

**1. What are the key factors affecting the resilience of food supply chains and causing disruption and rising food prices – including input costs, labour shortages and global events? What are the consequences for UK businesses and consumers?**

- The United Kingdom has a highly resilient food supply chain, as demonstrated throughout the Covid-19 response. It is well equipped to deal with situations with the potential to cause disruption.
- Defra has well established ways of working with the industry and across HM Government to monitor risks that may arise. This includes extensive, regular and ongoing engagement in preparedness for, and response to, issues with the potential to cause disruption to food supply chains.
- We do not expect any significant direct impact on overall British food supply as a result of the conflict in Ukraine. Our food import dependency on Eastern Europe is very low<sup>1</sup>, and we have strong domestic production of many of the products we do import.
- Rising food prices are dependent on a combination of factors including energy costs, agri-food import prices, domestic agricultural prices, domestic and migrant labour and manufacturing costs.
- Global prices for key agricultural products such as wheat, maize and fertiliser have risen rapidly since 2021 (increasing by 22%<sup>2</sup>, 29%<sup>3</sup> and 165%<sup>4</sup> respectively), driven by increased energy and shipping costs combined with weather events. Russia's invasion of Ukraine has exacerbated this situation by limiting the production and export of Ukrainian cereal crops. In response, some countries have adopted export restrictions that have further increased global prices and supply chain issues.
- Given that supply chains were already under significant costs pressures, consumer food prices are likely to continue to trend upwards in the short term.

CO<sub>2</sub>

- We are aware that CF Fertilisers has taken the decision to temporarily halt ammonia production at Billingham. Since last autumn, the CO<sub>2</sub> market's resilience has improved, with additional imports, further production from existing domestic sources and better stockpiles.
- While HM Government continues to examine options for the market to improve resilience over the longer term, it is essential industry acts in the interests of the public and business to do everything it can to meet demand.
- We are engaging with businesses across the food and drinks industry to understand any potential impacts

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<sup>1</sup> [HMRC trade data](#)

<sup>2</sup> Chicago Mercantile Exchange

<sup>3</sup> Chicago Mercantile Exchange

<sup>4</sup> IMF Primary Commodity Prices

## Labour

- As announced in the Government Food Strategy, HM Government has commissioned an independent review into labour shortages in the food supply chain, beginning this September.
- The review will consider how automation, domestic labour and migrant labour can contribute to tackling labour shortages in the food supply chain.
- Defra is working closely with industry and other government departments to help make sure that our farmers and food businesses have the labour they need for 2022 and beyond.
- The initial visa allocation for 2022 was 30,000 visas. An extra 10,000 visas were announced in HM Government's Food Strategy White Paper on 13<sup>th</sup> June, of which 2,000 are for pre-Christmas poultry workers. Operators remain confident that they have been able to source workers they need for the summer/autumn season, in spite of disruption from the Ukraine conflict.

## Support for Farmers

- In the farming sector, increased costs are particularly affecting fertiliser, animal feed, and fuel. This is creating short-term pressures on cash flow.
- Defra has taken a range of actions to support farmers and food producers to help ease the cost of energy impacts and other challenges.
- The 2022 Basic Payment Scheme payment will be made in two instalments to give farmers an advance injection of cash.
- We are also increasing revenue payment rates for the Countryside Stewardship scheme by c. 30% to reflect the change in costs since 2013.
- The introduction of one-off grants through various initiatives will also help, for example: the Farming Investment Fund; Farming Innovation Programme; Sustainable Farming Incentive and The Future Farming Resilience Fund.
- We successfully concluded the removal of Section 232 tariffs on British steel and aluminium exports to the US, that has allowed us to remove the 25% tariff on maize imports from the US, a key ingredient for animal feed.
- Defra continues to work on removing technical barriers to trade in sourcing maize from the US, such as genetically modified approvals, and to engage closely with industry.
- Fertiliser supply in both Great Britain and Northern Ireland is resilient, although prices are volatile caused by fluctuating gas prices
- As well as helping farmers with increased costs through accelerations to the 2022 Basic Payment Scheme payments, we have promoted independent guidance on efficient fertiliser application and impacts on crop yield and cost, delayed changes to the use of urea fertiliser for a year and clarified rules for safe application of manures.
- We have created a Fertiliser Industry Taskforce, where HM Government and industry work together to understand critical issues affecting the sector – current work is focussed on providing clear market information to farmers to enable them to make informed purchasing decisions.

- We increased grants for farmers and growers, including investing £70.5 million so far through the new £270 million Farming Innovation Programme for industry-led research and development in agriculture and horticulture
- Defra has also offered grants up to £48 million for equipment and technology through the Farming Investment Fund.
- On animal feed, Defra is working with the FSA to expedite authorisation of a further 8 GMO crops, to contribute to increasing supply of alternative crops into the British supply chain and support competitive pricing by increasing the number GMO events that are approved for food and feed uses on the GB market.
- Looking ahead, to help the sector adapt to a changing climate, we are funding a programme of research involving the Met Office Hadley Centre to explore and fill the knowledge gaps required to make sure a well-adapted agri-food sector.

## **2. What is the outlook for UK food price inflation in the short and medium term? What policy interventions should the Government consider to manage these pressures?**

### Background and key food price drivers

- Consumer food price inflation reached 13.1% in the year up to August 2022 and supply chains continues to face significant cost pressures<sup>5</sup>.
- The main drivers of these pressures are farmgate prices and food manufacturing costs. The former is impacted by increasing farm input costs including fertilisers; animal feed; labour availability; diesel and energy. The latter is impacted by increasing labour costs; energy costs; freight and border costs<sup>6</sup>.

### Defra Food Price Estimates

- Defra analysts estimate an approximate 10-20% rise in food prices this year in response to inflationary pressures<sup>7</sup>. This is the equivalent of adding approximately £340 – 680 to the average British household’s annual food bill<sup>8</sup>.
- In this modelling, analysts assumed a 15% increase in farmgate prices, a 50% rise in food manufacturers non-labour costs and a 4% rise in food manufacturing labour costs<sup>9</sup>. It is also estimated that a one percent increase in food price inflation increases the average annual British household food bill by £34<sup>10</sup>.
- A key caveat to this analysis was the uncertainty around how fast those cost pressures would translate into food price increases. This is partly because businesses had already been subject to sustained and significant cost pressures since mid-2021.

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<sup>5</sup> ONS - [Consumer price inflation, UK - Office for National Statistics](#)

<sup>6</sup> Internal Defra analysis.

<sup>7</sup> Internal Defra analysis.

<sup>8</sup> Defra analysis using ONS Living Costs and Food Survey data. [Family spending in the UK - Office for National Statistics \(ons.gov.uk\)](#)

<sup>9</sup> Internal Defra analysis.

<sup>10</sup> Defra analysis using ONS LCFS data. [Family spending in the UK - Office for National Statistics \(ons.gov.uk\)](#)

## Government Response

- HM Government is committed to a sustainable, long-term approach to tackling poverty and supporting people on lower incomes.
- In addition to the Energy Bills support announced by HM Government on 8 September, we have committed £37 billion to tackle the increased cost of living this year. This includes:
  - an additional £500 million to help households with the cost of essentials, including food, bringing total funding for this support to £1.5 billion.
  - increasing our Healthy Start Food Vouchers from £3.10 to £4.25, helping low-income families to buy basic foods such as milk, fruit and vitamins.
  - spending over £600 million in our Holiday Activities and Food programme over the next three years, to provide healthy meals to low-income families.
- Defra is working with other government departments to ensure a government wide understanding of the pressures facing low-income households.
- Defra is taking action to maintain an efficient food supply chain by mitigating against any potential burdens or friction that could otherwise drive-up consumer food prices. For example, we introduced labelling flexibility to reduce additional cost burdens resulting from the availability of Sunflower Oil.
- In addition, Defra continues to use regular engagement to work with retailers and producers to explore the range of measures they can take to ensure the availability of affordable food. For example, by maintaining value ranges, price matching and price freezing measures.
- Defra is in regular contact with major foodbank networks to understand their needs and asks of HM Government too.
- We have now announced that the Independent Review into Labour Shortages will be chaired by John Shropshire, an industry veteran who stepped down from his role as Chief Executive of major horticulture producer G's Fresh Group last year. We have announced that he will be supported by an expert panel that draws in expertise from across the farming, fisheries, processing and manufacturing aspects of the supply chain.
- The United Kingdom has been taking a leading role internationally in proposing mitigating actions to help with global commodity price increases and condemning Russia's role in exacerbating the crisis including:
  - engaging with likeminded partners through multi-lateral forums such as the WTO, UN and G7 to build consensus on the importance of open and predictable markets to support global food security.
  - supporting the work of the Agricultural Market Information System (AMIS), that monitors global agricultural markets and promotes transparency.

- funding development of a new grain database to help the Ukrainian Government identify grain illegally seized by the Russians and providing support for the UN-backed deal to resume grain exports from Ukraine.
- Global action to increase availability of cereal crops and reduce prices will benefit British consumers.

### **3. How are the rising cost of living and increasing food prices affecting access to healthy and nutritious food?**

- We know the cost of food has real consequences for people across the country as a significant proportion of household income is spent on food (circa 18% for lower income consumers)<sup>11</sup>.
- The broader affordability of food, and individuals' access to food, is a key element of HM Government's approach to tackling poverty as we learn to live with recent events and manage the impact of cost-of-living pressures.
- Whilst we strive to transform the food system in the long-term and unlock the benefits of healthier and more sustainable diets, we will, at all phases of policy development, champion consumer interests and seek to minimise food prices impacts.
- The delay to restrictions banning multibuy deals on foods and drinks high in fat, salt, or sugar will allow HM Government to consider the impact on consumers of the restrictions in light of an unprecedented global economic situation. The advertising restrictions on high fat, sugar and salt (HFSS) foods have also been delayed by 12 months. More detail here: [Government delays restrictions on multibuy deals and advertising on TV and online - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/government-delays-restrictions-on-multibuy-deals-and-advertising-on-tv-and-online)

### **4. How will the proposals in the Government's food strategy policy paper affect:**

#### **i. the resilience of food supply chains?;**

- The Government Food Strategy sets out a plan to transform our food system to make sure it is fit for the future.
- Responding to recent events, the Strategy puts food security at the heart of HM Government's vision for the food sector. The strategy sets out ambitions to boost food production in key sectors with post-Brexit opportunities and create jobs, with a focus on skills and innovations to level-up across the country.
- Domestic production figures have been very stable for most of this century. We produce 61% of all the food we need, and 74% of food which we can grow or rear in the United Kingdom for all or part of the year, and these figures have changed little over the last 20 years<sup>12</sup>.
- Our aim is to broadly maintain the current level of food that we produce domestically and boost production in sectors where there are the biggest opportunities – such as horticulture and seafood.
- Setting this commitment demonstrates that we recognise the critical importance of domestic food production and the role that it plays in our food security.

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<sup>11</sup> Internal Defra analysis.

<sup>12</sup> Production to supply: [AUK Chapter 14](#)

- Our farming reforms are designed to support farmers to produce food sustainably and productively, alongside securing environmental improvements that we all benefit from.
- Alongside this we are spending over £270 million in innovation by 2029 to support agricultural productivity. Our £48 million Farming Investment Fund is supporting more than 43,000 farmers this year, providing grants towards the cost of equipment and technology, as well as large capital items, to improve productivity.
- We have awarded grants, through the Future Farming Resilience Fund, to organisations who help farmers and land managers adapt to the agricultural transition through providing expert business advice.
- With the introduction of the Genetic Technology (Precision Breeding) Bill, we aim to create a new proportionate regulatory regime for plants and animals produced through precision breeding technologies where the genetic changes could have arisen through traditional breeding or natural processes. These technologies have great potential and can help us adapt to the impacts of climate change and enhance the sustainability and resilience of agricultural systems.

## ii. the agri-food and seafood sectors?;

### Agri-food

- The Government Food Strategy sets our aim to broadly maintain domestic food production at current levels in line with our environmental and climate goals.
- The Food Strategy also includes plans that will support farmers to boost home-grown fruit and vegetable production, and encourage people to buy more locally-sourced, high-welfare food.
- HM Government recognises the importance of the domestic horticulture sector in both feeding the country and promoting people's health and wellbeing.
- The innovation and versatility of our hard-working growers makes sure that this country has the means to produce a wide range of horticultural crops, from high-quality fresh produce to plants and cut flowers.
- With the help of this innovative best practice and new technologies, it's a sector with a potential to grow, taking advantage of the demand for top quality domestically grown produce.
- This is a vital sector not only in ensuring the resilience of our food supply chains, but in driving local economic growth and employment also.
- Our future policy will help growers to continue providing a supply of healthy, home-grown produce to high environmental standards.
- The Horticulture Strategy for England (HSFE) is a rolling programme that will examine the diverse roles of small, large, and emerging growing models, and drive high tech, controlled environment horticulture to increase domestic production. We will work with growers during the development of the HSFE, and there will be opportunity for those in the industry to feed into this, including potentially through one or more Calls for Evidence. Each will be an opportunity for industry to feed in relevant information to help shape the HSFE and collectively will cover a wide range of horticultural issues.

- The Government Food Strategy sets out the steps we are taking in driving innovation through creating a new simpler regulatory regime to allow researchers and breeders to unlock the benefits of technologies such as gene editing; and by working in partnership with UKRI, industry and consumer groups to prioritise research and innovation activity for funding, including on industry automation and sustainable proteins. This will make sure research and innovation is coordinated with maximum impact.
- This activity will build on existing research including UKRI-led £47.5 million Strategic Priorities Fund on Transforming Food Systems, Nutrition and Health that seeks to develop food systems that enhance human and planetary health; and Defra's flagship (conventional) breeding programmes (Genetic Improvement Networks) to support more sustainable, resilient crops and livestock.
- The UKRI-led Global Food Security Programme also has a role to co-ordinate Agri-Food research and innovation activities across major public sector funders (Research Councils, Agencies, government departments, devolved administrations).

## Seafood

- HM Government recognises the important role seafood has in for both consumer health, sustainability and food security. We are committed to growing the domestic consumption of our seafood and to inspire British consumers to buy and eat more locally caught fish and shellfish. So we are working with partners to better understand issues around supply and consumer behaviour to identify which interventions will be most successful.
- The Government Food Strategy outlines some of the areas where there is an opportunity for the seafood sector to grow and fulfil its potential over the next decade. This includes boosting seafood exports through the recently announced £1 billion Seafood Exports Package, as well as investment in innovation and technology to help the sector modernise and improve supply to the domestic market. In particular, we recognise the role that aquaculture has to play in boosting seafood consumption and production without adding additional pressure to fish stocks.
- Many of the other initiatives mentioned in the Food Strategy will also include seafood. For example, we will look to make sure that public procurement leads by example by encouraging the use of sustainable and locally-sourced seafood. This will help contribute to our goal for people to eat two portions of seafood a week, as recommended by the NHS.
- The United Kingdom Seafood Fund (UKSF) is a £100 million fund set up to support the long-term future and sustainability of the British fisheries and seafood sector.
- The UKSF has allocated £24 million towards two schemes funding the development of innovative new technologies and ideas: the Fisheries Industry Science Partnerships (FISP) and the Seafood Innovation Fund (SIF) that are helping to enhance the sustainability of the sector through data collection, research and innovation.
- SIF focusses on securing longer term, cutting-edge innovation across the seafood sector and helping to take innovative ideas from early-stage research to commercial viability.

- SIF has already run three funding opportunities with a further round planned this summer.
- Alongside science and innovation, the UKSF is divided into two further main components:
  1. Infrastructure, where at least £65 million is available to fund improvements to industry capability across the supply chain, including upgrades to ports and processing facilities; and
  2. Skills and Training, where up to £10 million will be available to develop new, and improve current, courses to upskill the industry in essential skills.
- A further £1 million will be used to help the British seafood industry increase exports to existing and new markets.

### **iii. access to healthy, nutritious food?**

- The Government Food Strategy sets out measures to ease supply chain bottlenecks and improve efficiency, aiming to reduce pressures on the cost of food; it includes measures to support good quality jobs around the country; and it also sets out how we will continue to support children and families on low incomes to learn and eat healthily through various initiatives such as the Healthy Start Scheme, free school meals, breakfast clubs and the Holiday Activities and Food Programme.
- We want the entire supply chain to help secure healthier food and encourage healthier eating. To that end, the food strategy builds on existing policy work such as that developed under the Agriculture Act to help make sure that our food system secures healthy and affordable food for all people and is built upon a resilient and sustainable agriculture sector.
- Furthermore, the Government Food Strategy announced a £6.9 million cross-government programme of food system trials (concluding spring 2025) to develop actionable evidence about what interventions encourage and enable the uptake of healthier and more sustainable diets for all.
- The Food Strategy also set out a new UKRI-led initiative, the Diet & Health Open Innovation Research Club, that will support new research across businesses and academics to drive improvements in understanding the relationship between food and health, how we can improve the nutritional value of the food we eat and explore what underpins food choices.

## **5. Is the current level and target of food self-sufficiency in England still appropriate?**

- The United Kingdom has considerable self-sufficiency in food. We produce 61% of all the food we need, and 74% of food that we can grow or rear in the United Kingdom for all or part of the year. In addition, the United Kingdom has nearly 100% sufficiency in poultry, carrots and swedes<sup>13</sup>.
- The United Kingdom's year-round production includes cereals, meats, milk and some fresh produce.
- British consumers have access through international trade to food products that cannot be produced here, or at least not on a year-round basis. This supplements

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<sup>13</sup> Production to supply: [AUK Chapter 14](#)



domestic production and make sure that any disruption from risks such as adverse weather or disease does not affect the United Kingdom's overall security of supply.

- Recognising the importance of food security, in the Agriculture Act 2020, HM Government made a commitment to produce an assessment of our food security at least once every three years, with the first United Kingdom Food Security Report published in December 2021<sup>14</sup>.
- The report recognises the contribution made by British farmers to our resilience, and the importance of strong domestic production to our food security. It considers the United Kingdom's food supply sources overall, noting that domestic production and diversity of supply are both important to our food security.
- The recently published Government Food Strategy puts food security at the heart of our vision for the food sector. Our aim is to broadly maintain the current level of food that we produce domestically and boost production in sectors where there are the biggest opportunities such as horticulture and seafood.

**6. How could the Government's proposed land use strategy for England improve food security? What balance should be struck between land use for food production and other goals – such as environmental benefit?**

7. The Government Food Strategy stated that we will publish a Land Use Framework in 2023 to make sure we help our farmers adapt to a changing climate, whilst continuing to produce high quality, affordable produce that supports a healthier diet while meeting our net zero and biodiversity commitments.
8. Defra is working with other government departments, including BEIS, DLUHC, and Cabinet Office, to develop the scope of the Framework, and to determine the principles that will help us move towards a more strategic land use.
9. We envisage the Land Use Framework will comprise a set of principles to guide local authorities, land managers, and others across England to move towards a more strategic use of land that will help us meet our commitments on food security, improving the environment, and securing net zero through multifunctional landscapes.
10. We are seeking to deliver as much as we can on our limited supply of land, to secure the whole range of government commitments through multifunctional landscapes. This will incorporate elements of the Three-Compartment Model, which was recommended in Henry Dimbleby's independent review, including areas of highly productive land as well as elements of land sparing and land sharing. Our focus is on securing resilient, multifunctional landscapes that will be a mosaic of land uses dependent on the local context.

September 2022

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<sup>14</sup> [United Kingdom Food Security Report 2021](#)