ANALYSIS

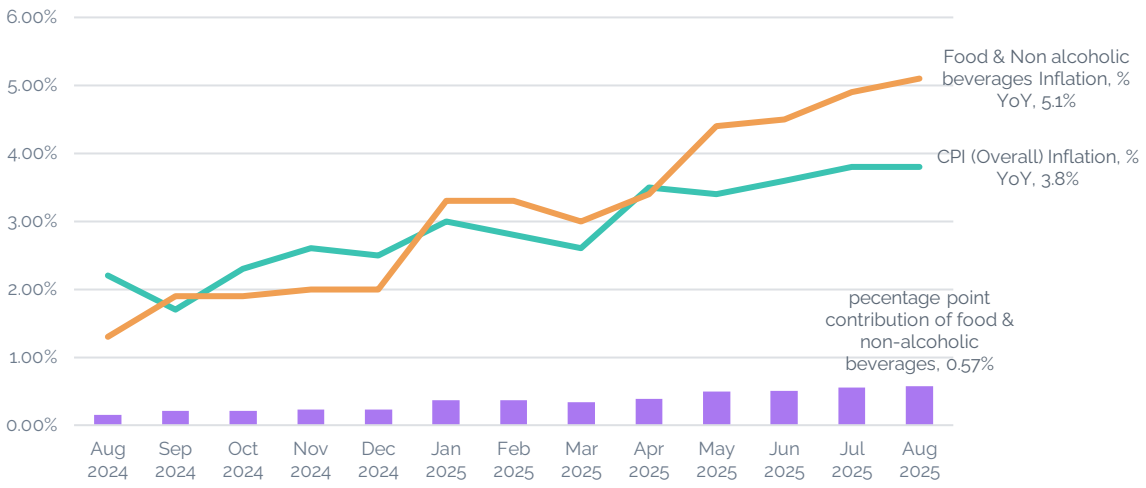
Foods hit by extreme weather rising in price four times faster than others

What is driving inflation?

In August 2025 the Consumer Price Index (CPI) rose by 3.8% year-on-year, unchanged from July. Food and non-alcoholic drink prices rose by 5.1% in the year to August, and were a major contributor to the headline rate, adding **0.57 percentage points** to the overall increase. This made it the second largest driver of inflation after housing, energy, and utilities (**0.92 percentage points**). The Bank of England predicts that food price inflation will peak at 5.5% at end of the year.

In addition, higher food and non-alcoholic beverage costs likely supported a rise in the cost of restaurant and hotels, which contributed **0.47 percentage points** to the rise in CPI. Food inflation is strongly correlated with catering, which makes up 40% of the Bank's preferred measure of "core services" inflation. "Core services" inflation gauges the segment of the basket most intrinsically linked to the underlying performance of the UK economy. Food prices are also particularly important from a central bank perspective "… because they are relevant in shaping households' inflation expectations", as noted recently by a key figure at the European Central Bank (ECB)[i].

Food price growth has exceeded headline inflation since May



Source: Office for National Statistics, Consumer Price Index

Reporting on inflation in August highlighted the role that higher employer national insurance contributions and the increased minimum wage, alongside the Extended Producer Responsibility (EPR) for packaging, has played in pushing up prices. While these matter, a lot of recent reporting (this from the BBC, for example) has excluded a critical factor: climate change.

How is climate change affecting food prices?

The UK imports two fifths[ii] of its food from overseas, including many staples like rice, bananas and tea, which we cannot simply grow at home. Extreme heat, drought, fires and floods are hitting crop harvests, quality and fuelling plant diseases at home and abroad. In 2022, 16% of our food – worth £8 billion – came from the countries most vulnerable and least resilient to these climate impacts.

Climate change poses a clear threat to our food security and has already added some £360 to the average household food bill across 2022 and 2023[iii].

In its August report, the Bank of England's Monetary Policy Committee said that extreme weather made more likely by climate change, has pushed up UK food prices and is contributing to current food inflation[iv]. The ECB has said similar[v]. Government projections suggest that the climate-exposure of UK food is set to worsen. For example, 52% of legumes and 47% of fruit is expected to be imported from climate-vulnerable countries by 2050.[vi]

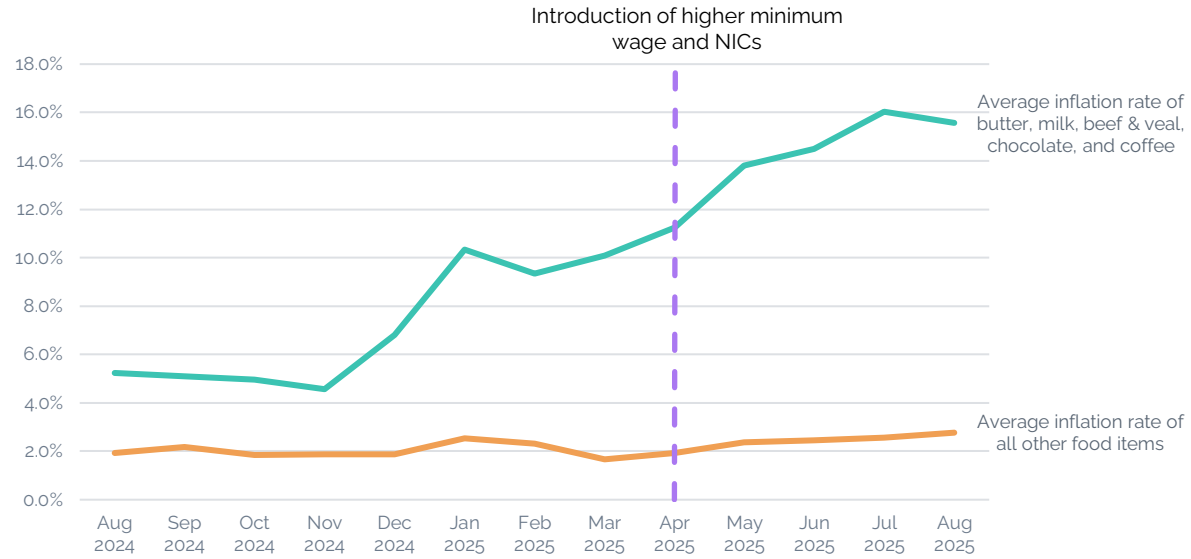
ECIU conducted a cautious analysis of August inflation data to assess the products where extreme weather linked to climate change is likely to be having an impact. In the next section, we provide more detail on the links between climate change and the individual food product types included.

Key findings

- As of August 2025, the most affected items putting upward pressure on inflation are **Butter, milk, beef & veal, chocolate, and coffee**. Prices for these climate-impacted foods rose by an average of **+15.6%** compared with August 2024. For other food and non-alcoholic drink items, the average rise was just **+2.8%**. This indicates that increases in **commodity prices are having a major impact on current food price inflation, which cannot be explained by domestic policies such as a higher minimum wage**.
- Although not the only factor driving an increase in these commodity prices, extreme weather made more likely by **climate change is having a distinct impact on prices for these products.**
- These five product categories make up only 11% of the basket of food and drink used by the ONS to measure inflation. Yet they accounted for 0.21 percentage points of the 3.8% August CPI inflation rate. By contrast, the remaining 89% of food and drink items contributed 0.36 points. This means that, on a weighted basis**, these foods are driving inflation at more than four times the rate of other items.**

- These foods account for 1.9 percentage points of the 5.1% rate seen across the average consumer food basket. The remaining nine tenths of the basket account for 3.2 points.
- This suggests **upward pressures on the prices of these products, including extreme weather made worse by climate change, are having a bigger impact on current food price inflation than domestic policy changes**, a finding counter to a lot of recent reporting.

A small basket of goods is driving food inflation



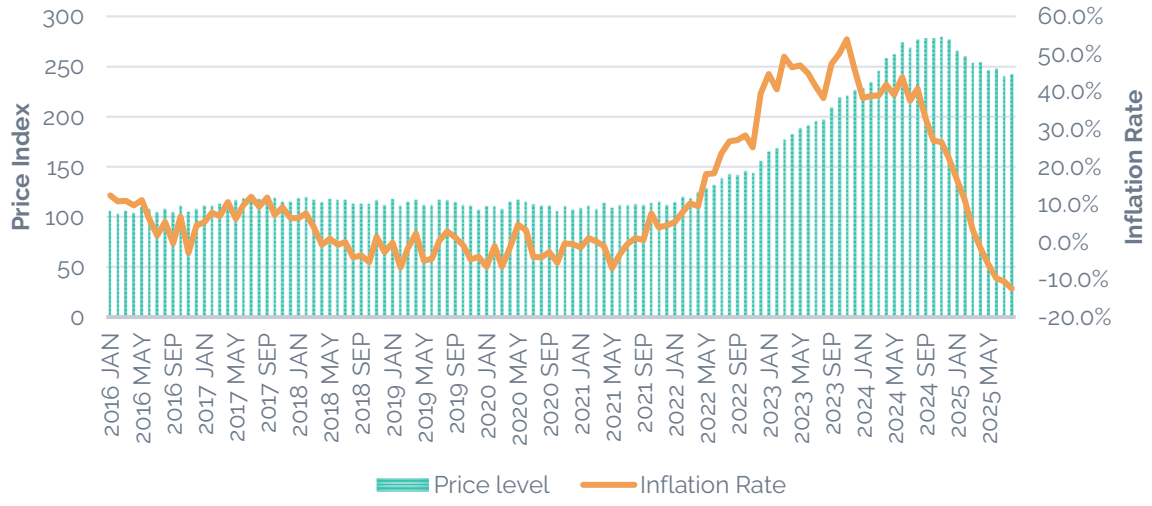
Source: Office for National Statistics, Consumer Price Index

What goes up doesn't always come down – a note on prices and inflation

The inflation rate is the percentage change between the price level across consumer spending this month, compared to the same time last year. It is a comparison of two points. This is important because it means, for example, that the average price of a good can remain unchanged from month to month, but the inflation rate can change substantially. It also means that the inflation rate can drop to zero or become negative, but the price level might remain historically high, if the price was even higher last year.

This is illustrated in the graph below, showing olive oil prices and inflation. Between early 2016 and the end of 2021, the average inflation rate was broadly in line with the Bank of England's target, at around 2.1%. During this period, the largest year-on-year increase was 12.4%, while the steepest decline was 6.4%.

Spain, the world's largest olive oil producer, experienced a historic drought in 2022 and 2023, driving prices sharply upward before they levelled off in the second half of 2024. Improved weather conditions led to a stronger harvest in late 2024 and early 2025, prompting prices to fall. The current inflation rate now stands at -12.4%, the lowest in the series, yet prices remain more than twice as high as they were at the start of 2022. As a result, although olive oil has one of the lowest food inflation rates, consumers continue to feel the impact of drought on their disposable income.



Source: Office for National Statistics, Consumer Price Index

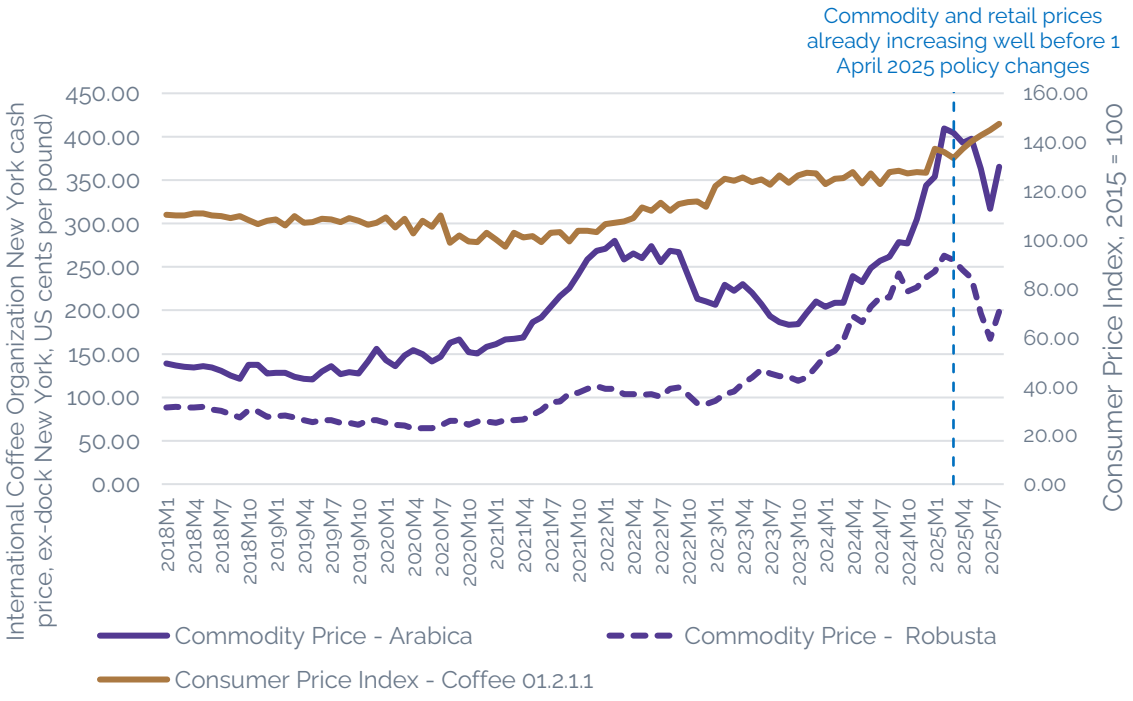
Coffee

Coffee prices are particularly exposed to climate risk with 97% of all coffee grown in countries vulnerable to climate impacts[vii]. Coffee prices in commodity markets rose sharply at the end of 2023 and continued to climb through 2024, reaching a peak in March 2025[viii]. The rise was driven largely by poor harvests in Brazil and Vietnam. Brazil is the dominant producer of arabica beans and Vietnam the leading supplier of robusta, the variety used in most instant coffee.

- Vietnam: Prolonged dry weather linked to El Niño, the warm phase of the El Niño Southern Oscillation (ENSO) whose intensity has been amplified by climate change[ix], caused severe stress on crops. Production in 2023/24 fell by around -20%, while exports declined by -10% for the second consecutive year.
- Indonesia: Excessive rainfall during the April–May 2023 growing season damaged coffee cherries, leading to a -16.5% fall in production and a -23% drop in exports year-on-year.
- Brazil: Hot and dry conditions (again linked to El Nino) prompted successive downward revisions to official forecasts for the 2023/24 harvest — shifting from an expected +5.5% increase to a -1.6% decline.[x]

Although global commodity prices have risen rapidly, much of the impact has yet to reach consumers. According to FAO estimates, it typically takes around one year for changes in raw coffee prices to filter through to retail prices, with effects lasting at least four years.[xi]

Since their peak in March, coffee prices have remained elevated. Most recently, coffee prices have risen again with dry weather in Brazil during the flowering season raising concerns of a poor harvest.[xii] [xiii]



Source: Office for National Statistics, Consumer Price Index; IMF Commodity Database

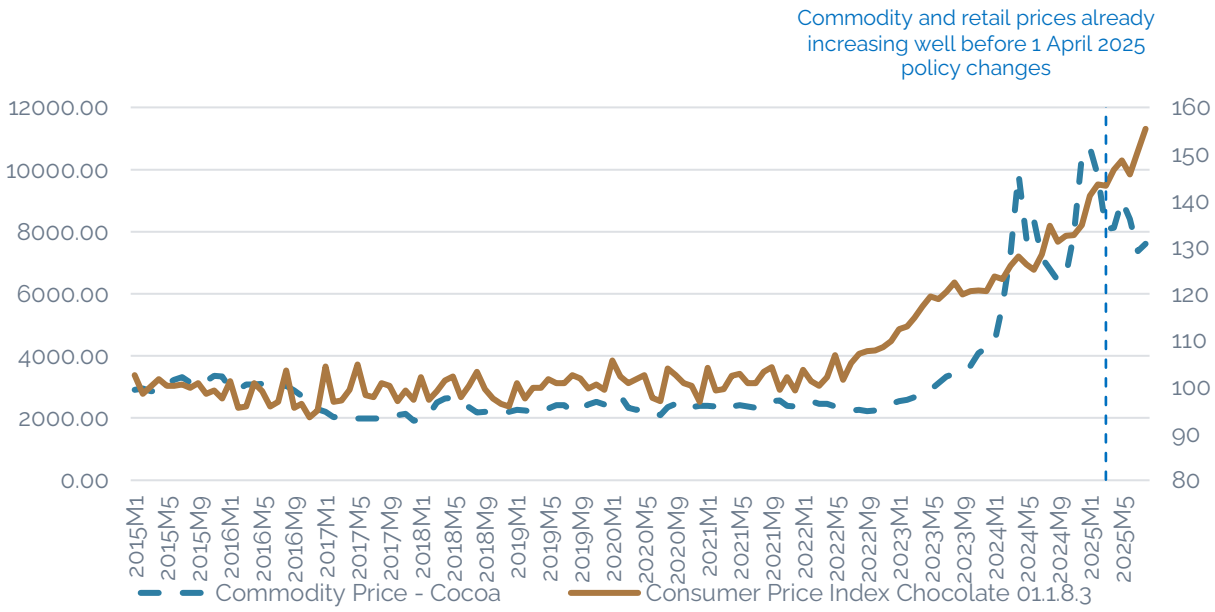
Chocolate

Cocoa prices are highly exposed to climate risk, with almost all cocoa globally (99.9%) grown in low climate readiness countries. Commodity prices have more than tripled in the past three years and doubled in the past two years. Some of this increase is still to feed through to consumer prices, which have risen 27% in the past two years and 45% over three years. In the UK, chocolate prices had already been climbing since 2022 due to energy and dairy inflation – themselves elevated by climate impacts - but the 2024–25 cocoa shock has added a new wave of cost pressures that manufacturers are now passing on to consumers.

After remaining relatively stable through 2021–22, cocoa prices began rising sharply in late 2023 and reached record highs in early 2024**,** peaking again in mid-2025[xiv]. The surge was driven by a severe supply crisis across the two main producing countries, Côte d'Ivoire and Ghana, which together account for about 60% of global cocoa output**.**

West Africa has been badly affected by climate impacts over the past few years. There was extreme rainfall in 2023, with total precipitation more than double the 30-year average for the time of year. This caused an outbreak of black pod disease, with cocoa plants rotting in the wet conditions. In early 2024, a typical El Niño–induced drought was made more intense, as climate change interacted with the natural phenomenon. In March 2024, West Africa was then hit with an extreme humid heatwave, which scientists at the World Weather Attribution (WWA) said was made 4˚C hotter and 10 times more likely by climate change[xv].

In short, West African farmers went from having far too much rain to not enough, all under oppressively hot temperatures, which affected the sowing, growing and harvesting of cocoa crops.



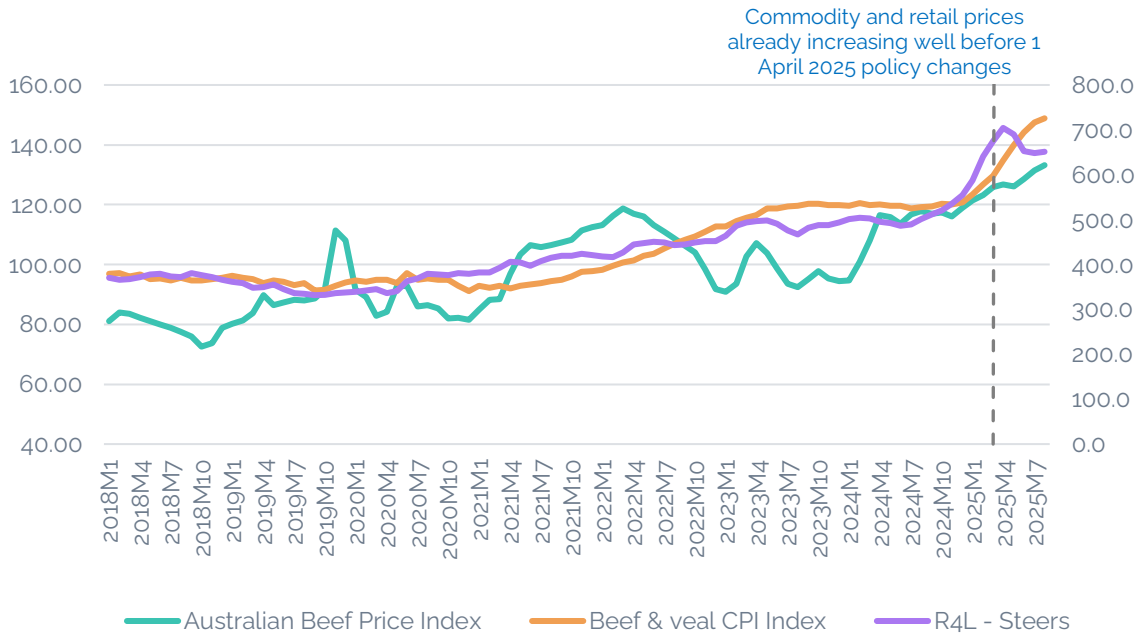
Source: Office for National Statistics, Consumer Price Index; IMF Commodity Database

Beef and veal

Beef and veal prices in the UK have risen sharply since 2020, driven by a combination of climate-related pressures, high input costs, and structural supply constraints. Successive years of weather extremes, including summer droughts, unseasonal rainfall, and flooding, have reduced pasture productivity and disrupted grazing patterns across much of the UK. These extremes have forced farmers to buy in more feed[xvi], cut herd sizes[xvii], and consider investments in supplementary water and shelter infrastructure.[xviii] This was highlighted in the Bank of England's August Monetary Policy Report which noted that '…dry weather conditions are pushing up the production costs of beef and some dairy products in the UK and elsewhere, as cows must be fed silage earlier in the year due to less grass growth.'[xix]

2025 saw the driest spring followed by the hottest summer on record, with Met Office analysis indicating that "a summer as hot or hotter than 2025 is now 70 times more likely than it would be in a 'natural' climate with no human caused greenhouse gas emissions."[xx]

Import substitution has offered limited relief. The UK has increased beef imports from Ireland, Brazil, and Australia, but these too face climate pressures — from Amazonian droughts[xxi] and pasture fires to Australian heatwaves — as well as higher freight and compliance costs. Beef prices are rising even faster in the USA, driven by a multi-year drought[xxii] made worse by climate change[xxiii], reducing herd size. This partly explains why the new quota for Australian beef imports into the UK is not being filled, with Australian exporters prioritising the larger US market, limiting the scope for UK buyers to mitigate price pressures here through imports. In this sense, climate impacts in both domestic and exporting regions have converged to sustain elevated prices.



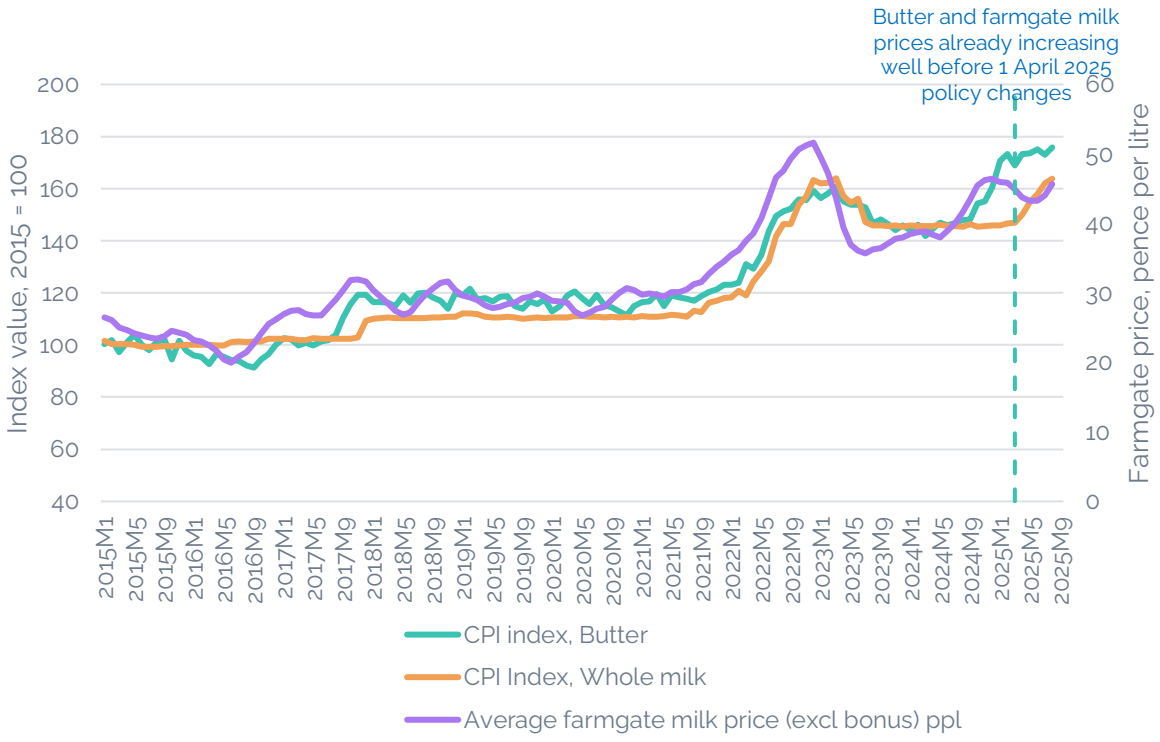
Source: Office for National Statistics, Consumer Price Index; IMF Commodity Database (both indices re-indexed to 2015=100); AHDB GB deadweight cattle prices

Milk and butter

A similar set of climate extremes has increased the cost of production for dairy farmers. A record-wet Oct 2023–Mar 2024 period that left fields waterlogged and damaged, was then followed by a long hot summer. This resulted in lower grass growth, which alongside other factors tightened the availability of milk and cream pushing up the prices of milk and butter significantly at the end of last year. Prices had been expected to come down from spring this year, but the driest spring and hottest summer on record[xxiv] reduced grass growth.

Production volumes of milk seem to have been mostly sheltered from the reduced productivity of the land though, as high farmgate-to-feed price ratios have made it viable for farmers to buy in feed to sustain production. Still, this has exerted upward pressure on costs for farmers. Reduced European supply caused by an outbreak of Bluetongue - a virus spread by midges - has also helped sustain demand for British dairy. Research indicates that climate change is likely extending bluetongue's transmission season and increasing the scale of outbreaks.[xxv]

Climate impacts in both domestic and exporting regions have converged to sustain elevated prices, alongside other factors. As a result, since December 2024 the inflation rate for butter has been in double digits, with prices up 18.9% year-on-year in August. Meanwhile, at 73p a pint of whole milk now costs 23p more than it did at just before the start of the gas crisis in August 2021.[xxvi]



Source: Office for National Statistics, Consumer Price Index; AHDB UK farmgate 'all milk' price

Methodology

To estimate the total contribution of climate-impacted foods to headline CPI inflation, we first identify food product types that have been significantly upwardly impacted by climate change in the August inflation data. The reasons for this are explained in the section above. COICOP codes (used by the ONS to classify different types of goods and services) included within our climate-impacted category are the following: 01.1.2.1 Beef and veal, 01.1.4.1 Whole milk, 01.1.5.1 Butter, 01.1.8.3 Chocolate, 01.2.1.1 Coffee, 01.2.1.3 Cocoa and powdered chocolate.

We then calculate the product of the inflation rates for each of these product categories with the proportion of the consumer basket that they make up to calculate the percentage point contribution that each makes to the headline inflation rate. We then sum these up. We use a similar approach with appropriately adjusted weights for the food inflation rate. Due to rounding errors, the result of our sum-product marginally deviates from the official headline rate. We rescale our results to adjust for this.

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[i] https://www.ecb.europa.eu/press/inter/date/2025/html/ecb.in250902~f9de5538b7.en.html
[ii] https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2024/united-kingdom-food-security-report-2024-theme-2-uk-food-supply-sources
[iii] https://eciu.net/analysis/reports/2023/climate-fossil-fuels-and-uk-food-prices-2023
[iv] https://www.bankofengland.co.uk/monetary-policy-report/2025/august-2025
[v] https://www.ecb.europa.eu/press/inter/date/2025/html/ecb.in250902~f9de5538b7.en.html
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[xv] https://eciu.net/analysis/reports/2025/climate-impacts-on-cocoa
[xvi] https://www.reuters.com/sustainability/climate-energy/drought-leaves-uk-beef-farmers-scrambling-feed-hungry-herds-2025-08-28/
[xvii] https://adas.co.uk/projects/investigating-how-uk-agriculture-can-adapt-to-drought-extreme-heat-and-wildfires/
[xviii] https://www.gov.uk/government/statistics/livestock-populations-in-england/livestock-populations-in-england-at-1-june-2025
[xix] https://www.bankofengland.co.uk/monetary-policy-report/2025/august-2025
[xx] https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2025/summer-2025-is-the-warmest-on-record-for-the-uk
[xxi] https://pmc.ncbi.nlm.nih.gov/articles/PMC11599441
[xxii] https://www.cbsnews.com/news/beef-prices-record-highs-drought/
[xxiii] https://www.drought.gov/news/new-research-finds-rising-heat-driving-western-us-droughts-2024-11-08
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[xxv] https://eciu.net/analysis/briefings/the-health-impacts-of-net-zero
[xxvi] ECIU analysis of CPI whole milk subindex and the ONS average price for pint of whole milk as of Jan 2025 https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/cznt/mm23