



READY TO GROW: **UNLOCKING BRITISH FARMING'S ECONOMIC POTENTIAL**

Agriculture's contribution to regional economies and employment



References:

- Total income from farming for the regions of England, Defra, Sept 2025
- Total Income from Farming 2025, Welsh Government, April 2026
- Agricultural facts: summary, Defra, October 2025
- Survey of agriculture and horticulture: June 2024, Welsh Government, Nov 2024

GVA = Gross Value Added – the value of output minus the value of goods and services used in production.

Introduction

Farming is Britain's beating heart.

It's at the heart of the everyday lives of 29 million households – putting food on tables three times a day; it's at the heart of every region of the country – providing jobs and economic value; and it's at the heart of our national security.

And yet food production has been overlooked as a national priority by successive governments. This has to change. British farming is ready to grow and do even more to support the country. But government needs to work with us to unlock its full potential.

Food production needs to be at the heart of farming businesses. For that to happen, those businesses need to be resilient and dynamic. And the key to achieving that is a food system that works for farmers.

One of the keys to driving growth across agriculture is building competitiveness in all sectors. Building sectors that can deliver better value for consumers should be an inbuilt ambition of the sector growth plans being put together by the Farming and Food Partnership Board.

Agriculture is one of the country's most geographically dispersed industries. Virtually every county is home to family farm businesses that work, day in and day out, to produce high quality, nutritious food to world-leading animal welfare and environmental standards.

This broad regional footprint means agriculture is already providing growth opportunities across postcodes throughout England and Wales. But with the right framework in place, farmers and growers can drive more growth in every constituency, strengthen the UK's resilience and help ease pressure on households.

Food production has been taken for granted for too long in this country. The government has said that 'food security is national

security' and this sentiment needs to be turned into meaningful actions to secure a resilient, affordable food system for the future.

Self-sufficiency – the amount of food we produce in this country to supply our home market – has fallen across ten of our 11 key commodities over the past 30 years, driven either by falling production or domestic demand outpacing supply.

This not only means the country has become increasingly reliant on imports to feed it, at a time of growing global insecurity, but it also raises the risk of the accumulated impact of these gradual year-on-year drops in production eroding the wider processing, supply chain and skills base which our food production depends on.

Once the erosion of this base reaches a tipping point, it will be extremely difficult – and in some cases almost impossible – to rebuild.

To start reversing this trend, and to safeguard the resilience of our food system, we need to drive growth across the sector. Farm businesses are ready to grow, but to do so farmers and growers need to know they will have the workforce they rely on, regulation and taxation which supports efficiency and innovation, and a planning system that unlocks investment in much-needed farm infrastructure such as poultry sheds, storage for valuable manures and reservoirs.

Providing certainty in these areas would also help rebuild farmer confidence, which is essential if businesses are to make the long-term investment decisions needed to drive growth and strengthen resilience.

British farming is ready to grow. But to do so, it needs government to acknowledge the importance of food production to the country and work with us to unlock its economic potential.



Tom Bradshaw
NFU President

The long view: Production and demand in British farming since the mid-1990s

Year to year, the changes in British farming appear gradual. But added together over decades they are transformational for the sector.

Commodity-level analysis shows a consistent pattern of declining self-sufficiency across major food sectors, driven either by falling production or demand growth outpacing supply, while export volumes have fallen since 2020 and imports continue to exceed exports in both value and volume terms.

Together, these findings indicate a growing reliance on imports and raise the risk that gradual declines across multiple sectors will erode the wider processing, supply chain and skills base which UK food production depends on.

Conversely, the largest gaps between domestic demand and production represent the greatest opportunities for targeted investment and growth in British farming.

Self-sufficiency falls while demand grows

The production-to-supply ratio – self-sufficiency – has fallen in ten of the 11 key commodities tracked here since the mid-1990s. The only exception, mutton and lamb, is no comfort as its ratio is stable only because production and consumption have both shrunk by a quarter.

In a few commodities – sugar, potatoes, mutton and lamb – demand itself has fallen. Sugar carries a distinct risk: a shrinking market and a shrinking processing base can reinforce one another.

Where production fell while demand rose – such as in wheat, oilseed rape, vegetables, beef and pig meat – we

have handed established markets to imports. Where production grew strongly – such as in poultry, eggs and fruit – demand grew faster still, so even the success stories are losing share of their own home market.

This is not for want of ambition. In sectors such as poultry and horticulture, the will and the finance to expand exist – what holds investment back is a planning system that stalls the sheds, glasshouses and reservoirs growth depends on.

BEEF:

A structural shift

Beef has shifted from a surplus (103%) in 1994 to 85% self-sufficiency.

But this headline figure also masks a major structural shift: dairy-beef now accounts for 37% of prime cattle slaughter, up from 28% in 2019¹, helping to sustain overall supply as the dedicated suckler herd contracts.

The UK beef breeding herd fell to 1.34 million head in 2024², meaning greater use of beef genetics in the dairy herd is cushioning, rather than reversing, the decline in the country's core suckler-beef capacity.

None of these movements is large in any single year, but sustained across three decades they are structural and risk pushing sectors below the



critical mass needed to sustain an efficient domestic supply chain.

As throughput falls, processing plants become less economical to operate and invest in, increasing the risk of losing capacity that is difficult to replace.

The table³ opposite compares the long-term change in production and demand, shows the resulting impact on self-sufficiency, and highlights examples of where risks and opportunities may emerge. The picture is mixed.

In sectors like wheat and beef, surpluses have shifted into deficits; in others, such as sugar and potatoes, production capacity has declined, indicating potential vulnerabilities in domestic supply.

In sectors such as poultry and horticulture, the gap between domestic consumption and production has widened, creating potential opportunities for domestic producers to replace imports with home-grown supply.

These examples are intended to illustrate where changing production and consumption trends may create risks or opportunities, rather than to categorise entire sectors as at-risk or opportunity areas.

Commodity	Production change 1995 to 2024	Demand change 1995 to 2024	Self-sufficiency 1995 to 2024	Example risk/opportunity	What is behind the numbers
Wheat	-6.8%	+28.6%	124% → 90%	Risk: The UK has lost its structural surplus, increasing reliance on imports of this staple product.	Consumption has risen steadily with population, but production has fallen since 2015. A structural exporter has become a net importer.
Oilseed rape	-10.5%	+25.3%	85% → 61%	Risk: Production could collapse rapidly following a major agronomic or regulatory shock.	Production grew broadly in line with consumption up to 2010, and exceeded it by 2015, but then fell sharply. Consumption declined more slowly, increasing reliance on imports to fill the gap.
Fresh vegetables	-20.9%	+7.3%	74% → 55%	Opportunity: There is an opportunity to rebuild domestic supply to serve a large home market.	Production down a fifth since the mid-1990s, while demand has held broadly stable. So a growing share of a large home market is met by imports.
Fresh fruit	+32.1%	+43.2%	17% → 16%	Opportunity: The UK could meet more demand through domestic production and reduce imports.	Demand grew around 43% over the period; even after a recovery to 2020 we grow less than a sixth of what we eat. Imports captured almost all the growth.
Beef	-4.7%	+15.5%	103% → 85%	Risk: A shrinking herd points to the risk of further declines in domestic production.	Long-term profitability pressures in the traditional suckler sector have driven sustained contraction of the breeding herd. Rising dairy-beef supply is cushioning, not reversing, that decline, while total consumption has risen with population growth.
Poultry meat	+53%	+64.6%	94% → 87%	Opportunity: Strong demand offers growth potential, but expansion is constrained by regulation (e.g. planning).	Demand for affordable protein has surged, but production growth has slowed as new shed capacity has stalled in the planning system. The five-year averages mask a sharper recent fall: in 2024, self-sufficiency was 83%, down from 96% in 2020, even as output rose.
Eggs	+22%	+30.3%	96% → 89%	Opportunity: Recent trends show that production can increase to meet growing demand.	Since 2015, production growth has outpaced consumption, pulling the UK back towards self-sufficiency, though still below 1990s levels.
Pig meat	-7.2%	+10.2%	81% → 68%	Risk: Lost production capacity has only partially been rebuilt.	Production dropped by a third in the 2000s due to low prices, EU competition, higher welfare costs, disease outbreaks, and the feed price spike; output later recovered but stayed below pre crisis levels.
Sugar	-26.6%	-24.6%	61% → 58%	Risk: A shrinking market and a shrinking processing base risk reinforcing one another.	Production and consumption have both declined gradually over time. The fall in demand accelerated with the introduction of the sugar levy, while the planted area has contracted, partly as processing factories have closed.
Mutton & Lamb	-26.8%	-26.8%	108% → 108%	Risk: A stable ratio masks a sector that has shrunk by a quarter, putting critical mass in processing under pressure.	Self-sufficiency is unchanged only because production and consumption have fallen in step, both down around a quarter since the mid-1990s. The flock has contracted as domestic demand has declined, with the surplus sold abroad, mainly to the EU.
Potatoes	-37.2%	-19.1%	90% → 70%	Opportunity: There is an opportunity to rebuild domestic supply in a still-large market where imports have captured a growing share.	Production has fallen nearly twice as fast as demand, as growers have exited under rising costs and weather risk. Fresh consumption has declined as diets have changed, while a growing share of processed products, such as chips, is imported.

* The figures used in this table are based on production and demand volume and use five-year rolling averages taken from Defra's Agriculture in the United Kingdom dataset to smooth out short-term variations.

1. Beef market update, AHDB, March 2025.
2. Defra's June survey shows beef and sheep populations at historic lows, AHDB, December 2024.
3. Agriculture in the United Kingdom 2025, Defra, July 2026

DAIRY:

One number cannot tell the story

Dairy is the one major sector that a single self-sufficiency figure cannot capture.

Britain is more than self-sufficient in liquid milk. Production has **grown 4.8%** since the mid-1990s, against a broadly flat market, and because fresh milk is perishable and low in value relative to transport costs, almost none is traded.

But most British milk is not drunk. It is processed into cheese, yoghurt, butter, powders and cream. It is in these products that Britain's dairy trade takes place.

The trade data points in two directions. The UK's trade deficit in dairy products has widened from

£1.04bn in 2021 to £1.55bn in 2025, driven by the high-value products: the deficit in cheese alone reached **£1.3bn**, up from £868m in 2021, with a further **£383m** in yoghurt.

But the UK is also a successful dairy exporter, running surpluses in milk powders and cream. The imbalance is one of value as **the products we export are worth far less per tonne than the ones we import**.

This points to two routes to growth. The first is **import substitution**: investing in domestic processing so more British milk becomes British cheese and yoghurt. The second is **exports**: global dairy demand is forecast to keep growing, and a

larger, higher-value product mix would let British dairy capture more of that market rather than supplying it in bulk.

Both depend on the same foundations: a growing domestic milk supply and the processing capacity to add value to it at home.



Source: Dairy trade figures: AHDB analysis of HMRC data, UK dairy trade balance.

The agri-food trade balance

These commodity-level trends are reflected in the UK's trade position, with the value and volume of agri-food trade both pointing to increasing reliance on imports.

Data⁴ shows that, in real terms at constant 2025 prices (Figure 1), the value of food, feed and drink imports has risen from **£38.7 billion** in 2000 to **£67.8 billion** in 2025, while exports increased from **£18.1 billion** to **£25.7 billion** over the same period.

As a result, the gap between imports and exports has widened substantially, driven by imports growing much faster than exports.

If recent patterns were to continue, the real-terms agri-food trade deficit would widen from around **£42 billion in 2025** to approximately **£54 billion by 2050** illustrating the cumulative effect of sustained differences between import and export growth.

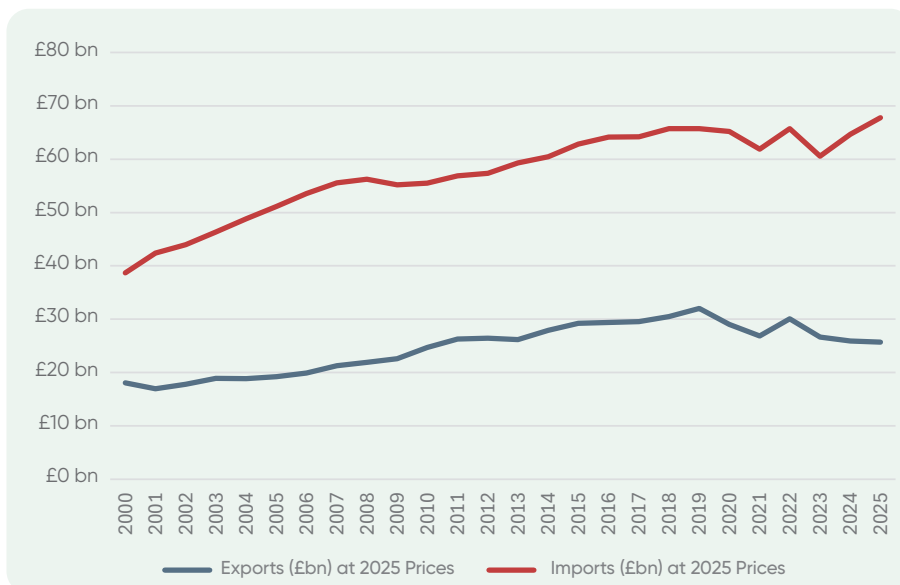
The volume data reinforce this picture. Across many key commodities, import volumes have generally increased over time, while export volumes have been comparatively flat or have grown more slowly.

Overall, **imports have grown by 70%** since 1997 (from 7.4 million tonnes to 12.6 million tonnes) while **exports have fallen by 49%**

(from 5.3 million tonnes to 2.7 million tonnes) – meaning the UK's food trade volume deficit has grown from **2.1 million tonnes** to **99 million** over that period.

Although trends vary by commodity, the overall pattern is one of increasing dependence on imported food and agricultural products to meet domestic demand.

Figure 1: Value of trade in food, feed and drink in real terms at 2025 prices⁵



Ready to GROW



Rob Lewis Livestock farmer Wales

I farm beef and sheep in the Elan Valley in Powys, running Welsh Mountain sheep alongside a suckler herd, and finishing lambs and prime cattle.

Alongside the farm, we also run The Triangle, a community inn in Rhayader, where we champion our own Welsh beef, lamb and venison, work with local butchers, and tell the story of our Welsh produce on the menu. Telling our sourcing story in this way brings customers back time and time again.

Our farming ambition centres on livestock numbers. We're at 60 suckler cows on the farm and we've taken the hill sheep enterprise about as far as it can go.

The bigger opportunity is rebuilding suckler numbers, which have fallen sharply nationally. But rising input costs, only partial farmgate price recovery and a third successive dry summer are all preventing the reinvestment that would let us grow.

Growth would create jobs, particularly in processing, although that depends on throughput, and with only 14 abattoirs left in Wales, protecting processing capacity is essential.

On farm, rising costs have meant letting employed staff go and leaning on family. With more livestock we could take people on again, opening up real opportunities for young people who can problem-solve and turn their hand to anything.

To achieve this growth, we need practical support: a calf production scheme to incentivise herd-building, stronger bTB control, help with the significant cost of slurry storage under water quality rules, and a Sustainable Farming Scheme budget uplifted to 2026 levels. Confidence – knowing the government will back the industry when we need it to – is crucial.

Agricultural GVA and employment in English regions and Wales



Agriculture generates billions of pounds for the economy and supports thousands of jobs across every region of England and Wales, making it one of the country's most geographically dispersed industries.

In 2024, agriculture generated around **£11.4 billion** of gross value added (GVA) across England and Wales and supported more than **334,000** people in the agricultural labour force.

GVA measures the economic value created by the sector, representing the value of output minus the value of goods and services used in production. While the scale of activity naturally reflects differences in land area, climate and farming systems, every region of England and Wales makes a meaningful contribution to national agricultural output and employment.

This broad regional footprint means agriculture is already providing growth opportunities across postcodes throughout England and Wales, with economic benefits distributed across rural communities rather than concentrated in a handful of economic centres.

Agriculture forms the bedrock of the UK's largest manufacturing sector – food and drink. When these figures are combined with food and drink manufacturing, processing, distribution and retail, the wider agri-food sector contributes **£162.3 billion** to the economy and supports **4.1 million jobs**.

Regional growth in agricultural GVA since 1998

Agriculture has also delivered sustained long-term economic growth across England and Wales. In real terms, agricultural GVA has increased across every English region and in Wales since 1998, demonstrating that growth has not been confined to one part of the country.

This growth has been achieved despite declines in production of several key agricultural commodities over the same period.

Much of the variation in regional real-terms growth since 1998 is a reflection of where regions started, and the relative size of their agricultural economies, rather than their relative performances since. The regions worst hit by the farm income crisis of the late 1990s have recovered the most ground.

Real-terms regional growth in GVA since 1998*:

North East +119%
South West +92%
West Midlands +92%
North West +88%
South East +81%
Yorkshire and the Humber +41%
East Midlands +35%
East +25%

Wales also recorded strong growth of 55%
broadly in line with the England average +57%

In other words, the sector has continued to generate greater economic value even as output has fallen in parts of the industry, highlighting the significant opportunity that could be realised if productivity and production volumes were able to grow together.

It is important to note that **GVA is not a measure of farm profitability**. Although it accounts for the cost of intermediate inputs used in production, it does not reflect the costs of labour, land, capital or depreciation borne by individual farm businesses. So, **increases in agricultural GVA do not necessarily translate into higher farm incomes or increased profitability**.

Taken together, these trends reinforce agriculture's role as a genuinely national industry, delivering economic growth and supporting prosperity across all regions rather than concentrating benefits in a small number of locations.

**Growth over time is presented using ONS regional GVA data⁶ because it is reported in real terms, allowing meaningful comparisons over time, whereas the regional agricultural statistics used for the 2024 regional snapshot on p2 are published in current prices.*



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Rob Atkin Arable/beef farmer Midlands

I'm a third-generation farmer in Staffordshire and ours is a mixed enterprise across 1,300 acres. We have 1,000 acres of combinable crops and a 300-head beef herd, finishing 100 cattle a year. Alongside the family, we employ two full-time staff and a 17-year-old harvest student.

Our ambition is to increase cattle numbers and become more productive on the arable side. The biggest limits there are the weather and increasingly regular droughts.

While government can't change the weather, it can fund research and plant breeding bodies like NIAB and the John Innes Centre to develop drought-resistant varieties and give clarity on parallel imports of plant protection products before we lose them and our margins with them.

Nearly a quarter of our income now comes from diversification: caravan storage, farm cottages to let, a secure dog paddock and industrial storage, which increasingly props up the farm after the loss of BPS and cuts to SFI.

We'd like to add glamping and caravan pitches, but planning rules stopped us over things like distance to a pub or bus stop. If government wants growth and spending in the countryside, this has to change.

The skills we need now centre on marketing and business management, but our mobile and broadband signal is patchy at best. Above all, I need stability in SFI, including a set figure I can budget against over ten years, not three, to give me the confidence to invest.

Structural profitability in English farming sectors

Producing food and running a viable farm business are not the same thing. A farm can keep growing crops or milking cows for a time while steadily losing money, but no business can maintain that position indefinitely.

To understand how much of England's food is being produced by businesses on a sound financial footing, the NFU commissioned Promar International to examine the profitability of the main farming sectors across the three financial years to February 2025, drawing on the government's own Farm Business Survey.

That means these findings set a baseline rather than telling the full picture, as they do not cover the dry growing seasons in 2025 and 2026, the pausing of SFI, further reductions in BPS, the emerging impact of bluetongue or an EU pig market compromised by African Swine Fever – each of which will have deepened the strain.

The measure used throughout is **Management and Investment Income (MII)**. MII is what is left for the farmer once the business's running costs have been met and an allowance has been made for the family's own labour.

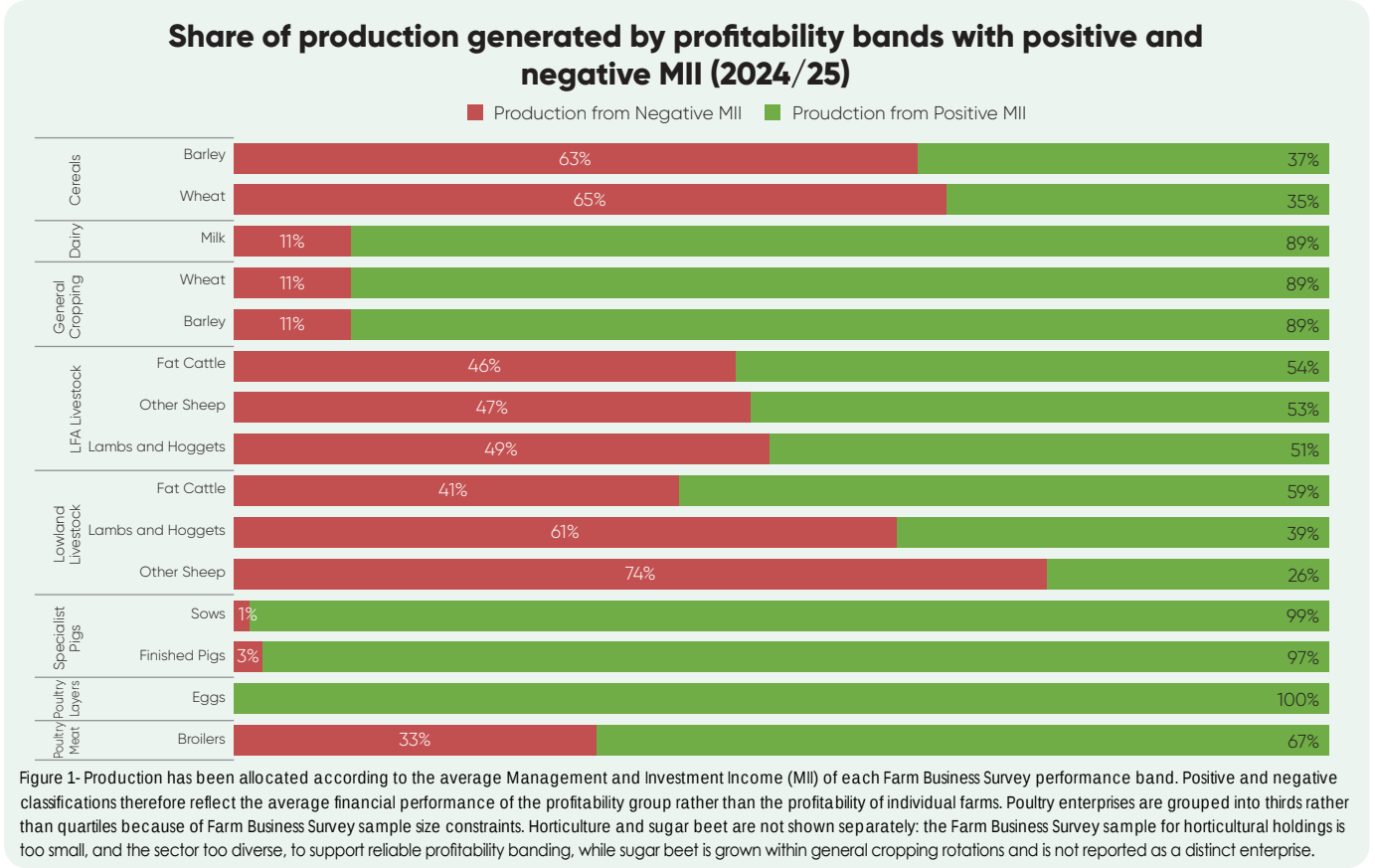
MII has to provide a return on the substantial capital a farmer has tied up in the business – the livestock, machinery, stored crops and working capital that farming requires – and it has to reward the risks a farmer takes on each year, from volatile prices to weather, that can undo a season's work.

Where MII is positive, the business is broadly paying its way. Where it is negative, the farm is running its core operation at a loss. But a positive figure that looks modest when set against the scale of money invested and the risks carried is not a comfortable position to be in.

It is important to note that, for much of the period examined, the income recorded still included the Basic Payment Scheme. In other words, the profitability shown in this analysis is not profitability from the market alone. In several sectors, it has been supported by public payments that are now being withdrawn.

The central question this analysis sets out to answer is not how much food each sector produces, but how much of that food comes from farms that are financially sustainable and how much comes from farms making a loss.

Figure 1 captures this for the most recent year of data, 2024/25. For each sector, it splits total production into the share coming from farms with a positive average income and the share coming from farms with a negative one. Hence, the chart illustrates how much of the nation's food supply is resting on shaky financial ground.



The picture it paints is of an industry split into two groups. In pig, dairy, poultry and diversified cropping, the vast majority of output in 2024/25 came from farms that were at least breaking even at a time when these sectors were toward the top of their respective commodity cycles. The strong egg figures reflect a period of recovery: the years covered followed a difficult spell of high feed and energy costs and low returns, which saw producers leave the sector before prices improved. In specialist cereals and in grazing livestock, particularly sheep, a substantial share of production came from farms that were losing money.

What makes this significant is that it is not the result of a single difficult year. Across the three years examined large, and in places majority, shares of certain sectors were producing at a loss.

When such a high proportion of a sector's output consistently comes from loss-making farms, the eventual consequence is less investment, fewer businesses and, in time, less domestically grown food.

Cereals concerns

The clearest example in this analysis is the specialist cereal sector. In 2024/25, only around **35%** of the wheat and barley grown on these farms came from businesses making a profit, meaning roughly **65%** was produced at a loss. That is a striking finding for the sector that underpins the nation's bread production and reflects how quickly fortunes turned within the three years studied.

Grain prices spiked in 2022 after Russia's invasion of Ukraine disrupted global markets and, for a short period, arable farming was more profitable. As those markets settled, prices fell back sharply and revenues did not recover.

The 2024 harvest compounded the problem as English wheat output fell by around 22% on the previous year, due to persistent rainfall through the preceding autumn meaning winter crops were left unplanted or struggling. Costs, meanwhile, stayed stubbornly high.



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Livestock under pressure

Grazing livestock tells a similar story within the period, though with more variation between enterprises. Both lowland and upland grazing farms – the latter being the Less Favoured Areas, or hill and marginal land – recorded losses on average across all three years.

Beef held up comparatively well, with most cattle coming from the stronger performing farms, but sheep was far more exposed. On lowland farms, as little as **26%** of some sheep output came from profitable businesses.

Also, in several livestock enterprises, production had become concentrated in a relatively small number of financially stronger farms, so that on the uplands in particular the majority of output came from the better performers, even as the sector as a whole lost money.

On one reading that looks like resilience. But it also means national output rests on a narrow base of farms – a vulnerability of its own should those businesses come under strain.



Recent events make current situation worse

While these patterns highlight where financial strain was concentrated across the sectors, two further qualifications sit around all of the figures – and both point in the same direction: that the underlying position is likely weaker than the numbers alone suggest.

The first concerns **direct payments**. For much of the period covered, farm incomes still included the Basic Payment Scheme, the area-based payment that long underpinned many farm businesses. That support was being steadily withdrawn across the years analysed and is now all but gone in England.

Some of the profitability was therefore propped up by public money, resilience that no longer exists. As this support is removed, a number of businesses that currently appear only marginally viable are likely to fall below the threshold of commercial viability.

That pressure has only built since the data was collected. The withdrawal of direct payments has continued, and the pausing of the Sustainable Farming Incentive in 2025 closed off income that some businesses had been relying on to bridge the gap.

This weighs most heavily on the sectors already under strain – cereals and grazing livestock – where direct payments made up a larger share of income and commercial margins are smallest.

The second concerns **timing**. As previously mentioned, this analysis is retrospective, with 2024/25 the most recent year, and a great deal has happened since.

England has endured further prolonged dry and hot conditions, with drought affecting large parts of the country. Sustained heat and lack of rain have held back crop development and hit final yields, as well as impacting grass and forage growth for livestock farms.

Energy-related costs have climbed again on the back of renewed instability in the Middle East, pushing up the price of fertiliser and diesel – costs that feed straight into every farm's bottom line, and bear heaviest on the intensive sectors – poultry and protected horticulture – where heating, lighting and ventilation are core costs of production. Bluetongue has also emerged as a further threat to livestock businesses.

This data should therefore not be read as a description of where the sectors sit today, but as a floor beneath the current position. On many farms, and especially in the sectors already shown to be under pressure, the reality has almost certainly worsened.

These findings carry a clear message for the resilience of British food production. Across several years, and on a scale that cannot be dismissed as a one-off, meaningful parts of English agriculture have been producing food at a loss.

Farmers have absorbed those losses by drawing on reserves and non-farming income, but there is a limit to how long any business can trade in the red.

Left unchecked, losses of this kind translate into reduced investment, businesses leaving the industry and, in the end, a smaller domestic food base, at the very moment the country is asking its farmers to deliver more on food security, on nature and on climate.

Recognising where that financial strain is concentrated is the first step towards growth and protecting the productive capacity that British consumers depend on.



Ready to GROW



William Maughan
Free-range egg producer
North

We've grown our business organically over 25 years, steadily expanding free-range production to keep it viable, and the next logical step is another free-range shed. Our ambition is straightforward: we're doing the feasibility work to put up an additional laying shed, increase our number of free-range layers and keep the business relevant and economically sustainable for the long term. The demand is there as packers want the eggs, and we can produce to a high welfare standard. Expansion would create new jobs too: additional staff to care for the birds and support wider operations, existing part-time roles moving to full-time, and new roles to manage the extra workload. These are skilled, hands-on jobs built on strong stockmanship, experience with poultry livestock and the competence to run modern egg-packing machinery.

The barriers are real. This is a major investment and the biggest hurdle by far is planning, and nutrient neutrality in particular. The costs of meeting nutrient requirements are significant, and access to planning is getting harder. We take our nutrient responsibilities seriously and want to grow responsibly. What we need is a planning system that shifts from a culture of barriers to a culture of solutions, one that recognises strong demand and supports sustainable growth in the right place, with the right safeguards. Farmers like us are woven into our rural communities: our children attend the local schools, we serve as school governors, parish councillors and church wardens, and we support the local shops, pubs and places of worship. When a farming business grows, that wider rural economy and community grows with it.

The policy business case for climate adaptation and growth in UK agriculture

This business case is driven by nine connected factors:

UK agriculture is already operating in a changing climate. The Met Office expects hotter, drier summers, warmer, wetter winters and more frequent extreme weather events, and its Defra-funded work describes climate change as a systemic risk to the UK food system.

The policy business case for adaptation is therefore not only about avoiding losses. It is about protecting food production, sustaining productivity growth, reducing exposure to climate risk, and creating the conditions for long-term investment and competitiveness.

Fragile international supply chains – for food and for inputs like fertiliser, feed and energy – and intensifying global competition for supplies also reinforce the same conclusion: a resilient domestic production base is the UK's best buffer.

Climate adaptation affects every sector and every region in the UK, and adaptation takes time – decisions taken now will determine how resilient our food production is for decades.

The rising cost of inaction:

Extreme weather is already imposing significant costs on UK agriculture. Without strategic adaptation, these costs are likely to grow through lower productivity, more volatile output, asset damage and wider supply chain disruption.

The need to plan and adapt:

Without planned adaptation, climate risk will increasingly disrupt planting, growing and harvesting, as well as affecting livestock productivity, people, buildings, transport and supply chains. A warming climate also brings new and spreading pests and diseases, requiring sustained investment in research, surveillance and plant and animal health resilience.

A stable foundation for productivity and growth:

Adaptation can support more stable output, improved business confidence, stronger supply chains and greater investor confidence. This is especially important where land-use policy assumes productivity growth will help maintain food production.

Protecting productive land and assets:

Land, soils, drainage, reservoirs, buildings, glasshouses and supply chain infrastructure are long-term assets. Adaptation can help protect their productive value and reduce the risk of underperforming capacity.

Maintaining food security and protecting supply chains:

Climate risk affects the availability, affordability and stability of food supply. Adaptation should therefore be valued for its role in maintaining productive capacity and reducing supply chain fragility.

Avoiding market failure:

Many adaptation measures create wider public and system benefits, such as flood reduction, soil and water resilience, food supply stability and lower public recovery costs. These benefits are not fully captured in farm-level returns, leading to underinvestment.



Short-term blockers and fragmented responsibilities:

Farmers can adapt tactically, but strategic adaptation is constrained by tight margins, short contracts, tenancy issues, uncertain policy signals and fragmented responsibilities across farming, water, planning, trade and environmental policy.

Water and soils as essentials for growth:

Too much and too little water, alongside declining soil health, will increasingly shape agricultural productivity. Investment in water storage, irrigation efficiency, soil resilience and catchment planning can reduce risk and support growth.

Better evidence, metrics and appraisal:

Adaptation benefits often include avoided losses, reduced volatility and preserved future options. Government should help develop the data and appraisal tools needed to value these benefits properly.

As a priority, government must work with industry to build the data, modelling and appraisal framework needed for a long-term, risk-adjusted policy business case for agricultural adaptation.

This should identify where market incentives are insufficient, where public and private benefits diverge, and where adaptation can support productivity, competitiveness and sustainable growth.

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Rivenhall Greenhouse Ltd Horticulture East

Our business is developing the Rivenhall Low Carbon Greenhouse in Essex, a large-scale controlled environment agriculture project designed to produce fresh British food year-round.

The scheme will focus initially on tomatoes, with flexibility to grow other high-value crops such as cucumbers, peppers and strawberries. At full capacity, the site could produce up to 30,000 tonnes of tomatoes annually, equivalent to around 7.5% of current UK imports.

The project is built around a circular energy model, using heat, electricity and CO₂ from the neighbouring Indaver Integrated Waste Management Facility.

Our ambition is to demonstrate that the UK can reshore a meaningful share of fresh produce production if the right infrastructure, planning and investment conditions are in place.

We want Rivenhall to become a blueprint for commercially viable, lower-carbon, large-scale horticulture that strengthens food security, reduces exposure to volatile import supply chains, and gives retailers greater confidence in domestic sourcing.

To realise this ambition, we need major capital investment in glasshouse infrastructure, automation, energy integration, irrigation, packhouse capacity, crop technology and workforce training. The project represents around £150 million of investment, showing the scale of finance required to deliver modern UK horticultural capacity.

The project is expected to support more than 400 direct jobs, including roles in crop production, engineering, agronomy, data management, energy systems, logistics, packing, quality assurance and site management.

We need people who understand horticulture, robotics, climate control, crop science, energy systems and commercial supply chains. That means stronger links between businesses, colleges, universities and local training providers.

Supportive planning, investment incentives, skills funding, clarity around energy and infrastructure policy and a clearer government commitment to domestic food security would help unlock projects like Rivenhall across the UK.

Key economic realities impacting growth and resilience

Whether the British farming sector can grow and remain resilient will be determined by a number of economic conditions.

These are structural realities rather than short-term pressures: the UK's changing position in global food markets; the level of public support the UK provides relative to its competitors; and the market failures that prevent markets alone from sustaining a resilient farming sector.

Considered together, they highlight a sector whose strategic importance to consumers is rising, even as the market reward and public investment needed to sustain it are moving in the opposite direction.

That widening gap between what British farming is being asked to deliver and the means available to deliver it is the central economic reality shaping the sector's prospects for growth and resilience.

A smaller buyer in a more competitive global market: the case for producing more at home

While the UK's food imports have increased in absolute terms, global agricultural trade has expanded much faster.

As a result, on a value basis the UK's share of global agricultural imports fell from **8.9% in 2000** to **5.3% in 2024**, reducing its relative importance as a buyer by around **40%**.

This 3.6 percentage point decline is the largest among the major global importers. Germany, France and Italy have each lost around one percentage point over the same period, while China's share has increased from 3% to 12.5%.

The UK is therefore buying more food but purchasing a progressively smaller share of an increasingly competitive global market.

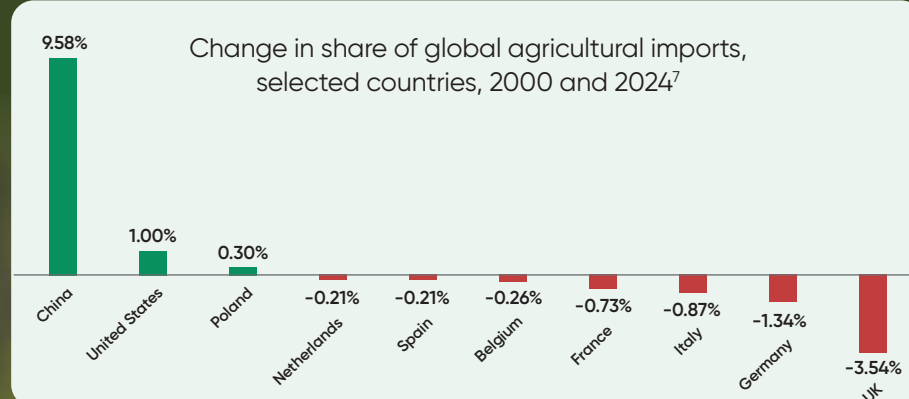
This should not be interpreted as headroom to liberalise trade or become more reliant on imports.

Global competition for exportable agricultural supplies has grown faster than UK demand, increasing the risk that supplies are diverted elsewhere when markets tighten.

These pressures could intensify as geopolitical instability, conflict, trade restrictions and disruption to shipping routes interact with climate change.

More frequent extreme weather, water scarcity and changing growing conditions may affect production across several exporting regions simultaneously. **In these circumstances, access to food cannot be assumed simply because the UK has the purchasing power to import it.**

Scale also matters. Suppliers may prioritise larger customers when availability is constrained, while larger



buyers can have greater influence over prices, specifications, delivery schedules and contractual terms. As the UK's share of global imports declines, its relative commercial leverage may weaken.

The long-term response to a more contested and volatile global market is not greater dependence upon it, but stronger domestic food production alongside secure and diverse trading relationships.

Trade will remain essential to UK food security, providing products that cannot be grown domestically, supporting consumer choice and helping to manage seasonal shortfalls. However, **trade policy should complement rather than undermine domestic production.**

Government should establish clear core standards for food imports, reflecting the environmental, animal welfare and food safety requirements expected of UK producers.

These standards should underpin trade policy, support fair competition and prevent British farmers and growers being undercut by products made using practices that are restricted or prohibited in the UK.

Domestic agriculture provides a buffer against global volatility and gives the UK greater influence over how its food is produced.

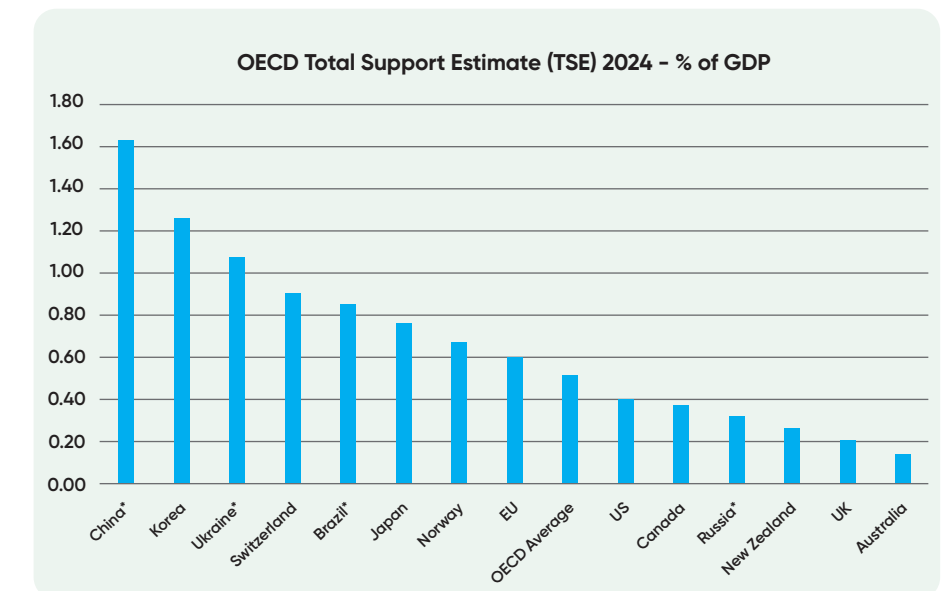
Government should assess how domestic farming, diversified trade and enforceable core standards can work together to protect the resilience of 29 million households' shopping baskets.

Without this, policymakers risk underestimating UK agriculture's role in safeguarding food security and protecting consumers.

The UK is spending less of its GDP on supporting agriculture than key competitors

Where markets do not reward public goods, and where regulation loads costs onto farmers that the supply chain does not return, public support is the principal mechanism for closing the gap.

This is the role agricultural support plays across the developed world: it compensates for market failure, funds the public goods markets under-reward, and underpins the research, biosecurity and infrastructure a resilient sector depends on.



* Non-OECD countries

So, is the UK investing enough in support to match the expectations it places on its farmers? Looking at the latest OECD data, the UK does stand out – but not in the way its ambitions for the sector suggest.

The OECD monitors how countries support agriculture both through direct support schemes and indirectly through services such as research, animal and plant health, data and promotion. This is called the Total Support Estimate (TSE).

Its latest data, covering 2024, shows a TSE for the UK that is just **0.21%** of GDP – down from **0.29%** in 2020. This is noticeably below key competitors such as the EU, New Zealand, the US and Canada and is less than half of the OECD average.

The UK TSE may continue to fall further as devolved nations implement new support schemes and issues such as the closure of the English Sustainable Farming Incentive (SFI) scheme in 2025 are factored in.

Market failures have evolved but not disappeared

If a vibrant domestic farming sector is the principal buffer against rising external pressures, the economic health of the sector becomes a matter of national security.

But domestic production does not operate in a frictionless market. The same consumers who rely on British farming for a resilient food supply are served by markets that systematically fail to reward much of what is needed to ensure that resilience.

Understanding these market failures, how they have evolved and where they bite hardest is essential to understanding why the sector's future cannot simply be left to the market.

Why market failures matter

Agriculture depends on markets, but markets often fail to reflect the full costs, benefits and risks of farming.

Issues recognised in the 1990s, including environmental impacts, information gaps, market power and risk, remain. What has changed is the expectation that farming should also deliver climate action, nature recovery, food security and resilience.

Food prices often exclude environmental costs, while markets under-reward benefits such as carbon storage, biodiversity and soil health. These gaps have become more important as environmental pressures have intensified.



Farmers also frequently find themselves in a weaker bargaining position than processors, retailers and input suppliers. This can limit their ability to respond effectively to market opportunities and to receive increased returns from rising consumer demand.

Farmers are increasingly exposed to volatile costs, extreme weather, disease and trade disruption. Markets may also underinvest in climate adaptation and food system resilience because many of the benefits are long term and shared more widely.

The central lesson of this is that market responsiveness works best when prices and incentives reflect the real costs, benefits and risks of farming. Where environmental impacts, public goods and resilience are not properly valued, markets alone will fall short.

Policy needs to address market failures by rewarding public goods, improving transparency, tackling supply chain imbalances and supporting risk management. Done well, this can strengthen profitability, sustainability, food security and resilience.

Regulation and unrewarded dairy investment

Dairy farms are required to invest in slurry storage, silage storage and nutrient management infrastructure.

These measures are intended to reduce risks such as water pollution, nutrient loss and silage effluent entering the environment. In effect, regulation is asking farm businesses to carry more of the cost of managing environmental risks that would otherwise fall on wider society.

The challenge is that this investment does not necessarily generate a commercial return. A new slurry store, covered lagoon or compliant silage clamp may reduce pollution

risk and improve climate resilience, but it does not automatically increase the milk price received by the farmer. The benefits are real, but many of them are public or supply chain benefits rather than returns captured directly by the farm business.

A previous Kite Consulting and CEC report⁹ estimated that improving climate resilience across UK dairy farms over ten years would cost more than **£3.9 billion**. For an average dairy farm in the dataset, the estimated cost of capital infrastructure and additional land required was **£472,539**, equivalent to an additional **2.4 pence per litre per year for ten years**.

This highlights the market failure. Regulation may require farmers to absorb environmental costs, but the dairy market does not guarantee that those costs can be recovered. Unless milk buyers, retailers or consumers pay more for milk produced with lower pollution risk and greater climate resilience, the cost is effectively loaded onto the farm business.

Regulation has an important role, but it cannot be treated as costless. Policy makers need to ensure that environmental improvement is supported by fair cost-sharing across the supply chain and a realistic commercial route for farmers to invest.



Sophie Gregory
Dairy farmer
South

We are first-generation dairy farmers in the South West. We've built our business from nothing through tenancies, share farming and taking opportunities as they've come.

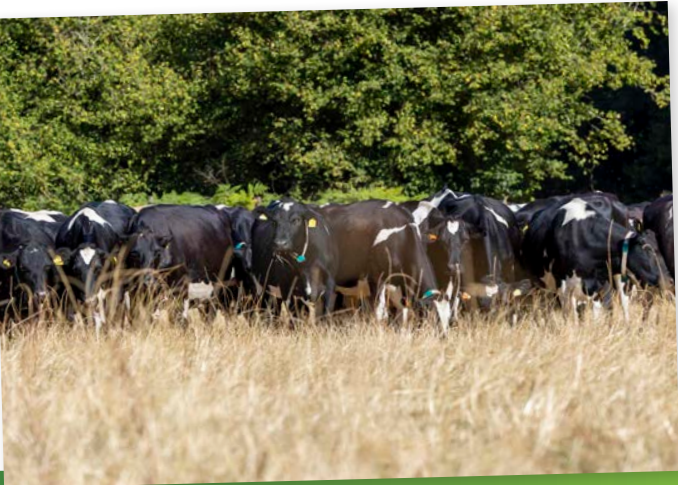
Today, we farm around 1,600 acres, milking 600 cows across two dairy units – one organic and one conventional – alongside youngstock, beef and some arable.

For us, growth isn't simply more cows or more acres. It's about getting better at what we do, raising productivity and making the most of our resources. Longer term, we'd love to own some land of our own to give the business real security.

People are our biggest investment. We're passionate about giving our team training, responsibility and a genuine route to progress. Modern dairy farming needs a huge mix of skills: stockmanship still matters, but so does data, technology, finance, environmental measurement and nutrient management.

I want ours to be a business where a young person can start in an entry level role and see a real career ahead of them.

What holds us back is the confidence to invest for the long term. Farming works on long timescales, and constant changes in policy and regulation make those decisions harder. For first-generation farmers, access to finance and land is the biggest barrier of all.



READY TO GROW: UNLOCKING BRITISH FARMING'S ECONOMIC POTENTIAL

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