, but the average farm wastes 40% of the fertiliser that applies to the field...the majority of the reason why rivers are dead biologically in the UK is manure, and synthetic fertiliser, both nitrogen and phosphorus agents. So much of the innovation is not in the actual fertiliser itself, it's in the application...then there is the other end of the spectrum, which is 'how do we create synthetic nitrogen fertiliser without fossil fuels?' And that's a kind of big industry type challenge we need...I would love it if we could not need synthetic nitrogen.... roughly half the world's population depends on synthetic nitrogen to survive. We can dial that down quite a bit, but there will still be something that's more of a kind of industrial chemical industries type opportunity the UK might have a go at."

- Policy Expert

Additionally, whilst there will always be demand for meat and livestock production, we know that behaviour change means that demand for plant-based, fermented and cultivated meat (and their respective ingredients such as pulses and grains) is forecasted to increase. Our expert interviews were enthusiastic about the opportunity for the UK to gain a competitive advantage in this growing market:



"I think analytically there is one technology or one family of technologies, which stands out absolutely head and shoulders as delivering on your affordable food grown in Britain environmental goals and that's alternative proteins....There's an extraordinary opportunity here....Britain has the natural conditions for an awful lot of economic opportunity here. Many of the skills that we need: our life sciences skills, that's something Britain's really good at. Many of the food businesses within Britain are pretty innovative in the processing and manufacturing end, the British retail sector is extremely innovative in inverted commas in creating and testing out new brands, new opportunities, new kinds of markets, new ways of getting different sorts of food to people. So in principle, the UK ought to be a big leader and the UK is the second largest market in Europe for all sorts of proteins already."

- Policy Expert

Whilst consumer demand shifts in favour of new foods, such as alternative proteins, and the global food system innovates to tackle the climate crisis, this moment of change represents a real opportunity for the UK to embrace this innovation and actively incentivise it.

There are several benefits to innovation in inputs and sustainable foods. Firstly, there has been much debate about how the UK should respond to the United States' Inflation Reduction Act, with the consensus being that the UK needs to be very targeted in the industries that they choose to support, such as carbon capture and floating offshore wind. Whilst some nations like Italy resist alternative proteins,³⁶ Britain could carve its own niche and become the global market leader in the foods and inputs of the future.

Secondly, there are huge environmental benefits to incentivising innovation. Currently, the inputs into agricultural production, such as animal feed, energy and pesticides, are very damaging to the environment and one of the key reasons agriculture contributes 12% of UK carbon emissions.³⁷ Fertiliser is particularly destructive – it is very energy intensive to make and heavily reliant on natural gas. Once it reaches a farm it's application is a major source of carbon emissions³⁸ and impacts nature, such as runoff into waterways leading to biodiversity loss and water pollution.³⁹


Thirdly, these inputs are very vulnerable to energy shocks. The energy crisis is a clear example of how dependent on fossil fuels our food system is, leading to the cost of inputs

³⁶ BBC News, *Italy moves to ban lab-grown meat to protect food heritage*, 29 March 2023

³⁷ CCC, *2022 Progress Report to Parliament*, 29 June 2022

³⁸ University of Cambridge, *Carbon emissions from fertilisers could be reduced by as much as 80% by 2050*, February 2023

³⁹ Holden, Joseph et al. *Farming and Water: Agriculture's Impact on Water Quality*, pp.5



like energy and fertiliser to skyrocket.⁴⁰ This drives the cost of production up for farmers and trickles down to the consumers in the form of inflated food prices and food shortages.

“What’s happened in the last six months is the inflation rate of the primary inputs is so great that there is no way innovation is going to offset those price increases from fossil fuels and others. So that means retail prices are going to go up or there is simply no food available to buy.”

- Policy expert

Innovation in inputs, such as low carbon fertiliser, that help to delink the food system from fossil fuels will in the medium and long term help protect farmers and therefore consumers from the kind of food price increases we have seen this year, and is an issue of food security.

The Government should significantly increase public funding for R&D investment in agriculture, and target it to support the creation of new domestic industries and delink food production from fossil fuels. This should include a fund for research and development of sustainable, low-carbon fertilisers and animal feeds, methane suppression and alternative protein manufacture.

Reforming Government Schemes


During the course of our research, a recurrent theme was the changing nature of government support for farmers and land managers in the UK, and the challenges and opportunities it brings to incentivise sustainable domestic production of food in the UK.

As a member of the European Union, farmers in the UK were supported by Common Agriculture Policy (CAP) which generally supported farmers with direct payments depending on how much land they farmed. This financial support was significant for farmers, totalling £4.7 billion in 2019.⁴¹ Since the UK’s departure from the EU, the government has committed to maintaining pre-Brexit farm funding levels for this Parliament. However, the way this support is delivered is being significantly reformed in England. CAP-style direct payments based on how much land is farmed are in the process of being phased out through to 2027. Instead, farmers and land managers will receive financial support to produce 'public goods' such as environmental and animal health improvements under the Environmental Land Management scheme and other new schemes.

These new schemes are explicitly not designed to reward food production in and of itself, but to reward farmers for using their land to produce environmental goods and services.

⁴⁰ ECIU, *High fertiliser costs adding £78m to farmers' monthly bills as fresh food shortages continue*, February 2023

⁴¹ House of Commons Library, *Farm funding: implementing new approaches*, 15th March 2023



Specifically, the government has said it is seeking to pay farmers and land managers to deliver the following outcomes:⁴²

- *creating and restoring a broad range of wildlife-rich habitat, as well as continuing to protect habitat already managed under our existing agri-environment schemes*
- *improving water quality, by reducing nitrogen, phosphorus and sediment pollution from agricultural activities, building on our existing Catchment Sensitive Farming approach*
- *increasing resilience to flooding and drought through nature-based solutions such as natural flood management*
- *creating more new woodlands and treescapes to increase tree and woodland cover, and encouraging management of existing woodlands, including to increase their resilience to pests and diseases*
- *reducing carbon emissions, storing carbon and increasing resilience to climate change, for example through management of soils, water, peatland and trees*

Throughout our research we found great support for the principle of public funding for agriculture which supports the production of ‘public goods’. The industry and policy experts we spoke to agreed that support for farmers and land managers shouldn’t be payment for farming land in any manner, and that it *should* be conditional. However, our research highlighted that too narrow a view of ‘public good’ could result in unintended consequences, for example a reduction in domestic food production:


“Losing productive agricultural land, and I think crucially agricultural processing infrastructure, would be highly detrimental. Looking to the future, I think it would be very very risky... and I don’t think the government necessarily understands that... I don’t think they understand the commercial reality... it’s a really important asset that we have for the country as a whole.”

- Industry Expert

“There’s a real danger. If some farmers actually all they need to do is sustain their nature and keep their hedgerows, and they don’t lose any money from that, they get the payment, you’ll have a nice countryside but you won’t have any food...there’s a real risk of killing industries because actually you can make a sustainable income without having to have the risk of producing [food]”

- Industry Expert

⁴² Gov.uk, [Environmental Land Management \(ELM\) update: how government will pay for land-based environment and climate goods and services](#), June 2023, accessed January 2023



"I'm not anti-ELMS...I think it's not a bad idea. But the problem is, if you make mainstream farming less economically viable don't be surprised if you get some nasty shocks, if your farms start to come out and get converted"

- Industry Expert

"The government is actually making it more profitable not to produce food, which is just ridiculous."

- Male, aged 47, dairy engineer and farmer, rural Yorkshire

We heard that often food production, nature restoration and protecting the environment are discussed as though they are in conflict, when food production *can* go hand in hand with achieving the UK's environmental goals. Many food producers up and down the country are already demonstrating how this can be done. For example, some farmers are adding grazing animals into their soil rotation to benefit the soil.⁴³ However, the planned design of ELMS focuses primarily on incentivizing farmers and land managers to produce environmental goods over food production rather than encouraging the sustainable production of food alongside these wider environmental goals.

Many of the experts we spoke to felt that domestic food production in and of itself is a public good which should be rewarded.

"It needs both, we're supportive of schemes which support both, but there's a huge focus on one bit and not at all on the other"

- Industry Expert

"Why isn't producing food a public good? It needs to be produced responsibly and absolutely we accept that. I don't think they've thought broadly enough about the opportunities they could deliver with ELMS"


- Industry Expert

"Food security should be considered a public good, and included in the 'public money for public goods' approach"

- Policy Expert

We also heard from policy experts and food producers that the uncertainty of the schemes, and what the government wants farmers and land managers to be doing is causing confusion for farmers who don't know what they're meant to be prioritising:

⁴³ Regenerative Food and Farming, [Regenerative Farmers](#), accessed February 2023



"I don't know whether I am meant to be a food producer or a producer of environmental goods"

- Farmer, expert interview

"I think there's a real lack of clarity from the government, and even from the farming industry... I think it's a weakness of having both the sponsor, department and the regulator in the same place"

- Farmer, expert interview

Research from the National Farmers Union illustrates the on-the-ground impact of the design of the ELMs scheme and policy uncertainty. 40% of cattle keepers, and 37% of sheep keepers said they would be reducing their output in the next 12 months, and when asked why by the NFU their primary reason was high input costs and profitability concerns. Strikingly, other major reasons included loss of the Basic Payments Scheme (51%), lack of confidence in the market (43%) and the new ELMs offer being insufficient or unclear (42%).⁴⁴

To ensure domestic production of affordable nutritious food is maintained and increased, whilst meeting environmental targets, government support should be focussed on both of those aims. It cannot simply be picking one and hoping for the best – hoping that farmers continue to produce food in the UK even when it's not the most financially advantageous decision.


We therefore recommend that sustainable production of food should be categorised as a 'public good' alongside environmental and animal welfare goals in the new ELMs schemes.

This is not a recommendation to return to payments for the amount of land farmed nor a call for more land to be farmed more intensively, but an acknowledgement by the government that food production is a vital component of our agricultural mix.

The government has promised a land use framework which will set out a way to manage competing uses of the UK's land from nature restoration and food production through to housing development and energy generation. This, inevitably, will involve trade-offs but sustainable food production is not in conflict with the environmental aims of the current ELMs structure.

Food producers should be rewarded for producing food sustainably. The stream could incentivise, for example, greater production of horticulture or feedstock for alternative

⁴⁴ National Farmers Union, NFU Livestock farmers help assess input cost impacts, January 2023



proteins or food produced using regenerative farming, less pesticides, or environmentally friendly fertilisers.

Managing the competing uses of land is a key political and policy issue. We have a finite amount of land and without clear direction from government on which land use is the priority, and what trade offs are acceptable, politicians can expect results that are sub-optimal for the country's food supply, environmental goals and economy.

Live debates surround the use of farming land for biofuels and carbon offsetting, for example, and ELMs must make clear the government's priorities.

Offsetting

As private companies seek to meet their net zero goals by offsetting their carbon emissions, they will use land in the UK and abroad to trap carbon via reforestation or rewetting marshland, for example. Several farmers in our focus groups flagged that they are *already* seeing carbon offsetting competing with food production:


"We seem to be obsessed by planting trees to offset our carbon. Yorkshire water own lots and lots of acres of land around where I live. And they're now taking it back off the farmers and going to plant trees so they can offset their carbon... You do need to offset carbon or whatever but it needs to be very controlled. It needs to be proportionate"

- Male, aged 46, smallholder farmer, rural Yorkshire

This is not a problem if the singular priority is for the UK to reduce its carbon emissions. But it does present a problem if we also wish to improve food security and increase food production because offsetting competes with the land available for food production.

Biofuels

Biofuels are fuel that is derived from renewable biological resources, such as plants and algae. Crop-biofuel uses field-grown crops used to produce bioethanol. The government has a target that biofuels must make up 14.6% of road transport by 2032, which actually exceeds our former European biofuels legislation. Critics argue that although the policy is well-intentioned to reduce dependence on fossil fuels, there are



more cost-efficient ways to see the same modest emissions savings that the crop-based biofuels mandate provides.⁴⁵

The core complaint here is that the trade off for using land for biofuels is too great, and this land would be better used for food production, specifically foods such as wheat which are in short supply since the Ukraine war. The case for reforming the biofuel mandate has been covered in greater detail by Green Alliance⁴⁶ and the Centre for Policy Studies.⁴⁷

These two case studies could easily have been replaced by others. Prioritising land use will always lead to trade offs, and as the UK races towards net zero, struggles with a cost of living crisis and faces increasingly severe and frequent climate change impacts, the demand on land use is an increasingly critical point of conflict.

Given this context, it is the role of government to pre-empt these demands and set out clear direction that local government and the agricultural sector can use in their forward planning.

As outlined above, we recommend that sustainable production of food should be categorised as a 'public good' alongside environmental and animal welfare goals in the new ELMs schemes. This should include an accompanying commitment that this and the ELMs framework will remain in place over the long-term.

As part of this reform, support for competing uses of land such as crop-based biofuels and carbon offsetting should be reviewed, and clear advice given to local government as they manage competing demands in their local plans and planning process.

Machinery of Government Change


One of the strongest themes we heard time and time again from our advisory panel, policy and industry experts was the lack of a coherent strategy from government for the UK's food system and how it interacts with wider public policy. We heard that food producers don't feel they have a sponsoring department in government. We also heard that often there are competing priorities even within the Department for Energy, Food and Rural Affairs (DEFRA).⁴⁸ For instance the parts of the department responsible for environmental policy devising policy separately from the 'arm' of DEFRA responsible for food policy, leading to an incoherent and detrimental policy landscape.

⁴⁵ Green Alliance, *Food security and UK crop-based biofuel use*, Jun 2022

⁴⁶ Green Alliance, *Food security and UK crop-based biofuel use*, Jun 2022

⁴⁷ CPS, *Drop the Crops*, April 2023

⁴⁸ Ed Conway, *Twitter thread*, 21 June 2021



The strength of feeling was apparent with one industry expert stating that if they had one ask of government it would be:

“For me, its that they are joined up, that they put all the bits together and look at it as a whole because until you do that you’re still going to get this grating of one department against another, and things that don’t fit together. We have to look at it as one holistic picture”

- Industry expert

There were two particular examples of how this lack of joined up strategy was impacting producers. The first is how the government’s strategy for food interacts with trade policy. We heard real concern that the government was embarking on a strategy to (rightly) hold food produced in the UK to high standards, and changing support for farmers to reward the production of environmental goods, while pursuing a trade policy which doesn’t hold imported food to the same standards. Whilst none of the people we spoke to wanted a reduction in the domestic standards, they did feel that trade policy undermined the government’s stated goals for the UK and in doing so, leaves domestic producers at a disadvantage.


“It is around that level playing field and clarity over UK standards both with imports and UK production because without that clarity, without that stable base, none of this will work because people won’t invest and people won’t get a fair price. And so we don’t have the base upon which to base an infrastructure that works for the long term. In the current environment there is still a lot of insecurity around that”

- Industry expert

The second example was in the development of the new support schemes for UK farmers and land managers. As discussed above, there is a new system being rolled out for in the UK as a replacement to the European Union’s Common Agricultural Policy. Many of the industry experts we spoke to discussed how they hadn’t been consulted in the development of these programmes, and they felt the environmental ‘arm’ of DEFRA was not speaking to nor had an understanding of the food industry:

“I just don’t think we really understand each other well. The government is siloed. One bit of Defra really understands the food industry and the other side thinks we just want to destroy the environment... Defra is bringing people in to advise on food policy that actually have no understanding of how to make food... I do think they need to have people in the room that understand both”

- Policy Expert.



"I think if we could have more government, industry engagement that would be really beneficial"

- Industry Expert

This was echoed by the farmers we spoke to in focus groups and interviews who did not feel listened to or consulted by DEFRA in the development of policy, and that trade policy contradicted domestic policy aims. Indeed, the experts we spoke to felt that as a result of these problems at government level, food producers from farmers through to processors didn't have confidence in the policy landscape they were operating in nor felt secure in the long term. This has real effects, for instance, a nervousness from food producers about making a significant investment in machinery or a new farming practice if they are going to be asked to do something else the following year.


"When government changes and new legislation comes in and ways of working, that can't really happen in farming. It's got to be more long term. There needs to be set goals"

- Female, aged 54, mental health nurse, rural Yorkshire

It is vital that the machinery of government enables rather than hinders a sustainable, prosperous food system. This clearly isn't the case at the moment. **The government should establish a new Cabinet Office unit which brings together every area of government that impacts food policy, from trade through to health and safety and environmental policy, with a strategic aim of supporting the development of a sustainable, prosperous food system.** As part of the remit of the new unit, every policy decision which impacts the food sector should contain an assessment of its impact on food affordability and UK food production, as part of the policy impact assessment.

The government has pledged a Land Use Framework in 2023 as part of the National Food Strategy, which will *"reflect all our objectives for English Agriculture, the environment and net zero"*. The government should bring forward the publication of this framework as a matter of urgency, developed with meaningful consultation with all parties with an interest in the UK's land use and ensure policy decisions are designed in line with the aims of the land use framework. The new Cabinet Office unit should be responsible for overseeing the implementation of the land use framework as part of their strategic focus.

Finally, although this report has not explored trade policy explicitly, it is clearly a matter of huge concern to food producers, industry and policy experts who are concerned about its impact on domestic industry. In particular, the unintended consequence of allowing the importation of food with a worse environmental footprint than the standards domestic producers are, rightly, being held to. We therefore urge the government to adopt the recommendation of the National Food Strategy to define minimum standards for trade -



covering animal welfare, environmental and health protection, carbon emissions and antimicrobial resistance – as well as mechanisms for protecting them.

Securing a Skilled Workforce

Securing a skilled workforce was a concern in every one of our expert interviews, and two clear areas of focus emerged: incentivising new entrants to the labour market and improving the skill levels of the existing workforce.

There is a long and short term labour market problem facing British agriculture. In the short term there is a labour shortage in seasonal workers, in part because the government post-Brexit has created uncertainty and an “unrealistic cap” which is detrimental to businesses planning ahead and in part due to the after-effects of the Covid-19 pandemic.⁴⁹ The current visa scheme is due to end in 2024 and there is little clarity on a long term solution for the availability of seasonal workers. In the longer term, there are not enough young people entering the sector. The agricultural workforce is ageing and estimates suggest 140,000 new workers will need to be recruited by 2024 to replace retirees.⁵⁰

Our research revealed a particular problem of antiquated views about what a career in agriculture involves and a real concern that young people don’t see agriculture as an exciting, modern and fulfilling career option.

“What we need to do is improve the status and the calibre of those people in the industry... I’ve got my eldest sons twice at school told they’re too clever to be a farmer. That is the perception... The biggest challenge facing the world is how to feed 10 billion people against the backdrop of climate change. And we don’t think it’s a worthy job”

- Farmer, expert interview

“They need more help with younger people. It needs to be more attractive...I grew up on a farm and it never appealed to me to work on a farm”

- Male, aged 35, project manager, rural Yorkshire

The food producers and policy experts we spoke to felt that for the sector to have a sustainable workforce in the long term, then the drain of young talent needed to be addressed. Farmers were also keen to see the sector have a “PR makeover” from central government that would reframe agriculture as an exciting, dynamic and fulfilling job absolutely vital to the green transition. We understand that the Institute for Agriculture and

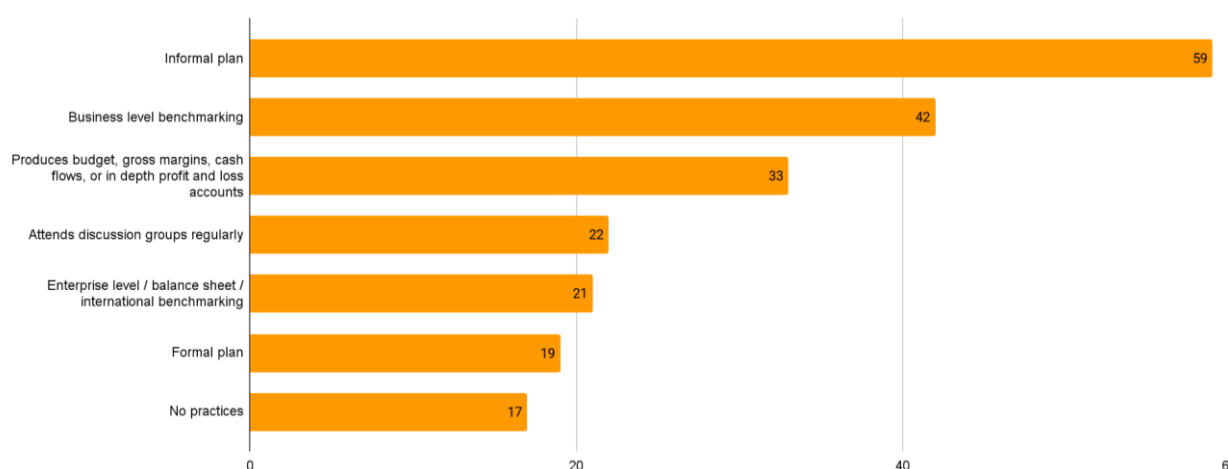
⁴⁹ NFU, *Seasonal Agricultural Worker Scheme – extra visas a step forward*, Dec 2022

⁵⁰ Food Research Collaboration, *Earning a crust? A review of labour trends in UK food manufacturing*, 2017

Horticulture is developing a campaign to transform the image of the industry with the younger generation.

Beyond labour, there is also a real challenge with the skill level of the agricultural workforce. Less than 32% of British farmers have undertaken formal training compared to 68% in Germany which is a particular problem when it comes to adopting modern techniques of farming.⁵¹ For example, only a fifth of UK farms have a formal business plan and formal management practices are not widespread:⁵²

Which of the following business management practices ARE being carried out for your business? % of all farms



In our interviews, farmers and policy experts were concerned that a lack of training and comparatively low skill level was holding the agricultural sector back in terms of productivity and the uptake of new technology and farming methods. For example, food producers not being proficient enough in digital skills to then use technology to its full capability, or even feel confident enough to invest in it at all.


“If you were in Europe you would need to have reached a certain level of professionalism to have access to grants [for the latest technology]... we need to have that degree of professionalism”

- Farmer, expert interview

“I’m thinking of my friends and they just don’t get it [education] at home... you need youth to come through and say ‘hold on a minute dad why have we done this for 20

⁵¹ Green Alliance, *What does the US Inflation Reduction Act mean for the UK’s green economy?*, Mar 2023

⁵² DEFRA, *Business Management Practices on Farms, England 2016/17*



years, why don't we do this?...' because he's been educated in the new world of farming. It's become a lot more specialist than it ever has been"

- Male, aged 46, smallholder farmer, rural Yorkshire

Therefore we recommend:

The government should work with the Agriculture and Horticulture Development Board and The Institute for Agriculture and Horticulture to increase the number of farming apprenticeships, including through increasing funding to support the sector to take on more apprentices, and particularly at higher levels. For instance, degree level apprenticeships. This would incentivise new entrants into the workforce, and support farmers to recruit the skills they need. Accompanying this increase in support should be an awareness raising campaign in schools and colleges of the many rewarding careers available to young people in agriculture and horticulture.

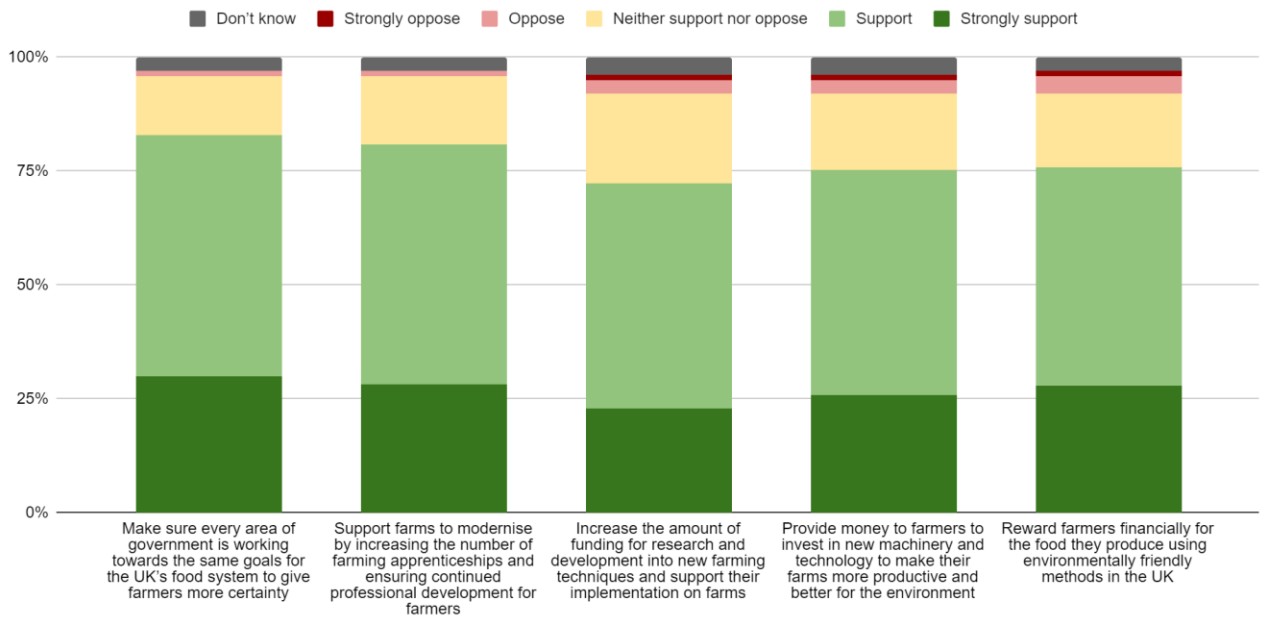
As well as encouraging new entrants to the market, the government should work with the Agriculture and Horticulture Development Board and The Institute for Agriculture and Horticulture to increase access to continued professional development for food producers. This support should include financial support to develop and rollout programmes, encourage take up of the short courses that agricultural colleges and universities are currently offering and raise awareness of its availability amongst the agricultural workforce.

Public Support

We found high levels of support amongst the public for the policy proposals set out in this chapter. We showed respondents different policy options to achieve an increase in domestic food production, reduction of prices whilst improving environmental impact. All policies tested were generally popular among the public, although some proved slightly more popular than others. The most popular policy option was ensuring 'every area of government is working towards the same goals for the UK's food system to give farmers more certainty', with 83% overall supporting the policy. The policy which would 'increase the amount of funding for research and development into new farming techniques and support their implementation on farms' was least popular but still had significant support (72%) and only 4% opposing it.



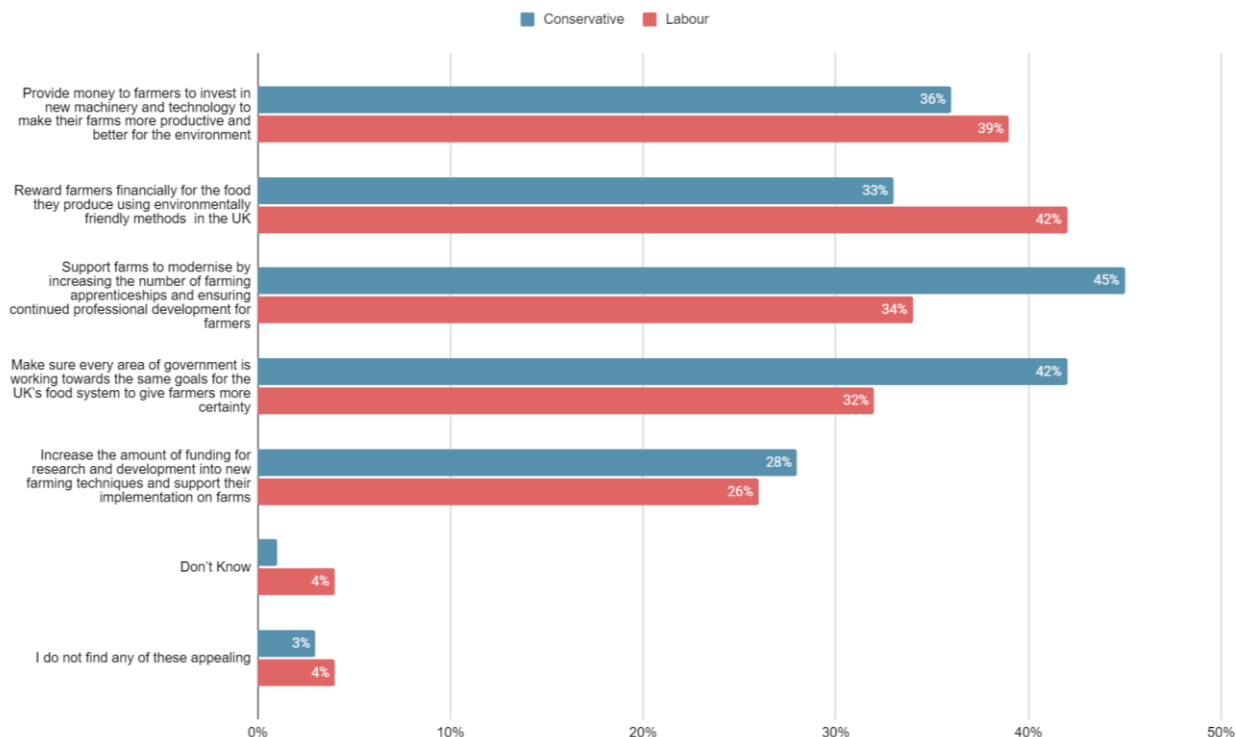
Here are some policy options that the UK may consider to increase its food production domestically and reduce prices whilst improving farming's environmental impact (All Respondents)



We asked respondents which two policies they found most appealing. Respondents intending to vote Conservative most favoured 'Support farms to modernise by increasing the number of farming apprenticeships and ensuring continued professional development for farmers', with 45% selecting this policy option. This contrasts from Labour voters, where 34% chose this policy. Labour voters' most popular choice was 'Reward farmers financially for the food they produce using environmentally friendly methods in the UK' at 42%. This was less popular for Conservative voters at 33%.



And of the same list of policies, please tell us which two you find most appealing (All respondents, split by voting intention)



Looking at preferences by 2019 vote, we observed a similar split, with the reward for farmers and investment in machinery policies being most favoured by 2019 Labour voters, whereas 2019 Conservative voters tended to prefer the apprenticeship and aligning goals for the UK's food system across areas of Government. There was no obvious top contender for the Conservative swing voters, with these policies getting between 38% and 40% support among the swing voter group, except the R&D fund which was only selected by 16% of the group.



The Way Forward

This report has argued that the current spike in food prices has shown that long-term thinking is required to ensure a sustainable, prosperous domestic agricultural industry, one that is more insulated from global shocks and the impact of climate change in order to restrain food prices increases in the medium and long-term. We have set out a series of policy recommendations which support this goal:

- 1. Provide money to farmers to invest in green technology to make their farms more productive and better for the environment** by significantly scaling up the Farming Investment Fund to invest in sustainable productivity improvement


Productivity on UK farms is significantly lower than the UK economy as a whole; technology diffusion and investment in green technologies is low. To ensure the UK can produce more domestically whilst continually improving the natural capital required for future production and reducing climate impacts, making our food system more resilient to global shocks, there must be a significant increase in productivity in UK agriculture. Supporting farmers to invest in new machinery and technologies will support this increase in productivity.

- 2. Increase the amount of public funding for research and development to support the creation of new domestic industries and new technologies that will help to insulate British agriculture from future energy price shocks**

UK agriculture is exposed to the volatility of global energy markets and supply chains, in part because of its reliance on inputs that are in turn reliant on fossil fuels. Delinking production from fossil fuels can therefore ensure domestic industry is more resilient to global shocks. To do so requires significant investment in R&D to develop these new technologies. At the same time, it can improve the sustainability of food production and provides an opportunity for the UK to be a world leader in the food production of the future.

- 3. Make sustainable production of food an explicit goal of support for farmers by making sustainable food production a 'public good', rewarding farmers financially for the amount of food they produce in the UK in a way that's good for environment**

Protecting the environment and a thriving agricultural sector are not in conflict if incentives are designed correctly. Overemphasis on one goal however, risks creating perverse incentives in government support programs. The current ELMs structure risks the unintended consequence of incentivising farmers away from producing food as other activities may become more financially viable and 'derisked'. A food



system that is resilient to global shocks requires a strong domestic industry, not at the expense of protecting the environment, but alongside it. Sustainable food production should therefore be seen as a ‘public good.’

4. Establish a new Cabinet Office unit which brings together every area of government that impacts food policy with a strategic aim of supporting the development of a sustainable, prosperous food system.

The way the government currently operates in relation to food policy is counterproductive to a strong domestic industry. Its approach hinders rather than supports the sector’s growth, and in some ways – for instance, in trade policy – actively obstructs it. If we are to support a thriving, sustainable industry resilient to global shocks, the machinery of government must work towards that goal.

5. Increase the number of farming apprenticeships and increase access to continued professional development for farmers to futureproof the agricultural workforce.

A barrier to the agricultural sector’s continued success is a lack of new entrants into the market. The workforce is ageing and the sector isn’t, anecdotally, perceived to be an exciting one in which to build a career. At the same time, the overall skill levels of the current workforce needs to improve to improve productivity and the application of new technologies at a farm-level. Resolving both of these challenges will ensure the future of the sector, and the application of changes needed that we have set out in this report.

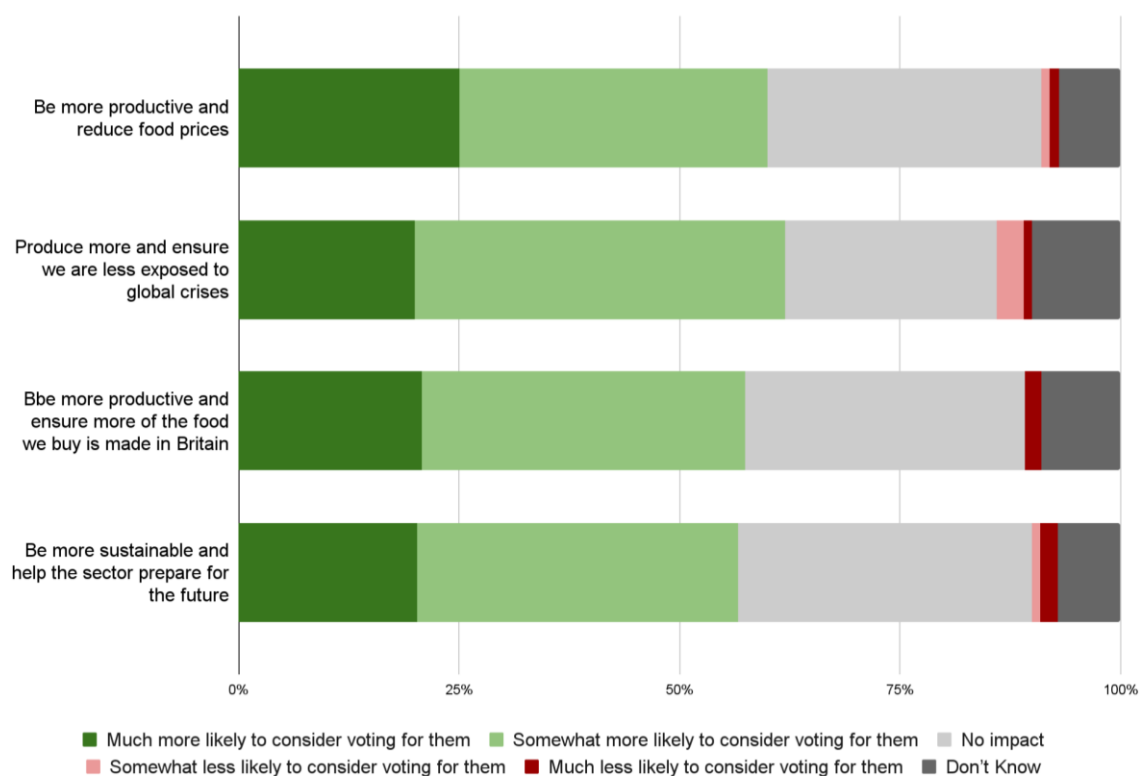
We began this report by showing that the UK public are extremely concerned about rising food prices, – as concerned as they are about their energy bills. With food prices set to overtake energy costs as a driver of inflation this issue will be of significant public concern as we head towards the next general election. Despite this, two thirds (64%) of people in our survey said they had not seen the UK Government do anything to address increasing food prices. We found high levels of public support for the policy recommendations we have made in this report, with all the policy recommendations enjoying over 70% support.

However, we know that the policy challenges and solutions discussed in this report are ‘techy’ and don’t obviously shout ‘retail policies for the electorate’. The challenge for any politician or political party is to communicate with the public about what intervention in the food system – of the type we advocate in this report – would achieve. The good news is we know that the UK public do want to buy domestically produced food if they can, primarily because they want to support British farmers, and they view agriculture as an important economic industry.



We tested political messages to explore whether hearing a political party say they would invest in and support farmers would make them more likely to consider voting for them. There were high levels of support for all of the political messages, with over half of respondents in every frame tested suggesting a pledge to support UK farmers would make them much or somewhat more likely to to consider voting for a political party.

Imagine that you read the following pledge from a political party ahead of the next general election. (Message randomly assigned to respondents). 'We will invest in and support our country's farmers to help them...'



The UK public, therefore, would be highly receptive to a political party setting out a strategy to secure the UK food system and support domestic food production for the long term, particularly a message that a political party plans to support UK farmers to ensure the UK is less exposed to global crises:

“We will invest in and support our country's farmers to help them produce more and ensure we are less exposed to global crises”

A headline commitment such as this is the best way to communicate the case for change to the electorate - the ‘what’ and ‘why’ - in a way that resonates with their current concerns, with the less electorally interesting ‘how’ (the policies recommended in this report) sitting underneath.



We encourage political parties to seize the opportunity to adopt the policies set out in this report and demonstrate to the UK public they have a strategy for improving the UK's food security in the long term whilst supporting a prosperous, sustainable agricultural industry.