

ANALYSIS

Summer drought and heat impacts on European grain production

Summary

Summer 2026 in western Europe was the [hottest on record](#), breaking all time temperature records across swathes of the continent. A combination of extreme temperatures from May onwards and lack of rainfall created incredibly [hostile conditions for farmers across almost all sectors](#).

This analysis focuses on grain production (wheat, maize, barley, durum wheat and other grains such as triticale). It compares the recent [September forecast](#) from the European cereals and oilseeds association [COCERAL](#) with their earlier [June forecast](#) to quantify the impact that this combination of drought and extreme heat is likely to have had on grain production across the European Union (EU) and the United Kingdom (UK).

This analysis builds on [earlier analysis produced by ECIU](#) that compared the June forecast with an [extraordinary forecast](#) issued by COCERAL in July, which was intended to capture the impact of the record-breaking June heatwave specifically. Their September forecast further downgrades grain harvest expectations for 2026, reducing production expectations by 8 million tonnes compared to July, which in turn had already reduced the forecast by 9 million tonnes compared to June.

The total downgrade between June and September is now 16.7 million tonnes, equivalent to the entire grain harvest currently forecast for Italy, Belgium and the Netherlands combined. This leaves the EU-27+UK harvest on course for 278.9m tonnes, 9.3% below 2025 and its smallest harvest in at least a decade - below both the 2018 and 2022 drought years.

At current ex-farm prices, the value of this lost production is approximately €3.2 billion. This is higher than our July estimate of €1.8 billion, factoring in the additional production losses, and reflects the continued extreme heat and incredibly dry weather seen throughout July and August, as well as a slight increase in market prices. €527 million (£452 million) of the additional losses stem from a reduction in the yield's forecasts for the

UK, with England and Wales seeing the driest July ever, with July being the driest calendar month ever across Southern England.

We estimate the financial losses for the countries with further downward revisions at €4.1 billion. The net loss of €3.2 billion results from upward revisions to the forecast for Bulgaria, Romania, Poland and Sweden. However, the gross figure of €4.1 billion more accurately reflects the losses experienced by farmers across Western and Central Europe.

COCERAL attributes many of these losses explicitly to heat, with wheat hit during grain fill (when grains need moisture to fill out, a key stage for overall yield) and the maize crop during pollination. Much of the further reduction in output compared to their July forecast stems from even greater maize and wheat yield reductions associated with the June heatwave than previously thought, as well as an expansion in the number of countries with lower yields than forecast in June.

[World Weather Attribution's study](#) of the June heatwave found June's temperatures would have been virtually impossible 50 years ago and are now tens to hundreds of times more likely than in 2003 due to climate change.

Results

The damage caused by the June heatwave is pan-European but also unevenly distributed, both across crops and countries. Full results are set out in Annex 2.

- France: -5.8m t (≈ €1.47bn) - nearly half the EU+UK total, and nine-tenths of it is maize: the crop is now forecast at 7.6m t, down 45% on 2025 and well below the 9.0m t that Agreste (the official statistical service of the French Ministry of Agriculture) projected in August, which it said could already be the weakest since at least 1980.
- Hungary: -3.2m t (≈ €723m) - the EU's second-largest loss. Maize is down to 1.9m t, half of 2025, with yields of 3.8 t/ha second only to 2022's 3.4 t/ha, which Hungary's statistics office called unprecedented in more than 50 years. Wheat was cut by a further 1.1m t. Hungarian prices, which were falling in July, have since recovered (milling wheat 63,800 Ft/t in late June, 72,800 in early September), so the lost volume is now worth more
- UK: -3.0m t (≈ €527m/£452m) - the biggest change since COCERAL's July forecast. The UK lost 3.0m t as drought and heat hit crops through July and previous impacts in June were added to the forecast, with wheat yields cut from 7.95 to 6.82 t/ha.

- Germany: -2.5m t (≈ €398m) - concentrated in wheat (-1.7m t); part of that reflects a smaller planted area, which we treat as a statistical update rather than weather damage
- Spain: -1.2m t (≈ €220m) - wheat and barley cut by a further 1.6m t, partly offset by a larger maize crop (+0.7m t)
- Austria: -0.9m t (≈ €215m) - mostly maize, where yields have fallen to 7.2 t/ha from 11.4 t/ha in 2025
- Offsets: crops in Romania, Bulgaria, Sweden, Poland and the Baltics came in better than June feared, worth ≈ €0.7bn

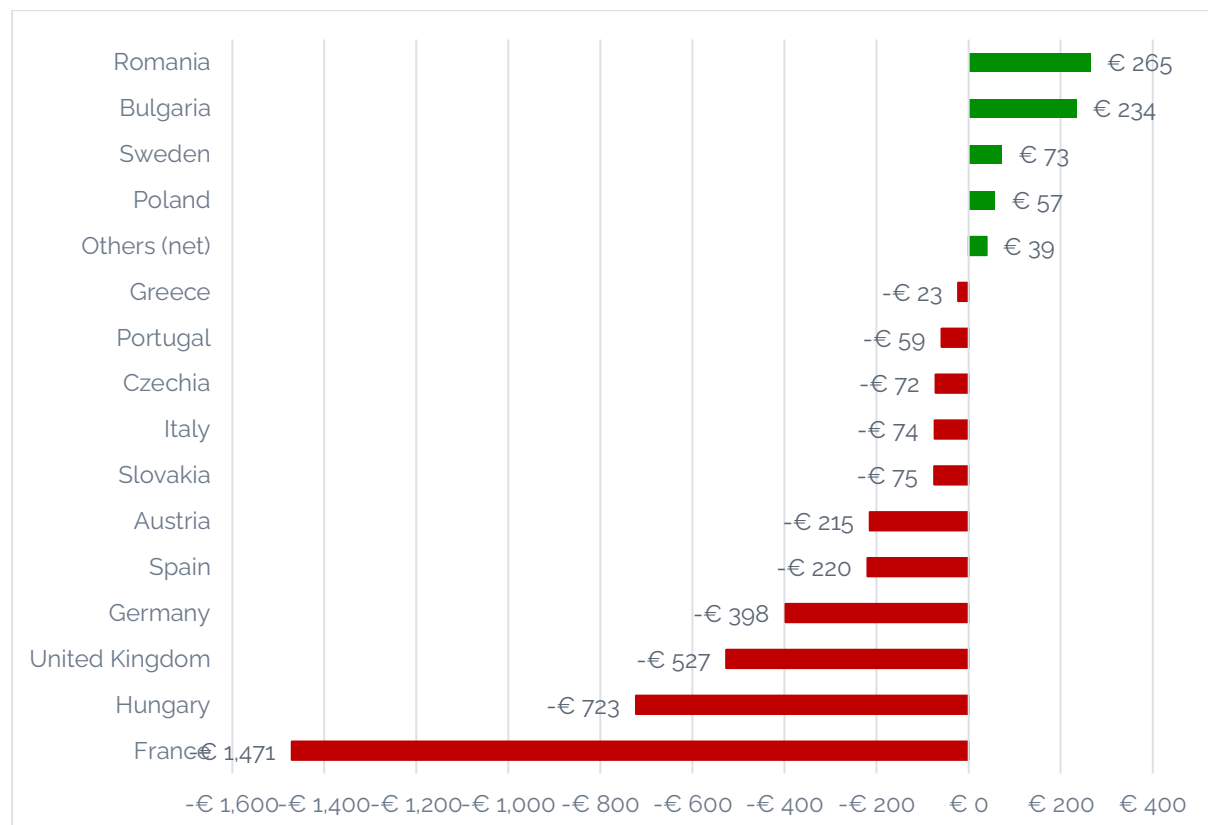
These countries accounted for the majority of the net downward revision in the forecast, reflecting both the impact of the heatwave as well as their status as some of the biggest grain producers in Europe. These results are set out in Table 1 and Chart 1 below, with full results in Table 2 in the Annex at the end of this document.

Table 1 - Changes between the June and September forecasts and estimates of lost revenue

Country	Changes since June, total grains	Value of lost grain	Range
France	-5.8 Mt	≈ €1.47bn	€949m-1.47bn
Hungary	-3.2 Mt	≈ €723m	€504-723m
United Kingdom	-3.0 Mt	≈ €527m	€527-684m
Germany	-2.5 Mt	≈ €398m	€351-523m
Spain	-1.2 Mt	≈ €220m	€220-244m
Austria	-0.9 Mt	≈ €215m	€215-221m
EU-27 + UK, gross*	-21.6 Mt, losses only	≈ €4.15bn	€3.3-5.0bn
EU-27 + UK, net	-16.7 Mt, including gains	≈ €3.19bn	€2.40-3.94bn
EU-27 only, net	-13.7 Mt	≈ €2.66bn	€1.88-3.25bn

**Gross counts only the crops that were lost; net also counts the upward revisions in Bulgaria, Romania, Sweden and Poland, with some smaller upward revisions in other countries. Full country-by-crop workings available on request.*

Chart 1 – Estimate of lost revenue due to net EU-27+UK change in production forecast between June and September 2026 (€m)



The changes in volume presented here take into account changes in both yield and area forecasts. Of the 16.7 million tonnes of grain lost between the June and September COCERAL forecasts, 5.6 million tonnes arose from changes in crop area forecasts, with 11.1 million arising from downward revisions to the yield forecast.

In order to isolate the financial impact of the drought and extreme heat, we only costed the production lost to reductions in yield plus the reduction in maize area, on the basis that this was the main way that extreme weather had an impact on production. The financial figures in this analysis therefore only take into account a subset of the overall changes between the two forecasts.

Our analysis in July costed the whole lost production at €1.8 billion, without making this yield vs area distinction. Applying this to our previous analysis reduces that figure to €1.65 billion. Our estimate of (additional) net costs in this analysis (€3.2 billion) is made up of €1.13bn of additional grain lost between the July and September forecasts - French and Hungarian maize, UK wheat and barley, amongst others - and €0.42bn from higher prices.

Conclusion

This analysis illustrates the impact of one of Europe's hottest ever summers on European grain production and the impact that this is likely to have on the Continent's farmers, comparing COCERALs September forecast with their June forecast. It builds on earlier [analysis](#) we produced comparing their extraordinary July forecast with the same June baseline. The estimates of extreme heat and drought impacts are likely to be conservative as they do not take into account extreme heat in May. Comparing the September forecast with their forecast in [March](#) shows a net difference of -20.1 million tonnes, compared to the -16.7 million tonne reduction between June and September.

Method

Lost tonnage

For each of the 28 countries and each crop (wheat, durum, barley, maize, and rye, oats, sorghum and triticale combined), the revision is COCERAL's September 2026 forecast minus its June 2026 forecast. The June edition was published before the heatwave, so the difference isolates what happened over the summer; a year-on-year comparison would conflate it with planting decisions made last autumn. Every country's crops sum to its printed total, and the revisions reconcile to COCERAL's printed EU-27 totals within its own rounding (soft wheat -3.86m t, durum -0.26m t, barley -0.40m t, maize -8.59m t, total -13.68m t; UK -2.98m t).

Yield vs area

COCERAL's revisions mix lower yields - the signature of heat and drought - with updated harvested areas. We split each revision into an area effect (change in area × June yield) and a yield effect (the remainder). Wheat and barley are sown the previous autumn, so their summer area revisions (e.g. Germany -75,000 ha, UK -55,000 ha) are survey updates rather than weather, and are excluded from the central figure. Maize is treated differently - in a drought, failing grain maize is abandoned or cut early for silage. [Agreste \(7 August\)](#) put French grain-maize area at 1.21m ha (-21%) and said its surveys would measure how many plots were redirected to silage; [Hungary's statistics office](#) attributed its 2022 area fall to fields abandoned through green harvesting or discing. Maize area losses are therefore counted where the same country's maize yield was also cut. Where COCERAL revised the finished 2025 harvest by more than 5% in the same direction in the same edition (Belgium; Spain's wheat yield; Romania's maize area; Romanian and Bulgarian durum), the 2026 change is treated as a statistical rebasing and excluded.

Central (€3.19bn net) = yield losses + drought-linked maize area + the smaller crops that can't be split (≈ €0.2bn). Floor (€2.40bn) = yield losses only. Upper (€3.94bn) = every COCERAL revision - the basis used in July. This reflects the range set out in Table 1 above.

Valuation

The value of changes in production was calculated by lost tonnes × ex-farm prices for 2026-harvest delivery, by country.

- France: port-delivered quotes (rendu Rouen/Bordeaux/Port-la-Nouvelle; Les Marchés, quotes of 21 September) less €15/t inland transport and intermediation.
- Germany: Agrarheute Erzeugerpreise - producer prices - week 38.
- Hungary: AKI producer prices (ex-VAT, ex-transport; first week of September, the latest release), with feed barley at ≈ 68,000 Ft/t from AKI data via Agroinform, converted at the ECB reference rate (361.58 Ft/€, 22 September).
- Spain: Lonja de León, session of 16 September (maize from 2 September, its last old-crop quote).
- UK: AHDB Corn Returns, the official ex-farm price survey, week ending 17 September, converted at the ECB rate (£0.8583/€).

See the Sources section for more details. These five countries carry about 80% of the gross central losses; the remaining countries use German prices as a documented proxy (French durum price for other durum wheat).

"Gross" (€4.15bn central) values only crops that were lost. "Net" (€3.19bn) also counts crops that came in better than June forecast - chiefly Romania, Bulgaria, Sweden, Poland and the Baltics, plus Spain's maize.

These figures reflect the current market value of production the summer's weather prevented - the revenue those tonnes would have earned at current prices for the 2026 crop. It is not net farm income - prices have risen partly on the same news, cushioning growers whose crops survived while concentrating losses on those whose didn't. It prices all barley as feed (ignoring malting).

Sources

- COCERAL crop forecasts: [forecast archive](#); direct tables: [September 2026 grains \(22 September\)](#) · [June 2026 grains](#) · [July 2026 grains \(extraordinary, 10 July\)](#)
- Les Marchés / Réussir: [French physical cereal prices, quotes of 21 September \(22 September\)](#)
- La Dépêche Le petit meunier: [cereals market, 21 September \(Euronext drivers\)](#)
- agrarheute Markt: [Erzeugerpreise Marktfrüchte, week 38/2026](#)
- AKI (Hungary): [AKI grain market reports](#); first-week-of-September producer prices via [Agrárszektor, 16 September](#); feed barley via [Agroinform, 20 September](#)
- Lonja de León (Spain), via Agronews Castilla y León: [session of 16 September](#) · [session of 2 September \(maize\)](#)
- AHDB (UK): [Corn Returns: ex-farm prices and volumes](#)

- ECB exchange rates: [EUR/HUF reference rate](#) · [EUR/GBP reference rate](#)
- July price set (used to isolate the price effect): [Les Marchés, 6 July](#) · [La Dépêche, 1–8 July](#) · [Agrárszektor, 8 July](#) · [Lonja de León, July](#); UK July average from AHDB Corn Returns
- Agreste (via Terre-net): [2026 grain maize estimates, 7 August](#)
- KSH (Hungarian Central Statistical Office): [main crop results, 2022](#)
- ECIU: [UK harvest even worse than previously thought \(14 August\)](#)
- FEFAC (via World Grain): [drought hampering EU feed supply, 2 September](#)
- World Weather Attribution: [rapid study of the June 2026 European heatwave, 26 June](#)
- European Commission, 2018 harvest: [short-term outlook figure \(284.3m t\) as reported by Agriland](#)
- Historical COCERAL series: [World Grain \(2022/2023 figures\)](#) · [Miller Magazine \(2023/2024 figures\)](#)

Annex 1

Table 2 sets out the full results of the analysis for all EU-27 countries plus the UK. Note that the forecast for Belgium and Luxembourg has been merged by COCERAL.

Table 2 – All changes for the EU27+UK between the June and September forecasts and estimates of associated revenue changes

Rank ¹	Country	June forecast (000 tonnes)	July ² forecast (000 tonnes)	Sep forecast (000 tonnes)	Net change (000 tonnes)	Net change (%)	Estimate of revenue change ³ (€m)
1	France	59,643	55,498	53,810	-5,833	-9.8	-1471
2	Hungary	11,755	9,353	8,593	-3,162	-26.9	-723
3	United Kingdom	20,622	20,622	17,643	-2,979	-14.4	-527
4	Germany	44,091	42,736	41,633	-2,458	-5.6	-398
5	Spain	20,587	19,195	19,414	-1,173	-5.7	-220
6	Austria	5,153	4,781	4,236	-917	-17.8	-215
7	Belgium/ Luxembourg	2,914	2,789	2,394	-520	-17.8	+4
8	Slovakia	3,891	3,856	3,403	-488	-12.5	-75
9	Czechia	7,834	7,827	7,458	-376	-4.8	-72
10	Italy	12,860	13,023	12,553	-307	-2.4	-74
11	Portugal	823	823	589	-234	-28.4	-59
12	Finland	3,362	3,501	3,186	-176	-5.2	-18
13	Romania ⁴	25,164	25,161	25,011	-153	-0.6	+265

14	Ireland	2,319	2,319	2,205	-114	-4.9	-16
15	Netherlands	1,579	1,570	1,516	-63	-4.0	-10
16	Cyprus	35	35	35	0	0.0	-
17	Malta	12	12	12	0	0.0	-
18	Slovenia	619	619	619	0	0.0	-
19	Croatia	3,150	3,150	3,150	0	0.0	-
20	Latvia	3,017	3,017	3,030	13	0.4	+26
21	Denmark	8,034	8,034	8,058	24	0.3	+4
22	Greece	2,605	2,414	2,662	57	2.2	-23
23	Estonia	1,236	1,236	1,352	116	9.4	+20
24	Lithuania	5,893	5,893	6,075	182	3.1	+30
25	Sweden	5,605	5,605	5,878	273	4.9	+73
26	Poland	32,981	32,981	33,538	557	1.7	+57
27	Bulgaria	9,736	10,514	10,811	1,075	11.0	+234
-	Total EU-27+UK	295,520	286,564	278,864	-16,656	-	-3189
-	Total EU-27	274,901	265,943	261,220	-13,681	-	-2663

¹Ranked in order of volume lost, with 1st being most lost

²July forecast is included for reference only

³Net revenue change between the June and September forecasts takes into account changes associated with revisions to yield and reductions in grain maize area only, excluding production changes associated with revisions to crop area for other grain crops between the two forecasts. This is to try and isolate the impact of the drought and extreme heat, which principally impacted yield and grain maize area.

⁴Romania's revenue change is out of sequence with the volume change due an upward revision in the maize yield and upward revision in wheat production being enough to offset a reduction maize output associated with a downward revision in area.