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EXECUTIVE SUMMARY

- 2021/22 was a recovery year for the EU sugar sector, following the beet yellows virus that affected top EU sugar producing countries, especially France, but also Germany and Poland, in 2020/21.
- Despite energy costs being up due to the post-Covid rebound in demand, EU sugar manufacturers ensured continuous supplies on the EU market.
- The EU produced 16.2 million tonnes of beet sugar during the 2021/22 campaign – an increase of 14.4% on the previous year and the highest level since 2017/18.
- Following last year's decade-low level, EU sugar yields recovered above the 5-year average mainly thanks to the cold spell in the spring which decreased pest and disease pressure later in spring and summer.
- 2021/22 EU average sugar content in beets rose over 0.6 percentage points, from 16.7% in 2020/21 to 17.3% in 2021/22.
- The length of an average EU sugar production campaign in 2021/22 was 119 days, up from 110 days in 2020/21, and well above the ten-year average (2011/12-2021/22) of 112 days.
- Production in 2022/23 is expected at around 15 million tonnes, mainly due to this year's severe summer drought in many EU regions.

1. AREAS

For the fourth consecutive year, contracted sugar beet areas in the EU fell slightly in 2021/22 (0.3%), despite the higher beet prices as a result of the recovery of the EU market price for white sugar that has been moving above the EU threshold (EUR 404 per tonne) since September 2021.

Figure 1: Beet areas (thousand ha) in the EU27 (EU14+EU13)

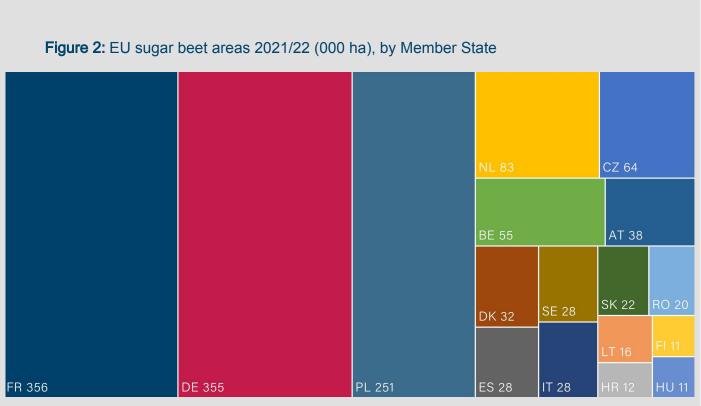
Areas (ha, '000)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
EU27	1,487	1,417	1,402	1,453	1,239	1,344	1,567	1,533	1,449	1,413	1,409
EU14	1,135	1,060	1,048	1,077	925	987	1,175	1,137	1,063	1,016	1,015
EU13	352	356	354	377	314	357	392	395	386	397	394

■ EU14 ■ EU13



1.5 million ha

EU average sugar beet areas over the past five years



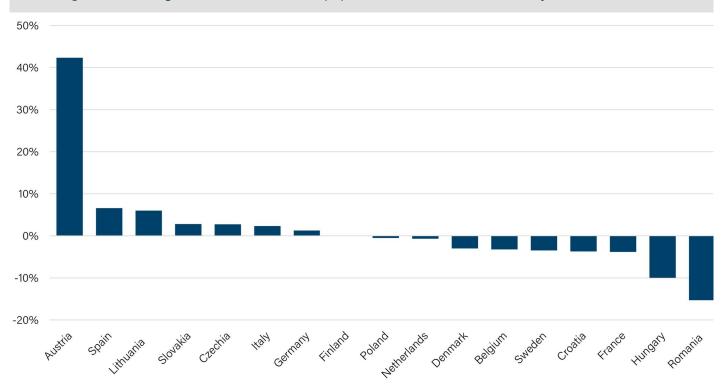
When it comes to EU sugar beet areas by Member State, Romania (-15%) and

Hungary (-10%) reduced contracted areas

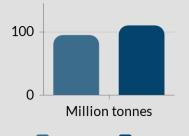
the most compared to 2020/21.

By contrast, Austria significantly increased its contracted areas (+42%) and Spain recovered from last year's reduced areas (+7%).

Figure 3: EU sugar beet area variation (%), 2021/2022 vs 2020/2021, by Member State



2. PAID BEET



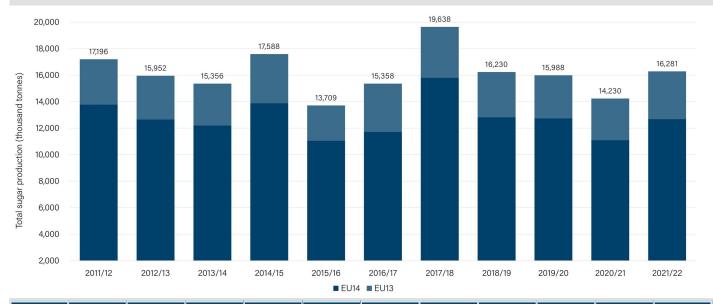
The total EU paid beet for 2021/22 was 110.4 million tonnes. This is an increase of 15.2 compared to 2020/21.

2020/21 2021/22

3. PRODUCTION

EU beet sugar total production reached 16.2 million tonnes during the 2021/22 campaign. This is a significant increase of 14.2% compared to 2020/21 production and the highest level since 2017/18. This increase in production is in line with the higher beet yields due to favourable weather conditions and the increase in paid beet, which was up 15.2% in the whole of the EU.

Figure 4: Total sugar production (thousand tonnes) in the EU27 (EU14 + EU13)

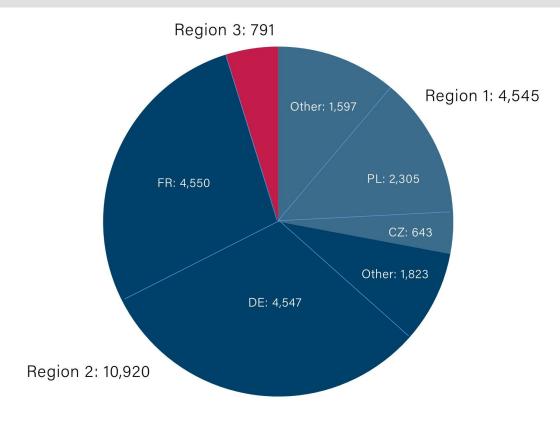


Production (tonnes, '000)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
EU27	17,196	15,952	15,356	17,588	13,709	15,358	19,638	16,230	15,988	14,230	16,281
EU14	13,776	12,652	12,200	13,877	11,048	11,717	15,796	12,820	12,743	11,086	12,685
EU13	3,420	3,300	3,155	3,711	2,661	3,641	3,842	3,410	3,245	3,143	3,596

In terms of sugar beet production by Member State, France (+32%) regained its position as the EU's biggest sugar producer in 2021/22, following the significant drop in 2020/21 due to the widespread infestation by virus yellows. The EU's second biggest sugar producer, Germany, also increased its production by 10.8%, as well as Poland and Czechia by 16% and 23% respectively.

For the remaining EU Member States, production can only be shown by region due to the new EU rules.

Figure 5: Total sugar production, by region (thousand tonnes rounded)



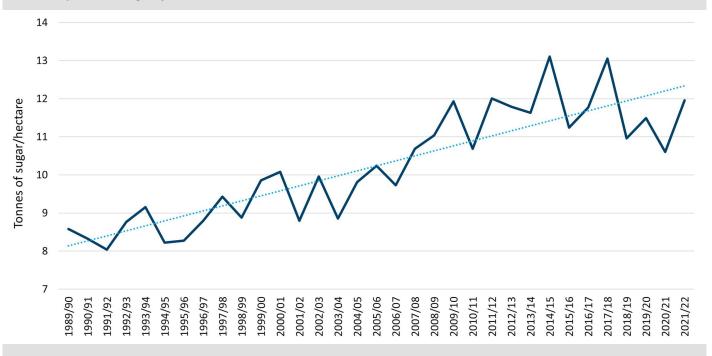


4. SUGAR YIELDS

Sugar yield is a function of sugar production divided by contracted beet areas. Sugar yields have increased over the past three decades and are now among the highest in the world. However, boosting yields has proven increasingly difficult over the past ten years, due to decreasing availability of plant protection products and volatile weather conditions.

Following last year's decade-low level, EU sugar yields recovered above the 5-year average mainly thanks to the cold spell in the spring which decreased pest and disease pressure later in spring and summer.

Figure 6: Sugar yields EU27, tonnes/ha





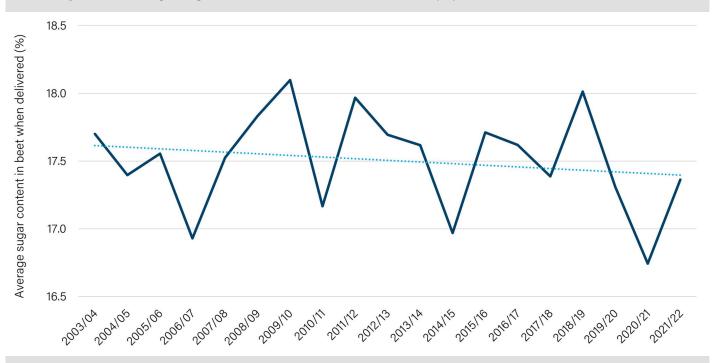
Average sugar yield in EU over the past 5 years

5. SUGAR CONTENT

Sugar content is highly dependent on weather. Sunshine increases the sugar content in beets while rainfall increases the size of beets but thereby reduces the relative sugar content.

Following an historical low last year, due to poor sunshine over the summer, in 2021/22 EU average sugar content in beets rose over 0.6 percentage points, from 16.7% in 2020/21 to 17.3% in 2021/22.

Figure 7: Average sugar content in beet when delivered (%) in EU27



Over the past five years France has enjoyed the highest sugar content in its beets on average, at 18%. Despite this year's recovery, however, France is not in the top five of EU sugar producing countries in terms of sugar content in beet, as a result of its historical low in 2020/21.

Germany saw the highest sugar contents in 2021/22. However, in no country was sugar content greater than 18% in 2021/22.

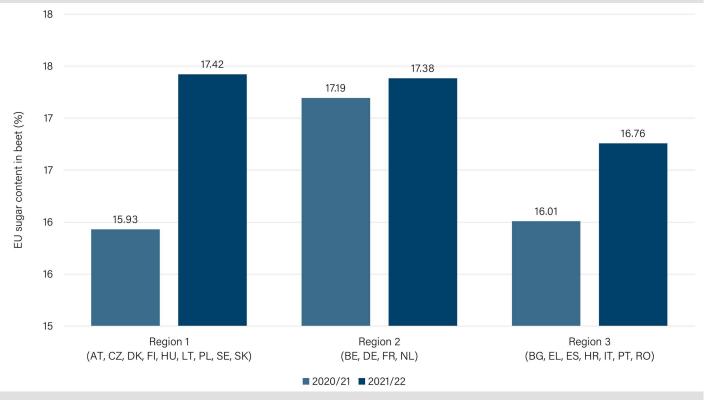
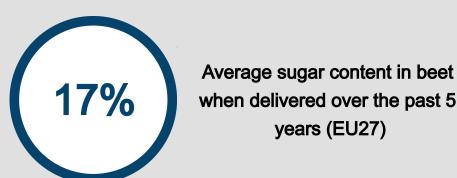


Figure 8: EU sugar content in beet (%), 2021/2022 and 2020/2021, by region



6. CAMPAIGN LENGTH

In most European countries sugar is produced during a processing campaign of around 100 days. Since it is not possible to store sugar beet for long periods, year-round production of beet sugar is not possible.

Longer campaigns allow for more efficient factory capacity utilisation, leading to better distribution of fixed costs. Campaign lengths have increased substantially over the past 20 years, as European sugar producers have worked to increase their competitiveness.

The length of an average EU sugar production campaign in 2021/22 was 119 days, which is an increase compared to the 110 days in 2020/21 (see chart below).

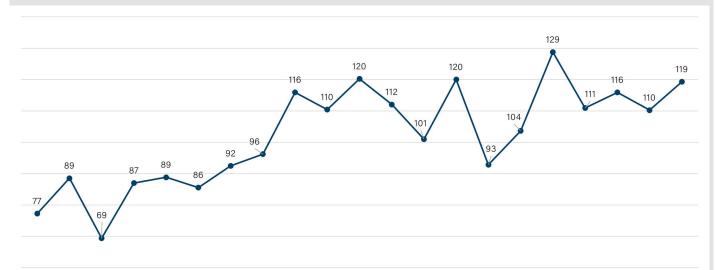


Figure 9: Average campaign length in the EU27 over the last 20 years (days)

The shortest campaigns in the EU can be found in Southern Europe (Region 3) with an average of 104 days in 2021/22, while in the rest EU sugar producing countries, the average campaign length is around 120 days (120 for Region 1 and 2).

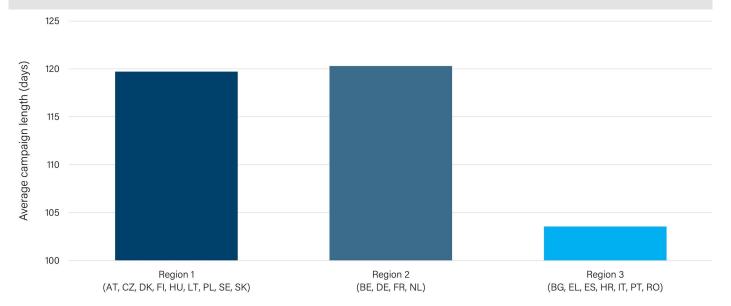


Figure 10: Average campaign length in EU regions in 2021/22 (days)



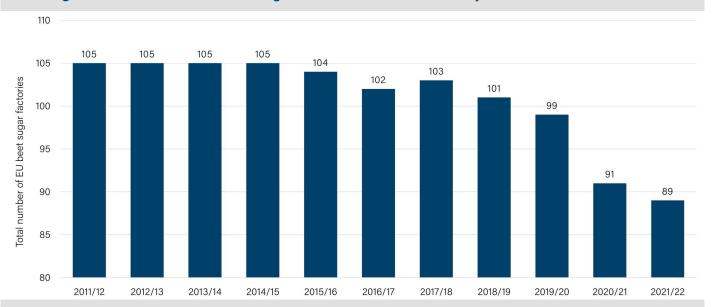
117 days

Average campaign length across EU27 over the past 5 years (visual)

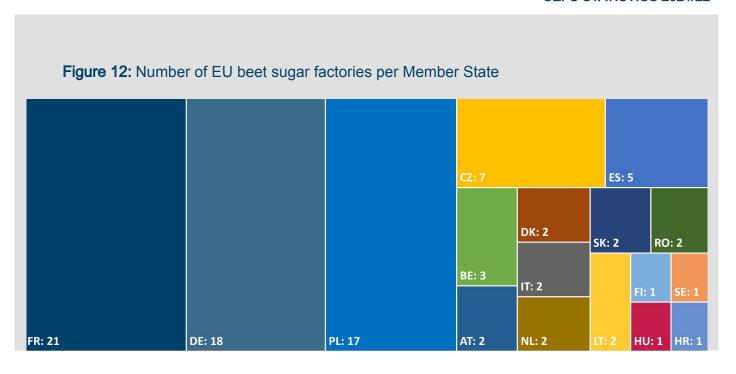
7. FACTORIES

For the fourth consecutive year, the total number of beet sugar factories in the EU has been decreasing. With the closure of two beet sugar factories, one in Croatia and one in Romania, during the 2021/22 campaign 89 factories were operational across the EU.

Figure 11: Number of EU beet sugar factories over the last ten years



The majority of EU beet sugar factories are located in 3 countries – namely France, Germany and Poland.



8. EMPLOYMENT

During the 2021/22 campaign 24,000 workers were directly employed in sugar production.

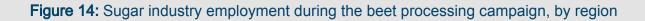
Beet sugar production takes place over approximately 100 days, depending on the Member State. A substantial proportion of employment is therefore seasonal. Around 1,000 fewer workers were employed in the sector in 2021/22, including 925 fewer permanent workers and 85 fewer seasonal workers than in 2020/21. Since 2017/18, the first year after the end of production quotas, 4,600 fewer people are directly employed by the EU sugar sector.

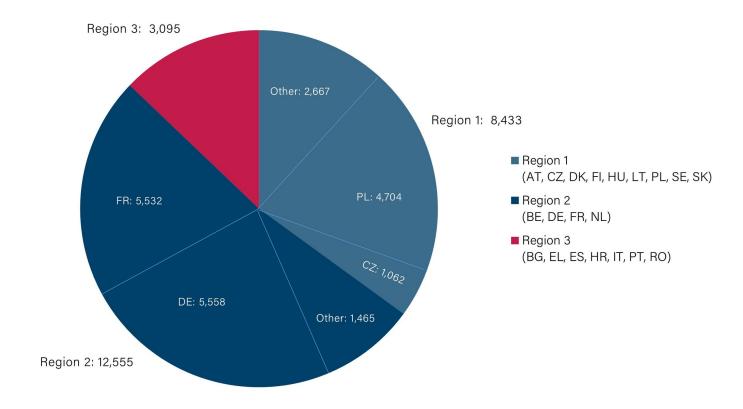
35,000 30,000 25,000 20,000 15,000 10,000 5,000 0 2011/12 2012/13 2013/14 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 2021/22 ■ Permanent ■ Seasonal

Figure 13: Sugar industry employment during the beet processing campaign

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Permanent	20,120	20,968	20,922	20,243	19,808	20,797	21,368	21,174	20,399	19,560	18,635
Seasonal	8,590	8,348	8,334	7,637	7,095	6,840	7,307	6,714	5,838	5,533	5,448
Total	28,710	29,316	29,256	27,880	26,904	27,637	28,675	27,888	26,237	25,093	24,083

Employment in the EU beet sugar industry is distributed between 17 Member States, with the bulk of jobs in France, Germany, and Poland.

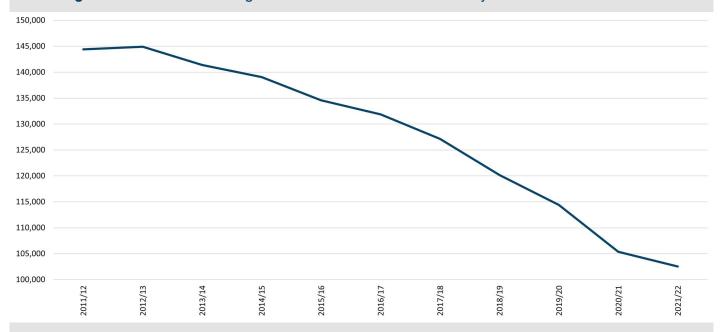




9. BEET GROWERS

In 2021/22, 102,500 growers supplied beets to EU sugar factories. In comparison to 2020/21 the number of beet growers fell by 3% in the EU.

Figure 15: Number of beet growers in the EU over the last 10 years





10. ORGANIC SUGAR

Production of organic sugar in the EU has increased substantially over the past years, although it remains a niche market. In 2021/22 CEFS members surveyed reported production of 60,000 tonnes, a 67% increase compared to last year. Sugar yields increased by almost 20%, from 5.3 to 6.3 t/ha.

Figure 12: EU organic sugar production, areas and yield



11. METHODOLOGY

- The information contained in this report is collected from CEFS members on a confidential basis.
- 'EU' refers to the 27 current Member States of the European Union. This grouping is used as a consistent basis for the historical EU data series in the annex.
- 'EU14' refers to the following EU Member States: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain and Sweden.
- 'EU13' refers to the following EU Member States: Bulgaria, Croatia, Czechia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.
- 'Region 1' covers the following EU Member States: Austria, Czechia, Denmark, Finland, Hungary, Lithuania, Poland, Slovakia and Sweden.
- 'Region 2' covers the following EU Member States: Belgium, France, Germany and the Netherlands.
- 'Region 3' covers the following EU Member States: Bulgaria, Croatia, Greece, Italy, Portugal, Romania and Spain (please note that Bulgaria, Portugal and Greece are not sugar producing countries).
- A sensitivity analysis is conducted on the basis of the final production and areas figures published by the European Commission: where member areas/production data are found to diverge by more than 5% from the final figures of the European Commission, the Commission's figures are used.
- Aggregated averages for sugar content are weighted by paid beet production.
- Aggregated averages for campaign length and sugar yield are weighted by sugar production.



ANNEX

ANNEX

Harvested areas for beet sugar production (ha)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Variation	5 year Average
EU27	1,486,860	1,416,624	1,401,642	1,453,207	1,238,650	1,344,092	1,567,115	1,532,860	1,449,111	1,413,127	1,409,473	-0.26%	1,474,337
EU14	1,134,671	1,060,295	1,047,823	1,076,698	925,147	986,777	1,175,223	1,137,409	1,062,810	1,015,820	1,015,325	-0.05%	1,081,317
EU13	352,189	356,329	353,819	376,509	313,503	357,315	391,892	395,451	386,301	397,307	394,148	-0.80%	393,020
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	445,653	441,643	436,273	446,614	376,443	423,581	461,715	463,235	444,233	462,518	472,633	2.19%	460,867
Region 2 (BE, DE, FR, NL)	897,486	822,546	830,387	845,414	744,570	797,826	975,861	962,120	905,046	861,599	849,413	-1.41%	910,808
Region 3 (BG, EL, ES, HR, IT, PT, RO)	137,721	143,126	129,183	154,179	112,752	117,385	123,322	106,205	98,232	89,010	87,427	-1.78%	100,839

Paid beet (tonnes, milllions)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
EU27	104.0	99.1	94.4	116.5	85.0	98.4	126.6	102.0	104.1	95.8	110.4

Total sugar production (tonnes)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Variatio n	5 year Average
EU27	17,195,73 7	15,952,20 7	15,355,51 5	17,587,79 3	13,709,36 7	15,357,72 8	19,638,01 0	16,230,29 7	15,988,24 9	14,229,73 9	16,281,14 1	14.42%	16,473,48 7
EU14	13,776,20 7	12,651,76 3	12,200,40 5	13,876,70 9	11,048,15 2	11,716,74 3	15,796,22 5	12,820,41 9	12,743,03 7	11,086,28 8	12,684,91 7	14.42%	13,026,17 7
EU13	3,419,530	3,300,44 4	3,155,110	3,711,084	2,661,215	3,640,98 5	3,841,785	3,409,87 8	3,245,212	3,143,451	3,596,22 4	14.40%	3,447,310
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	4,610,523	4,355,42 3	4,102,558	4,562,55 3	3,465,24 5	4,528,53 5	4,672,156	4,175,477	4,016,317	4,015,268	4,570,712	13.83%	4,289,98 6
Region 2 (BE, DE, FR, NL)	10,920,56 7	9,959,711	9,697,32 3	11,027,40 4	8,766,69 2	9,300,04 6	13,695,05 4	11,212,79 0	11,099,29 4	9,376,68 0	10,919,60 9	16.45%	11,260,68 5
Region 3 (BG, EL, ES, HR, IT, PT, RO)	1,664,647	1,637,073	1,555,634	1,997,836	1,477,430	1,529,147	1,270,801	842,030	872,638	837,791	790,820	-5.61%	922,816

Sugar yield (t/ha)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Variation	5 year Average
EU27	12.01	11.79	11.63	13.10	11.24	11.77	13.05	10.96	11.49	10.61	11.96	12.73%	11.61
EU14	12.14	11.93	11.83	13.28	11.58	11.98	13.66	11.45	12.15	11.14	12.62	13.28%	12.20
EU13	9.84	9.52	8.91	10.08	8.53	10.29	9.91	8.74	8.49	8.05	9.20	14.27%	8.88
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	9.03	8.52	8.35	9.07	7.99	9.56	9.23	8.22	8.13	7.67	8.79	14.55%	8.41
Region 2 (BE, DE, FR, NL)	12.29	12.26	12.02	13.65	11.90	12.28	14.06	11.71	12.32	11.08	12.87	16.15%	12.41
Region 3 (BG, EL, ES, HR, IT, PT, RO)	10.93	10.73	10.21	11.69	9.95	10.11	10.75	8.72	9.89	10.48	9.74	-7.09%	9.92

Sugar content (%)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Variation	5 year Average
EU27	17.97	17.70	17.62	16.97	17.71	17.62	17.39	18.01	17.31	16.74	17.36	3.70%	17.36
EU14	18.05	17.88	17.70	17.15	17.84	17.83	17.48	18.21	17.47	17.11	17.37	1.53%	17.53
EU13	17.66	17.02	17.30	16.36	17.19	16.99	17.02	17.33	16.72	15.59	17.32	11.07%	16.79
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	17.55	17.13	17.58	16.59	17.51	17.34	17.13	17.53	16.76	15.93	17.42	9.36%	16.96
Region 2 (BE, DE, FR, NL)	18.23	18.05	17.78	17.43	18.04	18.01	17.67	18.49	17.68	17.19	17.38	1.10%	17.68
Region 3 (BG, EL, ES, HR, IT, PT, RO)	17.27	16.86	16.26	15.13	15.89	15.74	15.49	14.93	15.58	16.01	16.76	4.68%	15.75

Campaign length (days)	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Variation	5 year Average
EU27	120	112	101	120	93	104	129	111	116	110	119	8.26%	117
EU14	125	115	105	122	95	102	132	111	120	111	120	8.61%	119
EU13	107	108	88	118	90	113	123	114	108	115	120	4.52%	116
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	116	114	107	125	92	115	123	112	109	117	120	2.33%	116
Region 2 (BE, DE, FR, NL)	128	115	106	122	96	101	134	113	120	109	120	10.71%	119
Region 3 (BG, EL, ES, HR, IT, PT, RO)	84	90	54	99	74	83	89	79	90	95	104	8.87%	91

Factories	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
EU27	105	105	105	105	104	102	103	101	99	91	89
EU14	68	68	68	68	67	65	66	65	64	57	57
EU13	37	37	37	37	37	37	37	36	35	34	32
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	36	36	36	36	36	36	36	36	35	35	35
Region 2 (BE, DE, FR, NL)	50	50	50	50	50	50	50	50	50	44	44
Region 3 (BG, EL, ES, HR, IT, PT, RO)	19	19	19	19	18	16	17	15	14	12	10

Growers	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Variation
EU27	144,396	144,899	141,405	139,067	134,601	131,864	127,147	120,179	114,393	105,374	105,374	102,528
EU14	104,599	105,169	101,945	100,514	96,825	94,514	89,382	83,841	80,919	73,429	72,723	-0.96%
EU13	39,797	39,730	39,460	38,553	37,776	37,350	37,765	36,338	33,474	31,945	29,805	-6.70%
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	48,905	48,656	48,254	47,076	46,319	45,504	44,898	42,203	39,129	37,242	36,120	-3.01%
Region 2 (BE, DE, FR, NL)	73,770	73,415	72,428	72,017	70,078	69,715	67,907	67,057	65,927	60,920	59,697	-2.01%
Region 3 (BG, EL, ES, HR, IT, PT, RO)	21,119	22,426	20,342	19,603	17,843	16,292	13,989	10,670	9,119	7,041	6,558	-6.86%

Employment <u>during</u> processing campaign	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Variation
EU27	28,710	29,316	29,256	27,880	26,904	27,637	28,675	27,888	26,237	25,093	24,083	-4.03%
EU14	19,221	19,166	19,377	18,829	18,306	18,165	19,114	18,407	17,776	16,689	16,171	-3.10%
EU13	9,489	10,150	9,879	9,052	8,598	9,472	9,561	9,481	8,461	8,404	7,912	-5.86%
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	9,290	9,986	9,859	9,642	9,046	8,980	9,151	9,126	8,337	8,469	8,433	-0.43%
Region 2 (BE, DE, FR, NL)	13,077	13,249	13,322	13,404	12,958	12,783	13,939	13,936	13,644	12,848	12,555	-2.28%
Region 3 (BG, EL, ES, HR, IT, PT, RO)	6,343	6,081	6,075	4,835	4,900	5,874	5,585	4,826	4,256	3,776	3,095	-18.03%

Employment <u>between</u> processing campaign	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Variation
EU27	20,120	20,968	20,922	20,243	19,808	20,797	21,368	21,174	20,399	19,560	18,635	-4.73%
EU14	14,189	14,526	14,546	14,088	13,732	13,812	14,338	14,125	13,764	13,026	12,452	-4.41%
EU13	5,931	6,442	6,375	6,156	6,077	6,985	7,030	7,049	6,635	6,534	6,183	-5.38%
Region 1 (AT, CZ, DK, FI, HU, LT, PL, SE, SK)	6,358	6,926	6,927	6,843	6,714	6,750	6,903	6,946	6,680	6,693	6,691	-0.03%
Region 2 (BE, DE, FR, NL)	10,729	11,000	11,033	10,992	10,706	10,875	11,147	11,015	10,734	10,412	9,859	-5.31%
Region 3 (BG, EL, ES, HR, IT, PT, RO)	3,033	3,042	2,961	2,409	2,389	3,172	3,318	3,213	2,985	2,455	2,085	-15.07%