

Annex C. Statistical Annex

Table C.1. World cereal projections

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
WHEAT												
World												
Production	Mt	752.2	766.4	772.9	781.0	788.8	796.5	804.8	812.8	821.6	829.8	838.0
Area	Mha	219.0	220.5	220.2	220.2	220.2	220.2	220.4	220.5	220.8	220.9	221.0
Yield	t/ha	3.43	3.48	3.51	3.55	3.58	3.62	3.65	3.69	3.72	3.76	3.79
Consumption	Mt	741.1	751.6	764.7	776.0	787.1	795.1	802.1	810.1	818.4	826.7	834.8
Feed use	Mt	146.3	147.8	150.9	153.1	155.4	157.5	159.4	161.4	163.5	165.5	167.7
Food use	Mt	503.4	512.5	518.4	525.5	531.5	535.1	538.0	542.3	546.5	550.8	554.5
Biofuel use	Mt	12.3	12.6	12.8	13.1	13.4	13.7	14.0	14.5	14.9	15.3	15.7
Other use	Mt	79.1	78.7	82.6	84.3	86.8	88.8	90.7	92.0	93.5	95.1	96.9
Exports	Mt	176.6	181.4	185.2	187.3	189.9	191.9	193.9	196.7	199.2	201.7	204.0
Closing stocks	Mt	286.0	301.6	309.8	314.8	316.6	317.9	320.6	323.3	326.5	329.6	332.8
Price ¹	USD/t	221.1	225.9	217.1	216.0	217.4	221.0	224.9	227.9	231.4	234.7	237.5
Developed countries												
Production	Mt	394.3	402.9	405.6	409.4	412.7	415.8	419.6	423.3	427.6	431.3	434.8
Consumption	Mt	273.6	271.3	273.3	275.3	277.7	279.6	281.0	282.7	284.6	286.3	288.1
Net trade	Mt	122.2	126.8	130.4	132.6	135.1	136.9	138.3	140.8	142.7	144.8	146.5
Closing stocks	Mt	79.8	77.1	79.1	80.6	80.4	79.7	80.0	79.9	80.2	80.4	80.6
Developing countries												
Production	Mt	357.9	363.6	367.3	371.5	376.2	380.7	385.1	389.5	394.0	398.5	403.2
Consumption	Mt	467.5	480.2	491.4	500.7	509.3	515.5	521.1	527.4	533.8	540.3	546.8
Net trade	Mt	-120.5	-126.8	-130.4	-132.6	-135.1	-136.9	-138.3	-140.8	-142.7	-144.8	-146.5
Closing stocks	Mt	206.2	224.5	230.7	234.2	236.2	238.2	240.6	243.4	246.2	249.2	252.2
OECD²												
Production	Mt	282.3	291.6	292.8	294.8	296.3	297.8	299.9	301.8	304.4	306.4	308.3
Consumption	Mt	225.4	225.6	227.1	228.8	230.7	232.2	233.2	234.4	235.8	237.1	238.4
Net trade	Mt	57.9	63.7	64.0	64.7	65.6	65.9	66.8	67.7	68.4	69.2	69.7
Closing stocks	Mt	65.1	62.0	63.8	65.0	65.0	64.7	64.7	64.5	64.7	64.8	64.9
MAIZE												
World												
Production	Mt	1 128.2	1 151.5	1 168.2	1 184.8	1 201.5	1 219.5	1 237.1	1 256.9	1 275.3	1 293.6	1 311.2
Area	Mha	190.2	190.2	191.1	191.7	192.6	193.5	194.2	195.2	196.1	196.9	197.5
Yield	t/ha	5.93	6.05	6.11	6.18	6.24	6.30	6.37	6.44	6.50	6.57	6.64
Consumption	Mt	1 111.5	1 159.2	1 177.6	1 192.8	1 207.4	1 225.1	1 240.1	1 255.5	1 270.0	1 286.0	1 300.7
Feed use	Mt	651.9	678.6	690.7	700.4	708.9	721.3	731.1	741.3	751.0	762.2	772.0
Food use	Mt	133.9	138.7	141.0	143.5	146.0	148.5	151.0	153.5	156.1	158.7	161.3
Biofuel use	Mt	178.5	181.6	183.0	184.0	185.3	186.3	187.4	188.0	188.7	189.2	189.7
Other use	Mt	100.0	112.4	114.5	116.1	117.8	119.2	120.3	121.7	122.8	124.1	125.3
Exports	Mt	160.1	169.1	171.7	173.8	176.5	179.2	182.1	185.0	187.9	190.8	193.6
Closing stocks	Mt	374.9	339.5	319.1	300.0	283.1	266.4	252.3	242.7	237.0	233.5	233.0
Price ³	USD/t	158.5	160.6	164.5	165.8	169.0	171.9	175.3	178.3	181.6	184.2	186.0
Developed countries												
Production	Mt	520.5	528.9	536.3	541.4	545.6	549.9	554.0	558.5	563.0	567.0	570.8
Consumption	Mt	461.1	468.4	475.2	478.9	482.0	486.5	489.4	492.6	495.8	498.7	501.3
Net trade	Mt	57.9	58.3	59.3	60.5	61.8	62.8	64.3	65.4	66.7	67.8	69.0
Closing stocks	Mt	84.7	78.9	80.7	82.6	84.4	85.1	85.4	85.9	86.4	87.0	87.5
Developing countries												
Production	Mt	607.6	622.6	631.8	643.4	655.9	669.6	683.1	698.4	712.4	726.6	740.4
Consumption	Mt	650.4	690.7	702.3	713.9	725.4	738.6	750.7	762.9	774.2	787.4	799.5
Net trade	Mt	-46.8	-47.3	-48.3	-49.5	-50.7	-51.7	-53.2	-54.4	-55.6	-56.8	-58.0
Closing stocks	Mt	290.3	260.6	238.4	217.4	198.6	181.3	166.9	156.8	150.6	146.5	145.5
OECD²												
Production	Mt	487.4	494.1	500.2	504.4	507.5	510.9	513.9	517.3	520.7	523.7	526.3
Consumption	Mt	485.3	494.1	501.7	505.6	508.7	513.4	516.4	519.7	523.1	526.1	528.8
Net trade	Mt	0.6	-2.8	-3.6	-3.2	-2.9	-3.0	-2.8	-2.9	-2.9	-2.9	-2.9
Closing stocks	Mt	83.9	77.8	79.9	81.9	83.6	84.2	84.5	84.9	85.4	85.9	86.3

Table C.1. World cereal projections (cont.)

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
OTHER COARSE GRAINS												
World												
Production	Mt	292.1	299.1	301.0	304.1	306.8	309.3	312.5	315.5	318.7	321.9	325.0
Area	Mha	154.2	156.1	155.6	155.9	155.9	156.0	156.3	156.6	156.8	157.1	157.3
Yield	t/ha	1.89	1.92	1.93	1.95	1.97	1.98	2.00	2.01	2.03	2.05	2.07
Consumption	Mt	290.8	293.0	298.2	300.8	304.0	306.9	310.2	313.4	316.4	319.7	322.9
Feed use	Mt	161.7	162.4	164.8	165.9	167.2	168.7	170.1	171.6	172.8	174.3	175.6
Food use	Mt	77.7	79.1	80.7	81.9	83.5	84.6	86.2	87.6	89.0	90.5	92.1
Biofuel use	Mt	9.4	9.5	9.6	9.6	9.8	9.9	10.0	10.1	10.2	10.2	10.3
Other use	Mt	42.1	42.1	43.2	43.3	43.5	43.8	44.0	44.2	44.4	44.6	44.9
Exports	Mt	43.1	40.5	41.1	41.6	42.3	42.8	43.6	44.2	44.8	45.4	46.1
Closing stocks	Mt	53.7	57.5	58.7	60.4	61.7	62.5	63.2	63.7	64.4	65.0	65.5
Price ⁴	USD/t	189.9	189.2	188.3	190.3	192.5	197.6	201.3	205.6	210.1	213.7	216.1
Developed countries												
Production	Mt	180.0	182.1	182.7	183.8	184.7	185.1	186.0	186.8	187.7	188.6	189.4
Consumption	Mt	150.1	149.4	151.7	151.7	152.3	152.7	153.2	153.6	153.8	154.2	154.6
Net trade	Mt	31.6	29.0	30.1	30.7	31.6	31.9	32.6	33.1	33.6	34.2	34.8
Closing stocks	Mt	28.7	31.0	31.9	33.3	34.1	34.6	34.9	35.0	35.3	35.5	35.5
Developing countries												
Production	Mt	112.0	117.0	118.2	120.4	122.2	124.2	126.4	128.6	130.9	133.3	135.6
Consumption	Mt	140.7	143.6	146.5	149.1	151.7	154.2	157.0	159.7	162.6	165.4	168.3
Net trade	Mt	-27.9	-27.4	-28.5	-29.2	-30.0	-30.3	-31.0	-31.5	-32.0	-32.6	-33.2
Closing stocks	Mt	25.0	26.5	26.7	27.2	27.6	27.9	28.3	28.6	29.1	29.5	30.0
OECD²												
Production	Mt	145.9	149.7	150.0	150.6	151.0	151.1	151.5	151.9	152.3	152.8	153.2
Consumption	Mt	128.8	128.1	129.9	130.3	130.5	130.7	130.9	131.3	131.4	131.7	132.0
Net trade	Mt	20.2	18.9	19.4	19.5	20.0	19.9	20.3	20.5	20.8	21.1	21.4
Closing stocks	Mt	20.3	20.9	21.6	22.4	23.0	23.5	23.8	23.9	24.0	24.0	23.9
RICE												
World												
Production	Mt	513.4	526.9	532.1	537.9	543.8	549.1	554.8	560.7	566.6	572.4	578.2
Area	Mha	165.8	167.5	167.3	167.1	167.1	166.9	166.8	166.8	166.7	166.6	166.5
Yield	t/ha	3.10	3.15	3.18	3.22	3.26	3.29	3.33	3.36	3.40	3.44	3.47
Consumption	Mt	510.5	524.1	530.8	537.0	543.3	548.9	554.6	560.3	566.1	571.8	577.6
Feed use	Mt	17.8	17.0	17.5	17.7	17.9	18.0	18.1	18.3	18.5	18.7	18.9
Food use	Mt	408.7	419.6	424.7	429.5	434.7	439.5	444.2	448.9	453.7	458.4	463.1
Exports	Mt	47.3	49.9	51.4	52.2	53.1	54.1	55.1	56.2	57.3	58.4	59.6
Closing stocks	Mt	171.7	178.9	180.2	181.0	181.6	181.7	182.0	182.5	183.0	183.6	184.1
Price ⁵	USD/t	422.7	436.4	431.5	433.7	434.8	441.3	448.5	454.5	460.5	465.7	470.3
Developed countries												
Production	Mt	17.9	18.1	18.1	18.2	18.4	18.4	18.5	18.6	18.7	18.8	18.9
Consumption	Mt	20.0	20.2	20.3	20.3	20.3	20.4	20.4	20.5	20.6	20.6	20.6
Net trade	Mt	-1.8	-1.8	-1.8	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9
Closing stocks	Mt	4.6	4.1	3.7	3.5	3.4	3.3	3.2	3.3	3.3	3.4	3.6
Developing countries												
Production	Mt	495.6	508.8	514.0	519.7	525.4	530.6	536.3	542.1	547.9	553.6	559.2
Consumption	Mt	490.5	504.0	510.5	516.8	523.0	528.5	534.1	539.8	545.5	551.2	557.0
Net trade	Mt	1.3	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Closing stocks	Mt	167.1	174.9	176.5	177.6	178.2	178.5	178.8	179.2	179.7	180.1	180.5
OECD²												
Production	Mt	21.4	21.6	21.6	21.7	21.8	21.8	21.9	21.9	21.9	22.0	22.0
Consumption	Mt	23.8	23.7	23.9	23.9	23.9	23.9	23.9	23.9	24.0	23.9	24.0
Net trade	Mt	-2.0	-1.8	-1.9	-2.0	-2.0	-2.0	-2.0	-2.1	-2.1	-2.1	-2.1
Closing stocks	Mt	5.7	5.1	4.7	4.5	4.4	4.3	4.3	4.3	4.3	4.3	4.6

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. Prices are in nominal terms.

1. No.2 hard red winter wheat, ordinary protein, United States FOB Gulf Ports (June/May).
2. Excludes Iceland but includes all EU member countries.
3. No.2 yellow corn, United States FOB Gulf Ports (September/August).
4. Feed barley, Europe, FOB Rouen (July/June).
5. Milled 100%, grade b, nominal price quote, FOB Bangkok (January/December).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.2. World oilseed projections

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
SOYBEAN												
World												
Production	Mt	352.8	357.1	362.1	368.5	374.6	381.8	387.5	393.2	398.9	404.8	411.0
Area	Mha	124.3	126.3	127.2	128.1	129.0	130.1	131.0	131.8	132.6	133.4	134.3
Yield	t/ha	2.84	2.83	2.85	2.88	2.90	2.93	2.96	2.98	3.01	3.03	3.06
Consumption	Mt	347.0	358.8	365.5	370.8	376.1	381.8	387.5	393.1	398.9	404.8	410.9
Crush	Mt	311.8	322.5	329.2	334.3	339.3	344.7	350.1	355.5	361.1	366.8	372.4
Closing stocks	Mt	42.6	50.9	47.5	45.2	43.7	43.6	43.7	43.8	43.7	43.8	43.9
Price ¹	USD/t	393.8	373.5	395.9	403.0	415.4	421.2	431.0	440.3	450.3	459.5	465.8
Developed countries												
Production	Mt	140.9	129.6	131.0	133.3	135.4	138.2	140.3	142.3	144.4	146.6	148.8
Consumption	Mt	91.2	94.0	95.2	96.1	97.0	98.0	99.0	100.0	101.0	102.1	103.3
Crush	Mt	82.2	84.5	85.7	86.6	87.4	88.3	89.2	90.1	91.1	92.1	93.1
Closing stocks	Mt	19.4	27.2	23.8	21.5	19.9	19.5	19.4	19.3	19.1	19.0	18.9
Developing countries												
Production	Mt	211.9	227.4	231.1	235.2	239.2	243.6	247.3	250.8	254.5	258.3	262.2
Consumption	Mt	255.8	264.8	270.3	274.7	279.1	283.8	288.5	293.1	297.9	302.8	307.7
Crush	Mt	229.6	238.0	243.4	247.7	251.9	256.5	260.9	265.4	270.0	274.7	279.4
Closing stocks	Mt	23.3	23.7	23.7	23.8	23.8	24.1	24.3	24.5	24.6	24.8	25.0
OECD²												
Production	Mt	131.8	119.7	121.0	123.0	124.9	127.4	129.3	131.1	133.0	134.9	136.9
Consumption	Mt	91.3	93.8	95.0	96.0	97.0	98.0	99.1	100.1	101.2	102.2	103.4
Crush	Mt	82.3	84.3	85.6	86.5	87.4	88.4	89.4	90.3	91.3	92.3	93.2
Closing stocks	Mt	19.5	27.0	23.7	21.4	19.8	19.5	19.3	19.2	19.0	18.9	18.7
OTHER OILSEEDS												
World												
Production	Mt	152.8	157.2	158.9	161.7	164.1	166.5	168.9	171.2	173.4	175.6	178.0
Area	Mha	88.7	90.3	90.4	91.1	91.6	92.1	92.6	93.0	93.4	93.8	94.3
Yield	t/ha	1.72	1.74	1.76	1.77	1.79	1.81	1.82	1.84	1.86	1.87	1.89
Consumption	Mt	151.9	156.8	159.3	161.5	163.9	166.3	168.7	171.0	173.3	175.5	178.0
Crush	Mt	130.8	135.6	137.9	139.8	142.1	144.2	146.3	148.4	150.5	152.4	154.7
Closing stocks	Mt	8.5	8.4	8.0	8.2	8.4	8.7	8.9	9.1	9.2	9.4	9.4
Price ³	USD/t	428.0	426.3	431.5	441.5	453.3	458.2	466.0	475.5	484.3	494.5	497.1
Developed countries												
Production	Mt	92.5	95.5	96.2	98.0	99.4	100.7	102.0	103.2	104.4	105.5	106.8
Consumption	Mt	82.7	85.6	86.8	87.6	88.7	89.6	90.6	91.4	92.3	93.1	94.1
Crush	Mt	75.0	78.0	79.0	79.8	80.8	81.7	82.6	83.3	84.2	85.0	85.9
Closing stocks	Mt	6.2	6.4	6.0	6.2	6.3	6.6	6.8	6.9	7.0	7.1	7.1
Developing countries												
Production	Mt	60.3	61.6	62.7	63.7	64.7	65.8	66.9	68.0	69.1	70.1	71.2
Consumption	Mt	69.3	71.2	72.6	73.9	75.2	76.7	78.1	79.6	81.0	82.3	83.8
Crush	Mt	55.8	57.7	58.9	60.1	61.3	62.5	63.8	65.1	66.3	67.5	68.8
Closing stocks	Mt	2.3	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3
OECD²												
Production	Mt	61.0	61.1	61.2	62.3	63.0	63.6	64.2	64.7	65.1	65.5	66.0
Consumption	Mt	56.2	56.9	57.5	57.8	58.3	58.7	59.1	59.4	59.7	59.9	60.3
Crush	Mt	50.3	50.9	51.5	51.7	52.2	52.5	52.9	53.1	53.4	53.7	54.0
Closing stocks	Mt	5.3	5.5	5.1	5.3	5.5	5.7	5.9	6.1	6.2	6.3	6.3
PROTEIN MEALS												
World												
Production	Mt	343.0	354.5	361.3	366.6	372.2	377.9	383.7	389.4	395.3	401.1	407.2
Consumption	Mt	342.0	354.6	361.3	366.5	372.1	377.8	383.6	389.3	395.2	401.0	407.1
Closing stocks	Mt	15.3	13.8	13.8	13.9	13.9	14.0	14.1	14.2	14.2	14.3	14.4
Price ⁴	USD/t	332.5	325.2	335.7	339.6	348.3	353.4	360.8	367.9	376.1	382.7	387.2
Developed countries												
Production	Mt	108.7	111.4	112.9	114.0	115.2	116.3	117.5	118.6	119.8	121.0	122.2
Consumption	Mt	124.4	127.2	128.4	129.2	130.0	130.8	131.6	132.3	133.1	133.9	134.7
Closing stocks	Mt	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9
Developing countries												
Production	Mt	234.2	243.1	248.3	252.6	257.0	261.6	266.2	270.8	275.5	280.2	285.0
Consumption	Mt	217.6	227.3	232.8	237.3	242.1	247.0	252.0	257.0	262.1	267.2	272.4
Closing stocks	Mt	13.5	12.0	12.0	12.1	12.1	12.2	12.2	12.3	12.4	12.5	12.6
OECD²												
Production	Mt	99.1	100.6	102.1	103.0	104.0	105.1	106.1	107.0	108.1	109.0	110.1
Consumption	Mt	128.0	130.6	132.2	133.3	134.3	135.4	136.5	137.5	138.6	139.6	140.7
Closing stocks	Mt	1.6	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6

Table C.2. World oilseed projections (cont.)

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
VEGETABLE OILS												
World												
Production	Mt	202.6	210.6	214.0	216.9	220.1	223.4	226.7	229.9	233.2	236.4	239.8
of which palm oil	Mt	71.3	74.7	75.6	76.5	77.6	78.7	79.8	80.8	81.8	82.9	83.9
Consumption	Mt	201.2	210.9	214.2	217.1	220.2	223.3	226.6	229.8	233.1	236.4	239.7
Food	Mt	136.3	140.8	143.2	145.7	148.2	150.8	153.6	156.3	159.2	162.0	164.8
Biofuel	Mt	25.4	29.8	30.5	30.5	30.4	30.5	30.4	30.4	30.3	30.3	30.2
Exports	Mt	81.9	84.6	85.8	87.0	88.2	89.2	90.4	91.6	92.8	94.1	95.4
Closing stocks	Mt	22.3	21.1	20.9	20.7	20.6	20.7	20.9	21.0	21.0	21.0	21.1
Price ⁵	USD/t	731.6	685.2	715.4	744.8	776.0	794.6	810.3	827.8	846.9	868.9	886.5
Developed countries												
Production	Mt	50.0	51.6	52.3	52.8	53.4	54.0	54.6	55.1	55.7	56.2	56.8
Consumption	Mt	53.9	56.1	56.4	56.7	57.1	57.2	57.2	57.2	57.2	57.2	57.1
Closing stocks	Mt	3.7	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Developing countries												
Production	Mt	152.6	159.0	161.7	164.1	166.7	169.5	172.1	174.8	177.5	180.2	183.0
Consumption	Mt	147.3	154.8	157.8	160.4	163.1	166.2	169.4	172.6	175.9	179.2	182.6
Closing stocks	Mt	18.6	17.6	17.4	17.2	17.2	17.2	17.4	17.4	17.5	17.5	17.6
OECD²												
Production	Mt	39.6	40.2	40.7	41.0	41.4	41.8	42.2	42.5	42.8	43.1	43.5
Consumption	Mt	53.2	55.1	55.4	55.8	56.1	56.2	56.2	56.2	56.3	56.3	56.1
Closing stocks	Mt	3.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1

Note: Average 2016-18est: Data for 2018 are estimated. Prices are in nominal terms.

1. Soybean, U.S., CIF Rotterdam (October/September).
2. Excludes Iceland but includes all EU member countries
3. Rapeseed, Europe, CIF Hamburg (October/September).
4. Weighted average protein meal, European port (October/September).
5. Weighted average price of oilseed oils and palm oil, European port (October/September).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.3. World sugar projections

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
WORLD												
SUGARBEET												
Production	Mt	291.4	290.8	293.5	295.1	297.6	300.1	303.2	307.0	310.3	313.8	317.4
Area	Mha	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.9	4.9
Yield	t/ha	61.91	61.59	61.88	62.35	62.56	62.80	63.24	63.81	64.23	64.69	65.15
Biofuel use	Mt	13.8	14.0	14.0	14.0	14.1	14.1	14.1	14.1	14.1	14.1	14.1
SUGARCANE												
Production	Mt	1 758.2	1 731.1	1 771.0	1 800.3	1 825.5	1 849.1	1 870.8	1 892.6	1 908.8	1 926.7	1 947.7
Area	Mha	25.3	24.9	25.3	25.5	25.6	25.7	25.8	25.8	25.8	25.9	25.9
Yield	t/ha	69.36	69.40	69.90	70.56	71.26	71.95	72.59	73.25	73.87	74.51	75.16
Biofuel use	Mt	360.6	376.6	389.5	403.9	412.5	421.4	429.6	437.7	446.1	455.1	464.1
SUGAR												
Production	Mt tq	177.6	179.7	183.0	186.5	189.6	192.2	194.9	197.7	200.2	203.2	206.8
Consumption	Mt tq	170.8	176.6	179.4	181.7	184.4	187.4	190.5	193.7	196.8	199.7	202.5
Closing stocks	Mt tq	80.8	83.5	83.4	84.5	86.0	87.2	87.9	88.1	87.9	87.7	88.3
Price, raw sugar ¹	USD/t	314.9	303.0	315.4	331.9	339.4	341.1	341.4	339.0	341.1	346.0	350.0
Price, white sugar ²	USD/t	392.6	376.1	391.3	410.2	419.1	422.7	423.8	422.9	427.2	433.0	438.4
Price, HFCS ³	USD/t	908.9	691.7	693.7	704.0	709.9	715.1	720.2	723.9	731.8	740.3	746.0
DEVELOPED COUNTRIES												
SUGARBEET												
Production	Mt	236.9	233.5	234.6	234.6	235.3	236.1	237.6	239.6	241.1	242.6	244.2
SUGARCANE												
Production	Mt	78.7	78.5	78.7	79.0	79.5	80.1	80.5	80.7	80.8	80.9	81.1
SUGAR												
Production	Mt tq	44.1	44.2	44.6	45.0	45.5	46.0	46.6	47.1	47.5	47.9	48.4
Consumption	Mt tq	46.9	47.2	47.3	47.3	47.4	47.4	47.5	47.5	47.5	47.6	47.6
Closing stocks	Mt tq	13.5	12.7	12.4	12.4	12.6	12.9	13.1	13.2	13.3	13.4	13.5
HFCS												
Production	Mt dw	9.1	9.0	9.0	9.0	9.1	9.1	9.1	9.1	9.1	9.1	9.1
Consumption	Mt dw	7.9	7.8	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8
DEVELOPING COUNTRIES												
SUGARBEET												
Production	Mt	54.4	57.3	58.9	60.5	62.2	64.0	65.7	67.4	69.2	71.1	73.1
SUGARCANE												
Production	Mt	1 679.5	1 652.7	1 692.3	1 721.3	1 746.0	1 769.0	1 790.3	1 811.9	1 828.0	1 845.8	1 866.6
SUGAR												
Production	Mt tq	133.5	135.5	138.3	141.5	144.0	146.2	148.3	150.6	152.7	155.3	158.4
Consumption	Mt tq	123.8	129.4	132.1	134.4	137.0	139.9	143.0	146.2	149.2	152.1	155.0
Closing stocks	Mt tq	67.3	70.8	71.0	72.1	73.4	74.3	74.8	74.9	74.5	74.3	74.7
HFCS												
Production	Mt dw	4.5	4.9	5.0	5.1	5.3	5.4	5.5	5.6	5.7	5.8	5.9
Consumption	Mt dw	5.5	6.1	6.2	6.3	6.5	6.6	6.7	6.8	6.9	7.0	7.2
OECD⁴												
SUGARBEET												
Production	Mt	184.0	183.1	183.8	183.4	183.8	184.3	185.5	187.1	188.2	189.5	190.7
SUGARCANE												
Production	Mt	117.5	118.6	119.1	119.5	120.6	121.5	122.3	122.8	123.3	123.8	124.3
SUGAR												
Production	Mt tq	41.4	41.3	41.6	41.8	42.3	42.6	43.0	43.4	43.6	43.9	44.2
Consumption	Mt tq	43.9	44.1	44.3	44.3	44.3	44.3	44.4	44.4	44.4	44.4	44.4
Closing stocks	Mt tq	12.2	11.3	11.4	11.5	11.8	12.0	12.2	12.3	12.4	12.5	12.6
HFCS												
Production	Mt dw	10.3	10.2	10.3	10.3	10.3	10.4	10.4	10.4	10.5	10.5	10.5
Consumption	Mt dw	10.0	10.0	10.0	10.0	10.1	10.1	10.1	10.2	10.2	10.2	10.2

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. HFCS: High fructose corn syrup. Prices are in nominal terms.

1. Raw sugar world price, ICE contract No11 nearby (October/September).
2. Refined sugar price, White Sugar Futures Contract No. 407, Euronext market, Liffe, London, Europe (October/September).
3. United States wholesale list price HFCS-55, dry weight (October/September).
4. Excludes Iceland but includes all EU member countries

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", *OECD Agriculture statistics* (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.4. World meat projections

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
WORLD												
BEEF AND VEAL												
Production	kt cwe	68 441	70 379	71 413	72 122	72 812	73 689	74 474	75 171	75 965	76 750	77 476
Consumption	kt cwe	68 567	70 480	71 522	72 221	72 911	73 782	74 566	75 267	76 058	76 843	77 570
PIGMEAT												
Production	kt cwe	119 440	117 842	121 663	122 688	123 554	124 448	125 307	126 205	127 106	127 954	128 819
Consumption	kt cwe	119 435	117 809	121 592	122 661	123 527	124 408	125 264	126 163	127 064	127 914	128 779
POULTRY MEAT												
Production	kt rtc	121 083	125 637	127 068	128 788	130 437	132 142	133 886	135 667	137 424	139 218	141 091
Consumption	kt rtc	120 487	124 637	126 086	127 834	129 475	131 197	132 961	134 762	136 536	138 356	140 253
SHEEP MEAT												
Production	kt cwe	14 912	15 036	15 283	15 505	15 730	15 937	16 149	16 363	16 574	16 784	16 997
Consumption	kt cwe	14 911	15 048	15 302	15 524	15 747	15 959	16 170	16 382	16 592	16 799	17 009
TOTAL MEAT												
Per capita consumption ¹	kg rwt	34.7	34.4	34.7	34.8	34.8	34.8	34.9	34.9	35.0	35.0	35.1
DEVELOPED COUNTRIES												
BEEF AND VEAL												
Production	kt cwe	30 189	31 093	31 369	31 481	31 609	31 910	32 118	32 231	32 412	32 582	32 719
Consumption	kt cwe	28 994	29 649	29 896	30 023	30 142	30 394	30 592	30 694	30 849	30 996	31 110
PIGMEAT												
Production	kt cwe	44 823	45 630	46 233	46 108	46 100	46 216	46 323	46 459	46 602	46 728	46 857
Consumption	kt cwe	41 160	41 387	42 203	42 337	42 349	42 423	42 485	42 580	42 664	42 728	42 801
POULTRY MEAT												
Production	kt rtc	50 025	51 371	51 626	52 053	52 564	53 041	53 514	53 997	54 469	54 952	55 455
Consumption	kt rtc	47 622	48 779	48 797	49 206	49 628	49 977	50 370	50 775	51 149	51 549	51 966
SHEEP MEAT												
Production	kt cwe	3 517	3 558	3 608	3 661	3 706	3 740	3 778	3 819	3 860	3 902	3 946
Consumption	kt cwe	2 798	2 812	2 848	2 877	2 910	2 940	2 971	3 005	3 036	3 068	3 101
TOTAL MEAT												
Per capita consumption ¹	kg rwt	68.5	69.2	69.5	69.7	69.8	70.0	70.2	70.4	70.6	70.8	71.0
DEVELOPING COUNTRIES												
BEEF AND VEAL												
Production	kt cwe	38 252	39 287	40 044	40 641	41 202	41 779	42 356	42 940	43 553	44 169	44 757
Consumption	kt cwe	39 572	40 831	41 626	42 198	42 770	43 389	43 974	44 572	45 209	45 847	46 460
PIGMEAT												
Production	kt cwe	74 616	72 212	75 429	76 580	77 455	78 232	78 984	79 746	80 504	81 225	81 961
Consumption	kt cwe	78 275	76 422	79 389	80 324	81 178	81 985	82 779	83 583	84 400	85 186	85 977
POULTRY MEAT												
Production	kt rtc	71 058	74 266	75 442	76 735	77 873	79 101	80 372	81 669	82 955	84 266	85 636
Consumption	kt rtc	72 865	75 858	77 290	78 628	79 847	81 220	82 591	83 987	85 387	86 807	88 287
SHEEP MEAT												
Production	kt cwe	11 395	11 478	11 674	11 844	12 024	12 197	12 371	12 543	12 714	12 881	13 050
Consumption	kt cwe	12 114	12 236	12 454	12 647	12 837	13 019	13 198	13 378	13 556	13 732	13 908
TOTAL MEAT												
Per capita consumption ¹	kg rwt	26.8	26.5	26.9	27.0	27.0	27.1	27.1	27.2	27.3	27.4	27.5
OECD²												
BEEF AND VEAL												
Production	kt cwe	28 072	28 891	29 155	29 238	29 330	29 597	29 794	29 888	30 052	30 198	30 315
Consumption	kt cwe	27 196	28 011	28 270	28 378	28 456	28 678	28 873	28 962	29 108	29 242	29 347
PIGMEAT												
Production	kt cwe	42 624	43 505	44 106	44 036	44 059	44 220	44 369	44 537	44 713	44 871	45 032
Consumption	kt cwe	39 899	40 325	41 045	41 197	41 268	41 389	41 505	41 653	41 789	41 906	42 032
POULTRY MEAT												
Production	kt rtc	48 323	49 889	50 166	50 594	51 100	51 584	52 066	52 568	53 063	53 575	54 097
Consumption	kt rtc	45 634	46 854	46 943	47 380	47 829	48 190	48 583	48 995	49 381	49 792	50 215
SHEEP MEAT												
Production	kt cwe	2 729	2 701	2 728	2 765	2 788	2 802	2 817	2 834	2 850	2 869	2 889
Consumption	kt cwe	2 064	2 044	2 056	2 069	2 082	2 094	2 106	2 119	2 130	2 140	2 152
TOTAL MEAT												
Per capita consumption ¹	kg rwt	69.4	70.2	70.5	70.6	70.7	70.8	71.0	71.2	71.3	71.5	71.6

Note: Calendar Year; except year ending 30 September for New Zealand in aggregates. Average 2016-18est: Data for 2018 are estimated. Prices are in nominal terms.

1. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.
2. Excludes Iceland but includes all EU member countries

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

ANNEX C

Table C.5. World dairy projections: Milk, butter and cheese

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
MILK												
World												
Production	kt pw	826 106	848 978	859 795	874 273	888 433	902 445	922 292	937 673	951 779	965 154	981 218
Inventory	000 hd	681 852	697 501	700 570	708 580	716 540	724 700	738 873	748 031	756 078	763 306	773 185
Yield	t/head	1.21	1.22	1.23	1.23	1.24	1.25	1.25	1.25	1.26	1.26	1.27
Developed countries												
Production	kt pw	395 573	399 974	402 688	405 585	408 524	410 991	413 559	416 287	418 849	421 449	424 049
Inventory	000 hd	80 873	80 941	80 911	80 988	81 055	81 089	81 126	81 187	81 244	81 292	81 336
Yield	t/head	4.89	4.94	4.98	5.01	5.04	5.07	5.10	5.13	5.16	5.18	5.21
Developing countries												
Production	kt pw	430 534	449 005	457 107	468 688	479 909	491 454	508 733	521 386	532 929	543 705	557 169
Inventory	000 hd	600 979	616 559	619 659	627 592	635 484	643 611	657 747	666 844	674 833	682 014	691 849
Yield	t/head	0.72	0.73	0.74	0.75	0.76	0.76	0.77	0.78	0.79	0.80	0.81
OECD												
Production	kt pw	354 050	359 736	362 268	364 810	367 418	369 623	371 939	374 392	376 694	379 045	381 394
Inventory	000 hd	72 949	74 405	74 642	74 702	74 780	74 927	75 112	75 311	75 510	75 710	75 910
Yield	t/head	4.85	4.83	4.85	4.88	4.91	4.93	4.95	4.97	4.99	5.01	5.02
FRESH DAIRY PRODUCTS												
World												
Consumption	kt pw	412 909	428 638	433 576	442 380	450 518	458 906	473 047	482 519	491 689	499 081	509 144
Developed countries												
Consumption	kt pw	133 114	134 026	134 098	134 554	134 950	135 353	135 783	136 221	136 661	137 087	137 530
Developing countries												
Consumption	kt pw	279 795	294 612	299 479	307 826	315 568	323 553	337 264	346 298	355 027	361 994	371 614
OECD												
Consumption	kt pw	99 975	100 706	100 586	100 639	100 769	100 968	101 198	101 456	101 719	101 984	102 282
BUTTER												
World												
Production	kt pw	10 906	11 006	11 219	11 438	11 664	11 882	12 101	12 330	12 562	12 800	13 035
Consumption	kt pw	10 847	10 999	11 214	11 436	11 662	11 880	12 099	12 329	12 562	12 800	13 035
Stock changes	kt pw	-23	6	5	3	2	2	2	1	1	0	0
Price ¹	USD/t	4 504	4 066	4 113	4 199	4 271	4 334	4 400	4 484	4 554	4 637	4 704
Developed countries												
Production	kt pw	4 522	4 560	4 599	4 648	4 694	4 731	4 766	4 805	4 845	4 885	4 921
Consumption	kt pw	3 930	3 980	4 006	4 043	4 079	4 105	4 129	4 157	4 180	4 204	4 223
Developing countries												
Production	kt pw	6 384	6 446	6 620	6 790	6 970	7 151	7 335	7 524	7 717	7 915	8 115
Consumption	kt pw	6 917	7 019	7 207	7 393	7 582	7 774	7 970	8 172	8 382	8 596	8 812
OECD²												
Production	kt pw	4 349	4 405	4 447	4 497	4 543	4 582	4 620	4 660	4 701	4 742	4 778
Consumption	kt pw	3 780	3 830	3 863	3 906	3 946	3 977	4 007	4 040	4 068	4 099	4 125
Stock changes	kt pw	-19	3	2	-1	-1	-1	-1	-1	-1	-1	-1
CHEESE												
World												
Production	kt pw	23 343	23 986	24 240	24 541	24 867	25 149	25 466	25 780	26 092	26 409	26 743
Consumption	kt pw	23 287	23 990	24 214	24 543	24 865	25 147	25 465	25 779	26 090	26 408	26 742
Stock changes	kt pw	-14	-4	26	-2	1	2	1	1	1	1	1
Price ³	USD/t	3 530	3 516	3 549	3 615	3 676	3 735	3 796	3 866	3 931	4 003	4 071
Developed countries												
Production	kt pw	18 746	19 358	19 568	19 785	20 030	20 233	20 472	20 712	20 947	21 188	21 443
Consumption	kt pw	17 790	18 379	18 502	18 721	18 934	19 103	19 308	19 510	19 710	19 920	20 145
Developing countries												
Production	kt pw	4 597	4 628	4 672	4 756	4 836	4 916	4 994	5 068	5 145	5 222	5 300
Consumption	kt pw	5 498	5 611	5 712	5 822	5 932	6 044	6 157	6 269	6 380	6 488	6 597
OECD²												
Production	kt pw	18 203	18 839	19 036	19 247	19 479	19 668	19 895	20 119	20 342	20 572	20 813
Consumption	kt pw	17 398	17 960	18 062	18 261	18 468	18 630	18 827	19 024	19 218	19 418	19 633
Stock changes	kt pw	-14	-4	26	-2	1	2	1	1	1	1	1

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand in aggregates. Average 2016-18est: Data for 2018 are estimated. Prices are in nominal terms.

1. FOB export price, butter, 82% butterfat, Oceania.
2. Excludes Iceland but includes all EU member countries
3. FOB export price, cheddar cheese, 39% moisture, Oceania.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.6. World dairy projections: Powders and casein

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
SKIM MILK POWDER												
World												
Production	kt pw	4 411	4 394	4 571	4 654	4 719	4 777	4 824	4 873	4 924	4 973	5 024
Consumption	kt pw	4 361	4 538	4 589	4 672	4 733	4 781	4 828	4 876	4 927	4 976	5 026
Stock changes	kt pw	11	-144	-18	-18	-13	-4	-4	-3	-3	-3	-3
Price ¹	USD/t	2 011	2 066	2 134	2 185	2 257	2 323	2 390	2 455	2 525	2 593	2 663
Developed countries												
Production	kt pw	3 844	3 836	3 988	4 055	4 104	4 150	4 187	4 225	4 263	4 300	4 339
Consumption	kt pw	1 927	1 980	1 970	1 983	1 984	1 973	1 962	1 949	1 937	1 923	1 911
Developing countries												
Production	kt pw	567	558	583	600	616	628	637	648	661	673	684
Consumption	kt pw	2 434	2 558	2 619	2 689	2 748	2 808	2 866	2 927	2 990	3 053	3 115
OECD²												
Production	kt pw	3 601	3 604	3 755	3 825	3 870	3 914	3 948	3 984	4 020	4 055	4 093
Consumption	kt pw	1 976	1 988	1 989	2 014	2 023	2 019	2 016	2 011	2 008	2 003	2 000
Stock changes	kt pw	11	-144	-18	-18	-13	-4	-4	-3	-3	-3	-3
WHOLE MILK POWDER												
World												
Production	kt pw	5 317	5 478	5 558	5 640	5 709	5 776	5 843	5 910	5 975	6 041	6 107
Consumption	kt pw	5 315	5 470	5 550	5 633	5 702	5 768	5 831	5 897	5 963	6 029	6 095
Stock changes	kt pw	17	8	8	8	8	8	13	13	13	13	13
Price ³	USD/t	2 841	2 926	2 987	3 065	3 126	3 198	3 267	3 344	3 420	3 501	3 580
Developed countries												
Production	kt pw	2 383	2 499	2 530	2 553	2 583	2 603	2 624	2 645	2 668	2 692	2 718
Consumption	kt pw	610	612	617	621	625	628	627	630	633	636	639
Developing countries												
Production	kt pw	2 934	2 978	3 027	3 088	3 126	3 173	3 220	3 264	3 307	3 349	3 389
Consumption	kt pw	4 705	4 858	4 934	5 012	5 077	5 140	5 204	5 267	5 329	5 392	5 455
OECD²												
Production	kt pw	2 562	2 674	2 708	2 733	2 764	2 783	2 803	2 825	2 846	2 870	2 895
Consumption	kt pw	818	828	836	845	854	861	863	870	877	883	890
Stock changes	kt pw	23	-5	-5	-5	-5	-5	0	0	0	0	0
WHEY POWDER												
Price ⁴	USD/t	903	955	1 007	1 029	1 052	1 089	1 121	1 153	1 188	1 221	1 252
CASEIN												
Price ⁵	USD/t	5 958	5 936	6 075	6 230	6 389	6 563	6 729	6 913	7 095	7 284	7 472

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand in aggregates. Average 2016-18est: Data for 2018 are estimated. Prices are in nominal terms.

1. FOB export price, non-fat dry milk, 1.25% butterfat, Oceania.
2. Excludes Iceland but includes all EU member countries
3. FOB export price, WMP 26% butterfat, Oceania.
4. FOB export price, sweet whey non-hygroscopic, Western Europe.
5. Export price, New Zealand.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.7. World fish and seafood projections

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
FISH¹												
World												
Production	kt	172 268	178 537	180 246	180 582	184 508	187 299	189 342	191 143	191 488	194 478	196 324
of which aquaculture	kt	79 833	85 329	87 769	90 000	93 044	94 682	96 371	97 854	99 264	100 736	102 156
Consumption	kt	172 525	178 432	180 221	180 722	184 533	187 114	189 107	190 793	191 753	194 503	196 449
of which for food	kt	152 784	158 502	160 667	162 250	165 752	168 306	170 306	171 992	173 830	175 812	177 777
of which for reduction	kt	15 226	15 529	15 275	14 315	14 747	14 896	14 975	15 063	14 271	15 126	15 194
Price												
Aquaculture ²	USD/t	2 952.2	2 936.7	3 050.7	3 315.1	3 325.7	3 368.7	3 507.1	3 580.5	3 635.8	3 588.0	3 626.2
Capture ³	USD/t	1 683.4	1 719.0	1 760.2	1 864.7	1 873.2	1 891.3	1 935.7	1 952.8	1 979.6	1 959.9	1 976.5
Product traded ⁴	USD/t	2 977.5	3 059.1	3 145.1	3 382.7	3 393.6	3 437.4	3 542.6	3 580.5	3 635.8	3 588.0	3 626.2
Developed countries												
Production	kt	29 603	30 102	30 240	30 099	30 196	30 540	30 625	30 726	30 765	30 844	30 921
of which aquaculture	kt	4 579	4 744	4 882	4 983	5 061	5 136	5 208	5 293	5 308	5 372	5 431
Consumption	kt	37 357	37 352	37 365	37 446	37 846	38 057	38 291	38 223	38 420	38 450	38 630
of which for food	kt	32 111	32 256	32 328	32 466	32 905	33 124	33 386	33 341	33 549	33 612	33 819
of which for reduction	kt	4 379	4 321	4 267	4 215	4 181	4 178	4 150	4 127	4 116	4 083	4 056
Developing countries												
Production	kt	142 666	148 435	150 006	150 482	154 313	156 759	158 717	160 418	160 723	163 634	165 403
of which aquaculture	kt	75 254	80 585	82 887	85 017	87 982	89 546	91 163	92 561	93 956	95 364	96 725
Consumption	kt	135 168	141 080	142 856	143 276	146 688	149 058	150 816	152 571	153 333	156 053	157 819
of which for food	kt	120 673	126 246	128 339	129 784	132 847	135 182	136 920	138 651	140 281	142 200	143 958
of which for reduction	kt	10 848	11 208	11 009	10 100	10 566	10 717	10 826	10 936	10 155	11 043	11 138
OECD												
Production	kt	28 824	29 637	29 753	29 305	29 513	29 890	30 000	30 120	29 821	30 166	30 378
of which aquaculture	kt	6 373	6 673	6 824	6 960	7 058	7 166	7 262	7 366	7 415	7 517	7 617
Consumption	kt	38 532	38 728	38 806	38 699	39 202	39 423	39 678	39 623	39 650	39 843	40 067
of which for food	kt	33 050	33 223	33 366	33 517	33 994	34 241	34 524	34 493	34 716	34 799	35 035
of which for reduction	kt	4 460	4 564	4 514	4 271	4 312	4 301	4 288	4 279	4 098	4 223	4 226
FISHMEAL⁵												
World												
Production	kt	4 865.7	5 033.3	5 022.3	4 822.3	4 974.4	5 066.2	5 132.5	5 203.6	5 049.8	5 316.4	5 380.6
from whole fish	kt	3 526.6	3 708.3	3 659.3	3 437.5	3 552.5	3 597.6	3 626.9	3 659.8	3 474.6	3 699.4	3 727.5
Consumption	kt	4 785.5	5 115.7	5 110.7	5 142.3	4 930.4	5 082.2	5 161.5	5 234.1	5 292.9	5 225.4	5 302.5
Variation in stocks	kt	80.2	-57.4	-63.4	-295.1	69.0	9.0	-4.0	-5.6	-243.1	90.9	78.0
Price ⁶	USD/t	1 463.3	1 490.2	1 532.0	1 618.7	1 572.7	1 608.4	1 645.0	1 684.0	1 818.9	1 753.7	1 765.8
Developed countries												
Production	kt	1 523.2	1 561.8	1 563.6	1 561.7	1 570.6	1 595.9	1 607.6	1 621.6	1 637.5	1 648.4	1 660.1
from whole fish	kt	1 523.2	1 561.8	1 563.6	1 561.7	1 570.6	1 595.9	1 607.6	1 621.6	1 637.5	1 648.4	1 660.1
Consumption	kt	1 546.1	1 625.3	1 603.8	1 556.8	1 481.6	1 477.5	1 464.2	1 457.7	1 427.5	1 405.5	1 405.6
Variation in stocks	kt	4.5	-33.4	-3.4	-64.1	32.0	2.0	-3.0	-3.6	-57.1	33.9	11.0
Developing countries												
Production	kt	3 342.6	3 471.5	3 458.8	3 260.5	3 403.9	3 470.4	3 524.9	3 581.9	3 412.4	3 668.0	3 720.4
from whole fish	kt	3 342.6	3 471.5	3 458.8	3 260.5	3 403.9	3 470.4	3 524.9	3 581.9	3 412.4	3 668.0	3 720.4
Consumption	kt	3 423.1	3 640.4	3 631.9	3 685.6	3 523.8	3 654.7	3 722.2	3 776.4	3 865.4	3 820.0	3 897.0
Variation in stocks	kt	75.7	-24.0	-60.0	-231.0	37.0	7.0	-1.0	-2.0	-186.0	57.0	67.0
OECD												
Production	kt	1 517.6	1 575.2	1 573.6	1 524.0	1 545.3	1 563.3	1 573.9	1 586.3	1 558.4	1 601.4	1 614.9
from whole fish	kt	1 517.6	1 575.2	1 573.6	1 524.0	1 545.3	1 563.3	1 573.9	1 586.3	1 558.4	1 601.4	1 614.9
Consumption	kt	1 696.2	1 815.8	1 797.7	1 752.0	1 659.6	1 662.1	1 652.2	1 648.2	1 623.1	1 600.0	1 607.9
Variation in stocks	kt	7.8	-34.4	-18.4	-74.1	27.0	7.0	-1.0	-0.6	-62.1	33.9	31.0

Table C.7. World fish and seafood projections (cont.)

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
FISH OIL⁵												
World												
Production	kt	1 086.2	1 028.7	1 037.3	1 012.4	1 043.0	1 063.0	1 078.4	1 094.0	1 070.6	1 116.4	1 128.5
from whole fish	kt	614.5	645.2	645.4	614.1	636.8	646.9	654.5	662.4	631.2	669.4	673.9
Consumption	kt	1 095.9	1 057.9	1 067.8	1 077.4	1 036.0	1 075.6	1 079.9	1 091.7	1 111.4	1 086.0	1 128.8
Variation in stocks	kt	-19.8	0.8	-5.6	-45.0	22.0	-2.6	3.5	2.3	-40.8	30.4	-0.3
Price ⁷	USD/t	1 601.0	1 633.4	1 688.1	1 803.0	1 787.7	1 837.4	1 880.9	1 925.5	2 053.9	2 009.2	2 048.1
Developed countries												
Production	kt	435.9	429.4	432.5	433.8	437.8	445.2	449.2	453.5	458.4	462.3	466.4
from whole fish	kt	435.9	429.4	432.5	433.8	437.8	445.2	449.2	453.5	458.4	462.3	466.4
Consumption	kt	571.5	602.7	600.2	610.5	583.8	610.8	616.1	628.3	645.6	620.3	644.2
Variation in stocks	kt	-8.5	-2.2	-2.6	-21.0	15.0	1.4	-1.5	-1.7	-19.8	16.4	2.7
Developing countries												
Production	kt	651.3	599.3	604.7	578.6	605.2	617.8	629.2	640.5	612.2	654.1	662.2
from whole fish	kt	651.3	599.3	604.7	578.6	605.2	617.8	629.2	640.5	612.2	654.1	662.2
Consumption	kt	479.9	425.2	442.7	446.9	437.2	454.8	458.8	463.4	465.8	465.7	484.7
Variation in stocks	kt	-11.3	3.0	-3.0	-24.0	7.0	-4.0	5.0	4.0	-21.0	14.0	-3.0
OECD												
Production	kt	508.5	523.6	526.0	516.7	523.3	529.0	532.5	536.2	531.1	541.5	545.6
from whole fish	kt	508.5	523.6	526.0	516.7	523.3	529.0	532.5	536.2	531.1	541.5	545.6
Consumption	kt	714.4	754.9	762.7	767.5	736.0	766.0	768.5	778.7	788.2	766.6	797.1
Variation in stocks	kt	-1.7	-1.2	-4.6	-19.0	10.0	-2.6	5.5	-0.7	-18.8	11.4	-2.3

Note: The term "fish" indicates fish, crustaceans, molluscs and other aquatic animals, but excludes aquatic mammals, crocodiles, caimans, alligators and aquatic plants. Average 2016-18est: Data for 2018 are estimated. Prices are in nominal terms.

1. Data are in live weight equivalent.
2. World unit value of aquaculture fisheries production (live weight basis).
3. FAO estimated value of world ex vessel value of capture fisheries production excluding for reduction.
4. World unit value of trade (sum of exports and imports).
5. Data are in product weight.
6. Fishmeal, 64-65% protein, Hamburg, Germany.
7. Fish oil, any origin, N.W. Europe.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.8. World biofuel projections

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ETHANOL												
World												
Production	mIn L	122.5	126.3	128.5	130.6	132.4	134.2	136.0	137.7	139.5	141.3	143.1
Consumption	mIn L	121.9	127.3	129.3	131.0	132.7	134.4	136.2	137.9	139.7	141.4	143.2
Exports	mIn L	10.5	11.1	10.8	10.8	10.7	10.8	10.8	10.7	10.6	10.5	10.4
Price ¹	USD/hl	42.6	40.9	44.5	47.1	48.7	49.4	50.7	50.7	51.3	52.0	52.6
Developed countries												
Production	mIn L	72.3	73.3	73.6	73.6	73.9	74.0	74.1	74.3	74.4	74.5	74.6
Consumption	mIn L	70.1	71.7	72.5	72.6	72.9	72.9	73.3	73.4	73.5	73.6	73.7
Net trade	mIn L	2.1	2.1	1.7	1.5	1.3	1.3	1.1	1.1	1.0	1.0	1.0
Developing countries												
Production	mIn L	50.1	53.0	54.9	57.0	58.6	60.2	61.8	63.4	65.1	66.8	68.5
Consumption	mIn L	51.7	55.6	56.8	58.5	59.8	61.5	62.9	64.5	66.1	67.8	69.5
Net trade	mIn L	-1.7	-2.1	-1.7	-1.5	-1.3	-1.3	-1.1	-1.1	-1.0	-1.0	-1.0
OECD²												
Production	mIn L	71.4	72.4	72.6	72.7	72.9	73.1	73.2	73.3	73.4	73.5	73.6
Consumption	mIn L	70.2	71.7	72.5	72.6	72.9	73.0	73.3	73.4	73.6	73.6	73.7
Net trade	mIn L	1.1	1.2	0.7	0.5	0.3	0.3	0.1	0.1	0.1	0.0	0.0
BIODIESEL												
World												
Production	mIn L	36.8	43.1	44.2	43.9	43.7	43.9	43.9	44.0	44.0	44.0	43.9
Consumption	mIn L	37.6	43.6	44.5	44.2	44.0	44.2	44.2	44.3	44.3	44.3	44.2
Exports	mIn L	4.1	4.8	4.1	3.8	3.7	3.6	3.6	3.5	3.5	3.5	3.4
Price ³	USD/hl	88.4	87.3	88.4	90.4	91.3	91.2	92.7	92.6	93.2	94.1	94.7
Developed countries												
Production	mIn L	21.3	24.6	25.7	25.3	24.9	24.6	24.3	24.0	23.7	23.3	22.9
Consumption	mIn L	24.2	27.5	28.0	27.3	26.8	26.5	26.2	25.9	25.6	25.2	24.8
Net trade	mIn L	-2.6	-2.8	-2.3	-2.0	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-2.0
Developing countries												
Production	mIn L	15.5	18.5	18.5	18.6	18.9	19.3	19.6	19.9	20.3	20.7	21.0
Consumption	mIn L	13.4	16.1	16.5	16.9	17.3	17.7	18.0	18.3	18.7	19.0	19.4
Net trade	mIn L	2.2	2.4	2.0	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6
OECD²												
Production	mIn L	22.0	25.3	26.4	25.9	25.5	25.3	24.9	24.7	24.4	24.0	23.6
Consumption	mIn L	24.9	28.2	28.7	27.9	27.4	27.2	26.8	26.6	26.3	25.9	25.5
Net trade	mIn L	-2.5	-2.7	-2.3	-2.0	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9

Note: Average 2016-18est: Data for 2018 are estimated. Prices are in nominal terms.

1. Wholesale price, United States, Omaha.
2. Excludes Iceland but includes all EU member countries
3. Producer price Germany net of biodiesel tariff and energy tax.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.9. World cotton projections

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
WORLD												
Production	Mt	25.2	26.4	26.6	26.8	27.2	27.5	27.9	28.2	28.6	28.9	29.2
Area	Mha	32.1	33.5	33.6	33.7	33.9	34.1	34.3	34.5	34.8	34.9	35.1
Yield	t/ha	0.78	0.79	0.79	0.80	0.80	0.81	0.81	0.82	0.82	0.83	0.83
Consumption ¹	Mt	26.2	27.3	27.6	27.7	27.9	28.0	28.0	28.2	28.5	28.8	29.2
Exports	Mt	8.8	9.9	10.2	10.3	10.5	10.7	10.8	11.0	11.2	11.4	11.6
Closing stocks	Mt	18.6	16.9	15.9	15.0	14.3	13.8	13.6	13.6	13.6	13.7	13.7
Price ²	USD/t	1 908.9	1 745.4	1 627.4	1 597.2	1 631.3	1 666.5	1 696.5	1 707.1	1 713.8	1 722.2	1 734.7
DEVELOPED COUNTRIES												
Production	Mt	6.6	6.6	6.6	6.6	6.7	6.8	6.9	6.9	7.0	7.0	7.1
Consumption	Mt	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9
Exports	Mt	5.1	5.0	5.2	5.2	5.3	5.3	5.4	5.4	5.4	5.5	5.5
Imports	Mt	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Closing stocks	Mt	2.1	2.4	2.4	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5
DEVELOPING COUNTRIES												
Production	Mt	18.6	19.8	20.0	20.2	20.4	20.7	21.0	21.3	21.6	21.9	22.1
Consumption	Mt	24.6	25.6	25.9	26.0	26.1	26.3	26.2	26.4	26.7	27.0	27.3
Exports	Mt	3.7	4.9	4.9	5.1	5.2	5.4	5.5	5.6	5.8	5.9	6.1
Imports	Mt	8.6	9.6	9.8	10.0	10.2	10.4	10.5	10.7	10.9	11.1	11.3
Closing stocks	Mt	16.6	14.6	13.6	12.7	12.0	11.4	11.2	11.2	11.2	11.2	11.2
OECD³												
Production	Mt	6.3	6.4	6.5	6.6	6.7	6.7	6.8	6.9	7.0	7.0	7.1
Consumption	Mt	3.2	3.3	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7
Exports	Mt	4.6	4.4	4.6	4.6	4.7	4.8	4.8	4.8	4.9	4.9	5.0
Imports	Mt	1.5	1.4	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Closing stocks	Mt	2.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. Prices are in nominal terms.

1. Consumption for cotton means mill consumption and not final consumer demand.

2. Cotlook A index, Middling 1 1/8", c.f.r. far Eastern ports (August/July).

3. Excludes Iceland but includes all EU member countries.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

ANNEX C

Table C.10. Economic assumptions

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REAL GDP¹												
Australia	%	2.6	2.9	2.6	3.4	3.4	3.3	3.3	3.2	3.2	3.1	3.1
Canada	%	2.2	2.2	1.9	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Chile	%	2.2	3.4	3.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
European Union	%	2.1	1.7	1.6	1.5	1.5	1.5	1.4	1.5	1.4	1.4	1.4
Japan	%	1.2	1.0	0.7	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3
Korea	%	2.9	2.8	2.9	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4
Mexico	%	2.4	2.5	2.8	2.8	2.8	2.8	2.8	2.9	2.9	3.0	3.1
New Zealand	%	3.3	2.8	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5
Norway	%	1.6	1.9	2.3	2.4	2.3	2.2	2.1	2.0	2.0	1.9	1.9
Switzerland	%	2.1	1.6	1.6	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0
Turkey	%	4.7	0.4	2.6	2.1	2.2	2.6	2.6	2.6	2.6	2.6	2.6
United Kingdom	%	1.6	1.4	1.1	2.9	2.9	2.8	2.7	2.7	2.6	2.6	2.5
United States	%	2.2	2.7	2.1	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4
Brazil	%	-0.4	2.1	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.7	2.7
China	%	6.7	6.3	6.0	4.9	4.6	4.4	4.2	4.0	3.9	3.7	3.6
Egypt	%	4.6	5.5	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
India	%	7.0	7.4	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Indonesia	%	5.1	5.1	5.2	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4
Iran	%	4.9	-3.6	1.1	1.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Malaysia	%	4.9	4.6	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Pakistan	%	5.2	4.0	3.5	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Russia	%	1.0	1.5	1.8	2.9	2.9	2.8	2.8	2.8	2.8	2.7	2.7
Saudi Arabia	%	1.0	2.4	1.9	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.3
South Africa	%	0.9	1.4	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Ukraine	%	2.8	2.7	3.0	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4
OECD ^{2,3}	%	2.2	2.1	1.9	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
PCE DEFLATOR¹												
Australia	%	1.2	1.6	2.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Canada	%	1.4	2.0	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Chile	%	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
European Union	%	0.6	1.7	1.8	1.6	1.8	1.8	1.7	1.7	1.7	1.7	1.7
Japan	%	0.0	0.9	1.6	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
Korea	%	1.3	1.8	1.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Mexico	%	4.8	4.4	3.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
New Zealand	%	1.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Norway	%	2.4	2.1	1.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8
Switzerland	%	0.3	0.9	1.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0
Turkey	%	11.3	16.7	14.2	13.4	13.0	13.0	12.1	11.3	10.6	9.9	9.2
United Kingdom	%	1.9	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
United States	%	1.6	2.1	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Brazil	%	5.1	4.9	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
China	%	1.9	2.4	2.6	2.8	2.9	3.0	3.0	3.0	3.0	3.0	3.0
Egypt	%	18.2	14.0	10.9	7.8	7.2	7.0	7.0	7.0	7.0	7.0	7.0
India	%	4.3	4.9	4.6	4.3	4.1	4.0	4.0	4.0	4.0	4.0	4.0
Indonesia	%	3.6	3.8	3.8	3.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Iran	%	16.1	34.1	24.2	17.5	13.5	12.0	12.0	12.0	12.0	12.0	12.0
Malaysia	%	2.3	2.3	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.3
Pakistan	%	3.6	7.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Russia	%	4.5	5.1	4.8	4.8	4.8	4.6	4.6	4.6	4.6	4.6	4.6
Saudi Arabia	%	1.3	2.0	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
South Africa	%	5.5	5.3	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Ukraine	%	13.1	7.3	6.0	5.8	5.3	5.2	5.2	5.2	5.2	5.2	5.2
OECD ^{2,3}	%	1.9	3.0	3.1	3.1	3.2	3.3	3.3	3.2	3.2	3.2	3.2

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Table C.10. Economic assumptions (cont.)

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
GDP DEFLATOR¹												
Australia	%	2.1	1.1	1.4	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Canada	%	1.6	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Chile	%	3.5	2.1	3.2	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0
European Union	%	0.0	1.7	1.8	1.6	1.8	1.8	1.7	1.7	1.7	1.7	1.7
Japan	%	0.0	0.3	1.6	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
Korea	%	1.6	2.0	2.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Mexico	%	5.7	5.6	4.6	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
New Zealand	%	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Norway	%	2.9	3.3	2.2	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8
Switzerland	%	-0.1	1.2	1.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0
Turkey	%	10.9	15.3	12.0	12.1	12.5	12.8	12.0	11.1	10.4	9.7	9.0
United Kingdom	%	2.0	1.7	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
United States	%	1.7	2.2	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Brazil	%	5.0	4.4	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
China	%	2.7	3.0	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Egypt	%	16.9	13.8	10.7	7.7	7.2	7.0	7.0	7.0	7.0	7.0	7.0
India	%	3.7	4.3	4.1	3.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Indonesia	%	3.4	3.6	3.8	3.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Iran	%	1.7	2.2	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Malaysia	%	2.1	2.6	3.0	2.8	2.7	2.4	2.4	2.4	2.4	2.4	2.4
Pakistan	%	2.5	6.8	5.3	4.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Russia	%	6.0	5.3	3.4	3.9	3.9	4.0	4.0	4.0	4.0	4.0	4.0
Saudi Arabia	%	4.7	0.9	0.6	0.3	0.8	1.1	1.1	1.1	1.1	1.1	1.1
South Africa	%	5.7	5.3	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Ukraine	%	16.6	8.4	8.1	8.0	7.3	6.8	6.8	6.8	6.8	6.8	6.8
OECD ³	%	1.8	2.9	2.9	2.9	3.0	3.1	3.1	3.1	3.1	3.1	3.1
WORLD INPUT PRICES												
Brent crude oil ⁴	USD/barrel	56.7	58.1	59.5	60.7	62.0	63.2	64.5	65.8	67.2	68.5	69.9
Fertiliser ⁵	USD/t	247.8	249.2	251.2	254.4	257.2	260.1	262.6	266.2	270.2	274.5	278.8
EXCHANGE RATES												
Australia	AUD/USD	1.33	1.41	1.41	1.45	1.49	1.53	1.56	1.60	1.63	1.66	1.69
Canada	CAD/USD	1.31	1.31	1.31	1.33	1.35	1.36	1.37	1.38	1.39	1.40	1.41
Chile	CLP/USD	652.29	653.60	658.46	663.23	667.98	672.89	677.83	682.82	687.84	692.89	697.99
European Union	EUR/USD	0.88	0.88	0.88	0.89	0.90	0.90	0.91	0.91	0.92	0.92	0.93
Japan	JPY/USD	110.48	112.80	112.80	113.60	114.31	114.94	115.50	116.01	116.46	116.86	117.23
Korea	KRW/USD	1 131.32	1 140.60	1 140.60	1 144.61	1 149.28	1 154.60	1 160.54	1 167.06	1 174.11	1 181.66	1 189.67
Mexico	MXN/USD	18.88	19.95	19.95	20.01	20.08	20.17	20.26	20.36	20.47	20.59	20.72
New Zealand	NZD/USD	1.43	1.52	1.52	1.56	1.60	1.63	1.65	1.68	1.70	1.72	1.74
Brazil	BRL/USD	3.44	3.70	3.70	3.89	4.08	4.27	4.45	4.63	4.82	5.00	5.18
China	CNY/USD	6.68	6.97	6.97	7.02	7.08	7.14	7.20	7.26	7.31	7.37	7.43
Egypt	EGP/USD	13.53	17.86	18.39	19.84	21.29	22.12	22.99	23.88	24.81	25.78	26.78
India	INR/USD	67.14	71.24	72.54	73.73	74.90	76.10	77.31	78.54	79.79	81.07	82.36
Indonesia	'000 IDR/USD	13.80	15.09	14.96	15.19	15.38	15.56	15.75	15.94	16.13	16.33	16.52
Malaysia	MYR/USD	4.19	4.10	4.11	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
Pakistan	PKR/USD	103.10	108.22	111.21	114.16	117.53	120.90	124.38	127.95	131.62	135.40	139.28
Russia	RUB/USD	62.65	65.59	65.59	65.51	65.57	65.76	66.06	66.46	66.95	67.53	68.19
Saudi Arabia	SAR/USD	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
South Africa	ZAR/USD	13.69	13.60	13.94	14.38	14.80	15.26	15.74	16.24	16.75	17.28	17.82
Ukraine	UAH/USD	26.41	28.66	29.92	31.17	32.22	33.23	34.27	35.34	36.45	37.59	38.76
United Kingdom	GBP/USD	0.76	0.79	0.79	0.80	0.81	0.82	0.83	0.83	0.84	0.85	0.85

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Table C.10. Economic assumptions (cont.)

Calendar year

		2018est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
POPULATION¹												
Australia	%	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0
Canada	%	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7
Chile	%	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
European Union	%	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Japan	%	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4
Korea	%	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Mexico	%	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9
New Zealand	%	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Norway	%	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Switzerland	%	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Turkey	%	1.5	1.3	1.1	0.8	0.6	0.5	0.4	0.4	0.5	0.5	0.5
United Kingdom	%	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
United States	%	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Argentina	%	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
Brazil	%	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5
China	%	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.0
Egypt	%	1.9	1.8	1.8	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.4
India	%	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8
Indonesia	%	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7
Iran	%	1.0	1.0	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5
Malaysia	%	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.0
Pakistan	%	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5
Russia	%	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
Saudi Arabia	%	1.9	1.7	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.1
South Africa	%	1.2	1.2	1.1	1.1	1.1	1.0	1.0	0.9	0.9	0.9	0.8
Ukraine	%	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6
OECD ³	%	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
World	%	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REAL GDP PER CAPITA¹												
Australia	%	1.3	1.6	1.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Canada	%	1.3	1.3	1.0	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3
Chile	%	1.4	2.6	2.4	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5
European Union	%	1.9	1.7	1.6	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3
Japan	%	1.4	1.2	1.0	1.3	1.4	1.5	1.6	1.6	1.7	1.7	1.8
Korea	%	2.5	2.4	2.5	2.7	2.6	2.6	2.5	2.4	2.3	2.2	2.2
Mexico	%	1.1	1.3	1.6	1.6	1.7	1.7	1.8	1.9	2.0	2.1	2.2
New Zealand	%	2.3	1.9	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Norway	%	0.6	1.0	1.4	1.5	1.3	1.2	1.2	1.1	1.1	1.1	1.0
Switzerland	%	1.2	0.8	0.9	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4
Turkey	%	3.1	-0.9	1.5	1.3	1.6	2.2	3.0	3.7	4.4	5.0	5.6
United Kingdom	%	1.0	0.8	0.6	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1
United States	%	1.5	2.0	1.4	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7
Brazil	%	-1.2	1.4	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.2
China	%	6.3	5.9	5.7	4.6	4.4	4.2	4.0	3.9	3.8	3.7	3.6
Egypt	%	2.6	3.6	4.1	4.2	4.3	4.3	4.4	4.4	4.4	4.5	4.5
India	%	5.8	6.3	6.6	6.6	6.7	6.7	6.7	6.8	6.8	6.8	6.9
Indonesia	%	3.9	4.1	4.1	4.3	4.3	4.4	4.4	4.5	4.5	4.5	4.6
Iran	%	2.0	-6.6	-2.3	-1.3	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2
Malaysia	%	3.5	3.3	3.5	3.5	3.5	3.5	3.6	3.6	3.7	3.7	3.8
Pakistan	%	3.2	2.1	1.6	1.6	1.2	1.3	1.3	1.4	1.4	1.4	1.5
Russia	%	1.0	1.5	1.8	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Saudi Arabia	%	-1.0	0.7	0.2	0.5	0.7	0.8	0.9	1.0	1.0	1.1	1.1
South Africa	%	-0.4	0.2	0.6	0.7	0.8	0.8	0.8	0.9	0.9	0.9	1.0
Ukraine	%	3.3	3.2	3.5	3.8	3.8	4.0	4.0	4.0	4.0	4.0	4.0
OECD ³	%	1.6	1.7	1.4	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7

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Note: For OECD member countries, as well as Brazil, China and Russia, historical data for real GDP, private consumption expenditure deflator and GDP deflator were obtained from the OECD Economic Outlook No. 104, November 2018. For other economies, historical macroeconomic data were obtained from the IMF, World Economic Outlook, October 2018. Assumptions for the projection period draw on the recent medium term update of the OECD Economics Department, projections of the IMF, and for population, projections from the United Nations World Population Prospects Database, 2017 Revision (medium variant). Data for the European Union are euro area aggregates except for population. The price index used is the private consumption expenditure deflator. Average 2016-18est and 2018est: Data for 2018 are estimated.

1. Annual per cent change.
2. Annual weighted average real GDP and CPI growth rates in OECD countries are based on weights using purchasing power parities (PPPs).
3. Excludes Iceland but includes all EU member countries
4. Short-term update for crude oil price from the OECD Economic Outlook N°104 (November 2018). For 2018, the annual average monthly spot price is used, while the average daily spot price for December 2018 is used as the oil price value for the year 2019 and oil prices during the projection period are expected to remain flat in real terms.
5. World Bank. Data for 2018 are estimated, projections by OECD and FAO Secretariats.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

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Table C.11. World prices

Nominal price

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
CEREALS												
Wheat ¹	USD/t	221.1	225.9	217.1	216.0	217.4	221.0	224.9	227.9	231.4	234.7	237.5
Maize ²	USD/t	158.5	160.6	164.5	165.8	169.0	171.9	175.3	178.3	181.6	184.2	186.0
Other coarse grains ³	USD/t	189.9	189.2	188.3	190.3	192.5	197.6	201.3	205.6	210.1	213.7	216.1
Rice ⁴	USD/t	422.7	436.4	431.5	433.7	434.8	441.3	448.5	454.5	460.5	465.7	470.3
Distiller's dry grains ⁵	USD/t	126.5	134.5	138.0	139.2	141.9	144.2	147.2	150.0	153.2	155.8	157.6
OILSEEDS												
Soybean ⁶	USD/t	393.8	373.5	395.9	403.0	415.4	421.2	431.0	440.3	450.3	459.5	465.8
Other oilseeds ⁷	USD/t	428.0	426.3	431.5	441.5	453.3	458.2	466.0	475.5	484.3	494.5	497.1
Protein meals ⁸	USD/t	332.5	325.2	335.7	339.6	348.3	353.4	360.8	367.9	376.1	382.7	387.2
Vegetable oils ⁹	USD/t	731.6	685.2	715.4	744.8	776.0	794.6	810.3	827.8	846.9	868.9	886.5
SWEETENERS												
Raw sugar ¹⁰	USD/t	314.9	303.0	315.4	331.9	339.4	341.1	341.4	339.0	341.1	346.0	350.0
Refined sugar ¹¹	USD/t	392.6	376.1	391.3	410.2	419.1	422.7	423.8	422.9	427.2	433.0	438.4
HFCS ¹²	USD/t dw	908.9	691.7	693.7	704.0	709.9	715.1	720.2	723.9	731.8	740.3	746.0
Molasses ¹³	USD/t	139.9	145.7	158.6	163.3	162.0	160.1	157.9	157.8	159.7	161.5	162.3
MEAT												
Beef and veal												
Price, EU ¹⁴	USD/t dwt	4 290.1	4 357.8	4 183.7	4 123.4	4 043.6	3 931.4	3 907.8	3 934.2	3 938.3	3 948.1	3 914.5
Price, United States ¹⁵	USD/t dwt	4 258.6	4 119.2	3 947.8	3 979.9	4 001.8	3 928.2	3 913.9	3 981.0	4 017.6	4 061.9	4 103.8
Price, Brazil ¹⁶	USD/t dwt	3 959.3	4 006.5	3 872.4	3 899.8	3 871.0	3 841.0	3 875.6	3 934.1	3 982.2	4 036.2	4 093.6
Pigmeat												
Price, EU ¹⁷	USD/t dwt	1 709.0	1 882.7	1 731.4	1 878.1	1 982.7	2 001.9	2 015.7	2 020.5	1 992.4	1 978.5	1 972.1
Price, United States ¹⁸	USD/t dwt	1 454.4	1 440.5	1 382.4	1 535.8	1 631.2	1 646.5	1 654.4	1 655.7	1 631.3	1 618.6	1 613.2
Price, Brazil ¹⁹	USD/t dwt	2 196.7	2 194.8	2 126.5	2 339.4	2 458.2	2 485.6	2 510.2	2 520.3	2 496.9	2 486.3	2 488.2
Poultry meat												
Price, EU ²⁰	USD/t rtc	2 091.7	2 094.5	2 138.5	2 166.6	2 116.3	2 076.6	2 074.5	2 073.3	2 063.7	2 050.9	2 042.5
Price, United States ²¹	USD/t rtc	1 136.9	1 078.8	1 097.6	1 144.0	1 166.1	1 167.8	1 176.9	1 186.6	1 195.5	1 204.9	1 214.6
Price, Brazil ²²	USD/t rtc	1 579.0	1 549.7	1 585.5	1 654.8	1 689.4	1 698.3	1 715.7	1 733.8	1 751.4	1 769.5	1 787.9
Sheep meat												
Price, New Zealand ²³	USD/t dwt	4 148.5	5 171.6	4 866.0	4 414.0	4 332.4	4 281.7	4 263.9	4 257.5	4 263.9	4 268.3	4 298.0
FISH AND SEAFOOD												
Product traded ²⁴	USD/t	2 977.5	3 059.1	3 145.1	3 382.7	3 393.6	3 437.4	3 542.6	3 580.5	3 635.8	3 588.0	3 626.2
Aquaculture ²⁵	USD/t	2 952.2	2 936.7	3 050.7	3 315.1	3 325.7	3 368.7	3 507.1	3 580.5	3 635.8	3 588.0	3 626.2
Capture ²⁶	USD/t	1 683.4	1 719.0	1 760.2	1 864.7	1 873.2	1 891.3	1 935.7	1 952.8	1 979.6	1 959.9	1 976.5
Meal ²⁷	USD/t	1 463.3	1 490.2	1 532.0	1 618.7	1 572.7	1 608.4	1 645.0	1 684.0	1 818.9	1 753.7	1 765.8
Oil ²⁸	USD/t	1 601.0	1 633.4	1 688.1	1 803.0	1 787.7	1 837.4	1 880.9	1 925.5	2 053.9	2 009.2	2 048.1
DAIRY PRODUCTS												
Butter ²⁹	USD/t	4 504.2	4 066.1	4 112.6	4 199.1	4 270.7	4 334.2	4 400.3	4 484.1	4 554.3	4 636.5	4 704.0
Cheese ³⁰	USD/t	3 530.0	3 515.7	3 548.6	3 615.2	3 676.0	3 734.9	3 796.2	3 866.4	3 931.3	4 002.7	4 071.0
Skim milk powder ³¹	USD/t	2 010.7	2 066.2	2 134.0	2 185.2	2 256.8	2 322.7	2 389.6	2 455.3	2 524.6	2 592.7	2 663.5
Whole milk powder ³²	USD/t	2 841.3	2 925.8	2 987.0	3 065.1	3 126.4	3 197.7	3 267.3	3 344.1	3 420.2	3 501.0	3 580.2
Whey powder ³³	USD/t	902.7	955.2	1 007.4	1 029.4	1 052.2	1 088.7	1 121.2	1 152.8	1 188.4	1 221.4	1 252.3
Casein ³⁴	USD/t	5 958.4	5 936.1	6 075.2	6 230.2	6 389.5	6 562.6	6 729.2	6 912.6	7 095.1	7 283.7	7 471.6
BIOFUEL												
Ethanol ³⁵	USD/hl	42.6	40.9	44.5	47.1	48.7	49.4	50.7	50.7	51.3	52.0	52.6
Biodiesel ³⁶	USD/hl	88.4	87.3	88.4	90.4	91.3	91.2	92.7	92.6	93.2	94.1	94.7
COTTON												
Cotton ³⁷	USD/t	1 908.9	1 745.4	1 627.4	1 597.2	1 631.3	1 666.5	1 696.5	1 707.1	1 713.8	1 722.2	1 734.7
ROOTS AND TUBERS												
Roots and tubers ³⁸	USD/t	397.3	483.4	502.7	506.3	520.2	525.6	538.3	546.0	557.4	565.0	572.3
USA GDP Deflator (2018=1)	Index	0.979	1.022	1.047	1.068	1.090	1.112	1.135	1.158	1.181	1.206	1.230

Table C.11. World prices (cont.)

Real price

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
CEREALS												
Wheat ¹	USD/t	225.5	221.0	207.4	202.2	199.5	198.7	198.2	196.9	195.9	194.7	193.1
Maize ²	USD/t	161.8	157.2	157.2	155.3	155.1	154.5	154.5	154.0	153.7	152.8	151.2
Other coarse grains ³	USD/t	193.6	185.2	179.8	178.2	176.6	177.7	177.4	177.6	177.8	177.2	175.7
Rice ⁴	USD/t	431.5	427.1	412.2	406.0	398.9	396.8	395.3	392.5	389.8	386.3	382.3
Distiller's dry grains ⁵	USD/t	129.1	131.6	131.8	130.3	130.2	129.7	129.7	129.5	129.6	129.2	128.1
OILSEEDS												
Soybean ⁶	USD/t	402.4	365.5	378.1	377.3	381.1	378.8	379.8	380.3	381.1	381.2	378.7
Other oilseeds ⁷	USD/t	437.2	417.1	412.1	413.3	415.9	412.0	410.6	410.7	409.9	410.2	404.1
Protein meals ⁸	USD/t	339.5	318.2	320.7	317.9	319.6	317.8	317.9	317.7	318.3	317.5	314.8
Vegetable oils ⁹	USD/t	748.3	670.5	683.3	697.2	712.0	714.5	714.1	714.9	716.8	720.8	720.6
SWEETENERS												
Raw sugar ¹⁰	USD/t	322.4	296.5	301.2	310.7	311.4	306.7	300.8	292.8	288.7	287.0	284.6
Refined sugar ¹¹	USD/t	401.8	368.1	373.7	384.0	384.5	380.1	373.4	365.2	361.6	359.1	356.4
HFCS ¹²	USD/t dw	929.6	676.9	662.6	659.1	651.3	643.0	634.7	625.2	619.4	614.1	606.4
Molasses ¹³	USD/t	142.9	142.5	151.5	152.9	148.6	143.9	139.2	136.3	135.2	134.0	131.9
MEAT												
Beef and veal												
Price, EU ¹⁴	USD/t dwt	3 813.0	3 713.5	3 479.7	3 361.4	3 230.7	3 078.4	2 998.8	2 958.7	2 902.7	2 851.8	2 771.0
Price, United States ¹⁵	USD/t dwt	4 351.0	4 031.1	3 770.8	3 725.9	3 671.7	3 532.3	3 449.2	3 438.3	3 400.6	3 369.3	3 336.0
Price, Brazil ¹⁶	USD/t dwt	4 043.2	3 920.8	3 698.8	3 650.9	3 551.7	3 453.9	3 415.4	3 397.7	3 370.6	3 348.0	3 327.8
Pigmeat												
Price, EU ¹⁷	USD/t dwt	1 520.0	1 604.3	1 440.0	1 531.0	1 584.1	1 567.5	1 546.9	1 519.5	1 468.5	1 429.1	1 396.0
Price, United States ¹⁸	USD/t dwt	1 485.7	1 409.7	1 320.4	1 437.8	1 496.6	1 480.6	1 458.0	1 430.0	1 380.8	1 342.6	1 311.4
Price, Brazil ¹⁹	USD/t dwt	2 245.2	2 147.8	2 031.2	2 190.1	2 255.4	2 235.1	2 212.2	2 176.7	2 113.4	2 062.4	2 022.7
Poultry meat												
Price, EU ²⁰	USD/t rtc	1 858.7	1 784.8	1 778.7	1 766.2	1 690.9	1 626.0	1 591.9	1 559.2	1 521.0	1 481.4	1 445.8
Price, United States ²¹	USD/t rtc	1 011.7	919.3	912.9	932.6	931.7	914.4	903.1	892.4	881.1	870.3	859.8
Price, Brazil ²²	USD/t rtc	1 612.8	1 516.5	1 514.5	1 549.2	1 550.0	1 527.1	1 512.0	1 497.4	1 482.4	1 467.8	1 453.4
Sheep meat												
Price, New Zealand ²³	USD/t dwt	4 228.1	5 060.9	4 647.9	4 132.3	3 975.1	3 850.2	3 757.6	3 677.1	3 609.1	3 540.5	3 494.0
FISH AND SEAFOOD												
Product traded ²⁴	USD/t	3 039.2	2 993.6	3 004.1	3 166.8	3 113.7	3 091.0	3 121.9	3 092.4	3 077.4	2 976.2	2 947.8
Aquaculture ²⁵	USD/t	3 015.1	2 873.9	2 913.9	3 103.5	3 051.4	3 029.2	3 090.7	3 092.4	3 077.4	2 976.2	2 947.8
Capture ²⁶	USD/t	1 719.0	1 682.2	1 681.3	1 745.7	1 718.7	1 700.7	1 705.9	1 686.6	1 675.6	1 625.7	1 606.8
Meal ²⁷	USD/t	1 494.5	1 458.3	1 463.3	1 515.4	1 443.0	1 446.3	1 449.7	1 454.4	1 539.5	1 454.7	1 435.5
Oil ²⁸	USD/t	1 635.7	1 598.4	1 612.4	1 687.9	1 640.3	1 652.2	1 657.6	1 663.0	1 738.4	1 666.6	1 665.0
DAIRY PRODUCTS												
Butter ²⁹	USD/t	4 589.7	3 979.1	3 928.2	3 931.1	3 918.5	3 897.4	3 877.8	3 872.7	3 854.8	3 846.0	3 824.0
Cheese ³⁰	USD/t	3 601.9	3 440.5	3 389.6	3 384.5	3 372.8	3 358.5	3 345.4	3 339.3	3 327.5	3 320.3	3 309.4
Skim milk powder ³¹	USD/t	2 053.9	2 022.0	2 038.3	2 045.7	2 070.7	2 088.6	2 105.8	2 120.5	2 136.9	2 150.6	2 165.2
Whole milk powder ³²	USD/t	2 898.3	2 863.2	2 853.1	2 869.4	2 868.5	2 875.4	2 879.4	2 888.1	2 894.9	2 904.1	2 910.4
Whey powder ³³	USD/t	801.9	813.9	837.9	839.2	840.6	852.5	860.4	867.0	875.9	882.2	886.5
Casein ³⁴	USD/t	6 085.4	5 809.1	5 802.9	5 832.6	5 862.5	5 901.2	5 930.2	5 970.2	6 005.4	6 041.9	6 073.8
BIOFUEL												
Ethanol ³⁵	USD/hl	43.6	40.1	42.5	44.1	44.6	44.4	44.6	43.8	43.4	43.1	42.8
Biodiesel ³⁶	USD/hl	90.2	85.4	84.5	84.6	83.8	82.0	81.7	80.0	78.9	78.1	77.0
COTTON												
Cotton ³⁷	USD/t	1 948.9	1 708.1	1 554.4	1 495.3	1 496.8	1 498.5	1 495.0	1 474.4	1 450.6	1 428.5	1 410.2
ROOTS AND TUBERS												
Roots and tubers ³⁸	USD/t	404.8	473.1	480.2	474.0	477.3	472.7	474.4	471.6	471.8	468.6	465.3

ANNEX C

Note: This table is a compilation of price information presented in the detailed commodity tables further in this annex. Prices for crops are on marketing year basis and those for products on calendar year basis. See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. Real prices are deflated using USA GDP base year 2018=1.

1. No.2 hard red winter wheat, ordinary protein, United States FOB Gulf Ports (June/May).
2. No.2 yellow corn, United States FOB Gulf Ports (September/August).
3. Feed barley, Europe, FOB Rouen (July/June).
4. Milled 100%, grade b, nominal price quote, FOB Bangkok (January/December).
5. Wholesale price, Central Illinois (September/August).
6. Soybean, U.S., CIF Rotterdam (October/September).
7. Rapeseed, Europe, CIF Hamburg (October/September).
8. Weighted average meal price, European port (October/September).
9. Weighted average price of oilseed oils and palm oil, European port (October/September).
10. Raw sugar world price, ICE contract No11 nearby (October/September).
11. Refined sugar price, Euronext, Liffe, Contract No. 407 London, Europe (October/September).
12. United States wholesale list price HFCS-55, dry weight (October/September).
13. Unit import price, Europe (October/September).
14. EU average beef producer price.
15. Choice steers, 1100-1300 lb lw, Nebraska - lw to dwt conversion factor 0.63.
16. Brazil: frozen beef, export unit value, product weight.
17. EU average pigmeat producer price.
18. Barrows and gilts, No. 1-3, 230-250 lb lw, Iowa/South Minnesota - lw to dwt conversion factor 0.74.
19. Brazil: frozen pigmeat, export unit value, product weight.
20. EU average producer price.
21. Wholesale weighted average broiler price 12 cities average prior 2013. National composite wholesale, broiler.
22. Brazil: export unit value for chicken (FOB), product weight.
23. New Zealand lamb price carcass weight, all grade average.
24. World unit value of trade (sum of exports and imports).
25. World unit value of aquaculture fisheries production (live weight basis).
26. FAO estimated value of world ex-vessel value of capture fisheries production excluding for reduction.
27. Fishmeal, 64-65% protein, Hamburg, Germany.
28. Fish oil any origin, N.W. Europe.
29. FOB export price, butter, 82% butterfat, Oceania.
30. FOB export price, cheddar cheese, 39% moisture, Oceania.
31. FOB export price, non-fat dry milk, 1.25% butterfat, Oceania.
32. FOB export price, WMP 26% butterfat, Oceania.
33. FOB export price, sweet whey non-hygroscopic, Western Europe.
34. Export price, New Zealand.
35. Wholesale price, United States, Omaha.
36. Producer price Germany net of biodiesel tariff and energy tax.
37. Cotlook A index, Middling 1 1/8", c.f.r. far Eastern ports (August/July).
38. Thailand, Bangkok, Cassava (flour), wholesale.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.12.1. World trade projections, imports

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Wheat												
World Trade	kt	174 948	181 381	185 151	187 266	189 867	191 928	193 893	196 743	199 157	201 686	203 974
OECD ¹	kt	37 226	36 583	36 808	36 695	36 433	36 559	36 720	36 804	36 893	36 941	37 060
Developing countries	kt	144 164	150 121	153 941	156 413	159 127	161 135	163 036	165 828	168 182	170 679	172 912
Least Developed Countries	kt	17 328	19 235	19 816	20 075	20 477	20 964	21 469	22 002	22 498	22 995	23 492
Maize												
World Trade	kt	149 077	158 065	160 627	162 705	165 412	168 192	171 072	173 904	176 875	179 724	182 557
OECD ¹	kt	66 613	70 437	71 744	71 616	72 000	72 663	72 883	73 459	74 026	74 584	75 091
Developing countries	kt	110 365	117 644	119 531	122 067	124 617	127 038	130 106	132 771	135 591	138 277	140 981
Least Developed Countries	kt	3 414	4 536	4 585	4 693	4 750	4 778	4 799	4 863	4 914	4 987	5 081
Other coarse grains												
World Trade	kt	39 336	38 867	39 548	40 045	40 753	41 170	42 038	42 580	43 209	43 837	44 516
OECD ¹	kt	7 336	6 881	6 862	6 821	6 750	6 778	6 865	6 828	6 815	6 773	6 749
Developing countries	kt	32 471	31 973	32 798	33 479	34 259	34 613	35 367	35 903	36 512	37 155	37 835
Least Developed Countries	kt	580	728	935	943	1 311	1 171	1 419	1 483	1 591	1 700	1 894
Rice												
World Trade	kt	47 801	49 915	51 364	52 245	53 096	54 062	55 123	56 172	57 277	58 405	59 580
OECD ¹	kt	6 169	6 310	6 373	6 437	6 498	6 557	6 629	6 697	6 766	6 825	6 884
Developing countries	kt	41 670	43 515	44 941	45 765	46 567	47 479	48 483	49 480	50 530	51 611	52 742
Least Developed Countries	kt	10 877	11 244	11 622	12 122	12 607	13 115	13 641	14 192	14 771	15 391	16 039
Soybean												
World Trade	kt	150 824	152 601	154 445	156 365	158 120	160 221	162 124	164 104	166 113	168 179	170 225
OECD	kt	27 247	26 988	27 410	27 628	27 768	27 983	28 154	28 371	28 565	28 759	28 924
Developing countries	kt	129 146	131 504	133 113	134 969	136 694	138 742	140 561	142 418	144 310	146 247	148 194
Least Developed Countries	kt	1 498	1 827	1 900	1 954	1 998	2 039	2 073	2 107	2 141	2 176	2 212
Other oilseeds												
World Trade	kt	20 507	21 021	21 391	21 782	21 994	22 228	22 472	22 685	22 933	23 204	23 589
OECD	kt	10 653	10 683	10 788	10 938	10 922	10 878	10 817	10 772	10 755	10 766	10 822
Developing countries	kt	11 868	12 522	12 819	13 095	13 370	13 699	14 058	14 365	14 679	14 986	15 368
Least Developed Countries	kt	178	193	213	228	246	265	287	306	326	346	370
Protein Meals												
World Trade	kt	90 567	95 882	97 036	97 835	98 847	100 188	101 563	102 960	104 422	105 887	107 472
OECD	kt	48 648	50 431	50 916	50 843	50 827	51 099	51 373	51 628	51 896	52 125	52 414
Developing countries	kt	48 393	52 160	53 211	54 243	55 434	56 704	58 030	59 415	60 852	62 333	63 878
Least Developed Countries	kt	937	984	989	1 010	1 051	1 099	1 154	1 210	1 270	1 330	1 393
Vegetable Oils												
World Trade	kt	80 243	84 558	85 812	87 042	88 173	89 229	90 369	91 560	92 815	94 084	95 417
OECD	kt	21 252	22 267	22 298	22 342	22 338	22 109	21 873	21 631	21 427	21 204	20 912
Developing countries	kt	60 244	63 471	64 714	65 894	67 018	68 281	69 641	71 063	72 507	73 987	75 603
Least Developed Countries	kt	7 417	7 757	7 952	8 154	8 368	8 612	8 877	9 145	9 421	9 699	9 996
Sugar												
World Trade	kt	56 381	53 468	53 882	55 345	56 618	57 789	58 807	59 894	60 888	61 999	63 245
OECD	kt	11 263	11 541	11 345	11 402	11 355	11 358	11 236	11 137	11 109	11 035	10 937
Developing countries	kt	44 501	41 705	42 390	43 735	45 047	46 259	47 440	48 693	49 772	50 988	52 361
Least Developed Countries	kt	8 944	7 782	7 879	8 266	8 725	9 165	9 614	10 108	10 540	11 007	11 528
Beef^{2,3}												
World Trade	kt	9 971	10 541	10 679	10 872	11 064	11 257	11 425	11 589	11 779	11 974	12 161
OECD	kt	4 204	4 326	4 348	4 421	4 463	4 492	4 527	4 551	4 588	4 627	4 665
Developing countries	kt	5 952	6 528	6 689	6 818	6 973	7 146	7 290	7 438	7 601	7 768	7 930
Least Developed Countries	kt	165	173	198	214	234	256	273	294	321	349	377
Pigmeat^{2,3}												
World Trade	kt	8 806	9 310	9 322	9 251	9 318	9 383	9 450	9 536	9 622	9 709	9 798
OECD	kt	4 990	5 129	5 166	5 195	5 276	5 300	5 321	5 368	5 397	5 422	5 458
Developing countries	kt	4 943	5 431	5 306	5 177	5 193	5 242	5 301	5 360	5 432	5 512	5 584
Least Developed Countries	kt	147	147	174	201	215	233	251	269	289	311	333
Poultry meat												
World Trade	kt	13 121	13 423	13 709	13 976	14 232	14 527	14 826	15 130	15 426	15 733	16 045
OECD	kt	3 900	4 020	4 057	4 096	4 127	4 150	4 166	4 177	4 185	4 192	4 198
Developing countries	kt	8 898	9 047	9 327	9 559	9 804	10 077	10 352	10 635	10 914	11 200	11 493
Least Developed Countries	kt	860	873	940	993	1 051	1 117	1 182	1 250	1 321	1 393	1 467
Sheep meat^{2,3}												
World Trade	kt	1 130	1 164	1 172	1 189	1 204	1 216	1 225	1 233	1 242	1 250	1 258
OECD	kt	493	467	467	467	473	476	478	479	481	481	483
Developing countries	kt	653	716	724	741	750	759	767	773	781	788	795
Least Developed Countries	kt	4	4	4	4	4	4	4	4	4	4	5

Table C.12.1. World trade projections, imports (cont.)

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Butter												
World Trade	kt	994	1 067	1 107	1 130	1 147	1 159	1 175	1 191	1 212	1 232	1 252
OECD	kt	312	332	358	369	376	375	377	381	382	387	389
Developing countries	kt	608	645	660	674	682	693	704	716	733	749	766
Least Developed Countries	kt	15	17	18	19	19	20	20	20	20	20	20
Cheese												
World Trade	kt	3 016	3 093	3 170	3 240	3 298	3 353	3 410	3 468	3 525	3 579	3 631
OECD	kt	1 620	1 667	1 685	1 712	1 743	1 766	1 786	1 807	1 828	1 844	1 859
Developing countries	kt	1 347	1 339	1 398	1 436	1 470	1 507	1 548	1 590	1 632	1 669	1 706
Least Developed Countries	kt	24	16	17	17	17	18	18	19	19	19	20
Whole milk powder												
World Trade	kt	2 472	2 575	2 606	2 631	2 661	2 685	2 714	2 745	2 776	2 808	2 841
OECD	kt	137	125	125	125	126	127	128	129	129	130	130
Developing countries	kt	2 339	2 460	2 492	2 518	2 548	2 573	2 602	2 633	2 665	2 697	2 730
Least Developed Countries	kt	207	219	224	229	234	240	246	251	258	264	270
Skim milk powder												
World Trade	kt	2 444	2 633	2 659	2 711	2 752	2 799	2 846	2 895	2 945	2 995	3 046
OECD	kt	558	594	591	599	603	610	616	624	631	639	647
Developing countries	kt	2 125	2 311	2 347	2 398	2 442	2 489	2 537	2 587	2 636	2 687	2 738
Least Developed Countries	kt	122	119	123	127	132	136	141	146	150	155	160
Fish												
World Trade	kt	41 524	41 646	41 954	42 501	43 404	43 606	44 191	44 361	44 827	45 321	45 759
OECD	kt	22 525	22 040	22 072	22 408	22 780	22 766	23 011	22 961	23 202	23 244	23 357
Developing countries	kt	19 556	19 893	20 233	20 535	21 121	21 310	21 677	21 904	22 219	22 690	22 975
Least Developed Countries	kt	1 308	1 431	1 486	1 520	1 608	1 680	1 751	1 817	1 897	2 001	2 098
Fishmeal⁴												
World Trade	kt	3 051	3 245	3 277	3 140	3 102	3 134	3 153	3 159	3 053	3 126	3 149
OECD	kt	1 033	1 066	1 072	981	977	949	934	930	852	902	891
Developing countries	kt	2 198	2 375	2 402	2 356	2 305	2 369	2 406	2 419	2 396	2 415	2 454
Least Developed Countries	kt	19	21	20	20	19	20	20	20	20	21	21
Fish oil⁴												
World Trade	kt	801	845	857	849	842	864	866	877	877	882	907
OECD	kt	654	691	697	690	685	704	705	715	714	717	737
Developing countries	kt	258	272	284	279	272	277	277	276	273	276	286
Least Developed Countries	kt	3	3	3	3	3	3	3	3	3	3	3
Ethanol												
World Trade	kt	10 090	11 073	10 833	10 824	10 726	10 795	10 772	10 714	10 608	10 523	10 436
OECD	kt	5 711	5 937	5 953	6 017	6 009	6 052	6 072	6 008	5 948	5 903	5 859
Developing countries	kt	4 981	5 698	5 458	5 388	5 297	5 325	5 282	5 291	5 247	5 210	5 169
Least Developed Countries	kt	13	3	3	3	3	3	3	3	3	3	3
Biodiesel												
World Trade	kt	4 505	5 084	4 417	4 137	3 992	3 936	3 899	3 859	3 819	3 780	3 738
OECD	kt	4 214	4 841	4 174	3 894	3 748	3 691	3 654	3 614	3 574	3 535	3 493
Developing countries	kt	290	244	243	243	244	245	245	245	245	245	245
Least Developed Countries	kt	0	0	0	0	0	0	0	0	0	0	0
Cotton												
World Trade	kt	8 946	9 894	10 156	10 330	10 526	10 705	10 836	11 018	11 207	11 398	11 590
OECD	kt	1 504	1 441	1 539	1 595	1 581	1 581	1 584	1 591	1 603	1 614	1 625
Developing countries	kt	8 599	9 566	9 821	9 997	10 195	10 378	10 509	10 691	10 879	11 069	11 261
Least Developed Countries	kt	1 678	1 923	2 000	2 070	2 138	2 208	2 282	2 366	2 455	2 546	2 639
Roots and tubers												
World Trade	kt	16 440	17 304	17 398	17 486	17 603	17 710	17 839	17 974	18 106	18 243	18 371
OECD	kt	2 875	2 992	3 020	3 007	3 034	3 020	3 037	3 035	3 049	3 048	3 057
Developing countries	kt	14 148	14 881	14 962	15 077	15 185	15 306	15 425	15 566	15 690	15 834	15 959
Least Developed Countries	kt	216	202	216	220	219	227	229	235	239	245	252

Note: The values do not add up to world trade due to double counting of certain countries and statistical differences (i.e. LDC are already included in the Developing countries aggregate). Average 2016-18est: Data for 2018 are estimated.

1. Excludes Iceland but includes all EU member countries
2. Excludes trade of live animals.
3. Excludes trade of live animals.
4. Data are in product weight.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.12.2. World trade projections, exports

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Wheat												
OECD ¹	kt	95 095	100 252	100 808	101 432	102 001	102 457	103 471	104 459	105 285	106 147	106 795
Developing countries	kt	23 641	23 318	23 586	23 799	23 979	24 237	24 706	25 071	25 474	25 888	26 377
Least Developed Countries	kt	121	110	108	106	105	103	101	99	97	95	94
Maize												
OECD ¹	kt	67 230	67 606	68 104	68 381	69 057	69 650	70 080	70 603	71 156	71 644	72 143
Developing countries	kt	63 538	70 390	71 235	72 595	73 893	75 312	76 895	78 404	79 985	81 514	83 004
Least Developed Countries	kt	3 216	2 748	2 637	2 590	2 558	2 536	2 518	2 485	2 458	2 425	2 382
Other coarse grains												
OECD ¹	kt	27 502	25 785	26 297	26 272	26 768	26 675	27 191	27 370	27 611	27 842	28 120
Developing countries	kt	4 564	4 540	4 306	4 317	4 264	4 315	4 373	4 406	4 471	4 558	4 650
Least Developed Countries	kt	857	476	236	210	161	175	157	157	156	156	154
Rice												
OECD ¹	kt	4 212	4 516	4 473	4 466	4 526	4 561	4 610	4 640	4 673	4 708	4 745
Developing countries	kt	42 990	45 285	46 755	47 639	48 424	49 343	50 347	51 355	52 415	53 494	54 620
Least Developed Countries	kt	4 704	4 806	5 384	5 463	5 636	5 844	6 066	6 308	6 571	6 850	7 162
Soybean												
OECD	kt	60 897	56 050	56 704	56 984	57 244	57 679	58 474	59 485	60 570	61 622	62 589
Developing countries	kt	86 446	92 902	93 917	95 388	96 719	98 215	99 150	99 955	100 728	101 589	102 512
Least Developed Countries	kt	64	76	76	76	74	73	72	71	69	68	66
Other oilseeds												
OECD	kt	15 324	14 606	14 900	15 224	15 380	15 591	15 799	15 919	16 080	16 219	16 499
Developing countries	kt	2 854	2 898	2 904	2 901	2 872	2 812	2 763	2 735	2 708	2 696	2 678
Least Developed Countries	kt	105	112	91	99	94	97	95	99	98	100	98
Protein Meals												
OECD	kt	19 738	20 540	20 699	20 533	20 532	20 716	20 911	21 102	21 332	21 538	21 767
Developing countries	kt	65 405	67 858	68 674	69 450	70 235	71 189	72 165	73 176	74 191	75 237	76 360
Least Developed Countries	kt	359	407	396	400	399	403	403	406	405	408	410
Vegetable Oils												
OECD	kt	7 775	7 435	7 581	7 616	7 651	7 692	7 828	7 901	8 006	8 100	8 293
Developing countries	kt	65 521	67 913	68 827	69 811	70 690	71 475	72 254	73 158	74 074	75 010	75 905
Least Developed Countries	kt	453	468	457	448	438	427	415	404	392	382	371
Sugar												
OECD	kt	8 792	8 974	8 651	8 779	9 062	9 405	9 727	9 977	10 235	10 455	10 624
Developing countries	kt	52 366	48 226	48 421	49 680	50 737	51 628	52 240	52 981	53 594	54 374	55 356
Least Developed Countries	kt	2 466	954	637	449	399	384	374	384	388	369	348
Beef²												
OECD	kt	4 831	5 041	5 083	5 115	5 165	5 227	5 259	5 287	5 335	5 381	5 429
Developing countries	kt	4 767	5 098	5 213	5 353	5 490	5 618	5 744	5 864	5 999	6 140	6 271
Least Developed Countries	kt	2	2	2	2	2	1	1	1	1	1	1
Pigmeat²												
OECD	kt	7 681	8 291	8 178	8 025	8 062	8 113	8 163	8 231	8 300	8 369	8 438
Developing countries	kt	1 140	1 179	1 236	1 264	1 285	1 300	1 313	1 324	1 335	1 345	1 356
Least Developed Countries	kt	1	1	1	1	1	1	1	1	1	1	1
Poultry meat												
OECD	kt	6 811	7 061	7 270	7 323	7 394	7 547	7 663	7 770	7 890	8 008	8 121
Developing countries	kt	7 093	7 454	7 479	7 668	7 828	7 955	8 130	8 316	8 480	8 656	8 840
Least Developed Countries	kt	19	20	19	19	19	18	18	17	17	17	16
Sheep meat²												
OECD	kt	1 092	1 056	1 076	1 101	1 115	1 126	1 132	1 139	1 147	1 156	1 164
Developing countries	kt	87	106	99	98	98	98	99	100	101	103	104
Least Developed Countries	kt	6	6	6	5	6	6	6	6	6	6	6
Butter												
OECD	kt	900	904	940	961	974	981	992	1 002	1 016	1 030	1 043
Developing countries	kt	79	68	69	68	67	66	66	66	67	67	67
Least Developed Countries	kt	4	4	4	4	4	4	4	4	4	4	4
Cheese												
OECD	kt	2 440	2 550	2 633	2 701	2 754	2 802	2 852	2 902	2 950	2 996	3 038
Developing countries	kt	447	356	358	370	375	380	385	389	396	403	410
Least Developed Countries	kt	0	0	0	0	0	0	0	0	0	0	0
Whole milk powder												
OECD	kt	1 858	1 976	2 001	2 018	2 041	2 053	2 068	2 083	2 099	2 117	2 136
Developing countries	kt	576	567	573	580	585	594	605	618	630	641	651
Least Developed Countries	kt	9	9	9	8	8	8	8	8	8	8	8
Skim milk powder												
OECD	kt	2 170	2 354	2 376	2 428	2 465	2 508	2 553	2 600	2 646	2 694	2 742
Developing countries	kt	262	311	311	309	310	309	309	308	308	307	307
Least Developed Countries	kt	5	8	7	7	7	7	7	7	6	6	6

ANNEX C

Table C.12.2. World trade projections, exports (cont.)

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Fish³												
OECD	kt	12 793	12 914	13 044	13 038	13 116	13 243	13 344	13 458	13 373	13 567	13 668
Developing countries	kt	27 013	27 203	27 358	27 881	28 772	28 827	29 343	29 411	29 884	30 306	30 693
Least Developed Countries	kt	1 594	1 516	1 478	1 453	1 394	1 365	1 325	1 293	1 250	1 202	1 158
Fishmeal⁴												
OECD	kt	847	860	866	827	836	843	857	868	849	870	867
Developing countries	kt	2 042	2 230	2 289	2 162	2 148	2 178	2 210	2 226	2 129	2 206	2 210
Least Developed Countries	kt	156	150	155	160	163	165	167	168	171	173	174
Fish oil⁴												
OECD	kt	449	461	465	459	462	470	463	474	476	480	488
Developing countries	kt	430	443	449	435	433	444	442	449	441	451	467
Least Developed Countries	kt	30	32	33	33	34	35	35	36	36	37	37
Ethanol												
OECD	kt	6 793	7 105	6 662	6 554	6 316	6 327	6 173	6 126	5 998	5 920	5 812
Developing countries	kt	3 295	3 563	3 764	3 863	4 002	4 059	4 189	4 176	4 197	4 192	4 212
Least Developed Countries	kt	1	0	0	0	0	0	0	0	0	0	0
Biodiesel												
OECD	kt	1 681	2 106	1 882	1 872	1 852	1 811	1 763	1 710	1 660	1 611	1 559
Developing countries	kt	2 445	2 686	2 243	1 973	1 846	1 830	1 841	1 854	1 863	1 873	1 884
Least Developed Countries	kt	0	0	0	0	0	0	0	0	0	0	0
Cotton												
OECD	kt	4 565	4 382	4 591	4 625	4 717	4 754	4 789	4 837	4 889	4 939	4 985
Developing countries	kt	3 707	4 868	4 947	5 105	5 220	5 370	5 475	5 620	5 770	5 926	6 085
Least Developed Countries	kt	1 056	1 237	1 265	1 300	1 339	1 380	1 422	1 465	1 507	1 550	1 595
Roots and tubers												
OECD	kt	1 718	1 749	1 733	1 780	1 763	1 812	1 812	1 850	1 858	1 893	1 909
Developing countries	kt	11 063	11 697	11 815	11 851	11 983	12 047	12 182	12 285	12 412	12 521	12 636
Least Developed Countries	kt	130	154	141	141	141	136	135	132	131	128	125

Note: Average 2016-18est: Data for 2018 are estimated.

1. Excludes Iceland but includes all EU member countries
2. Excludes trade of live animals.
3. Data are in live weight equivalent and refer to trade of food fish i.e. for human consumption.
4. Data are in product weight.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.13.1. Wheat projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	752 209	838 032	1.49	1.01	174 948	203 974	3.56	1.27	176 580	203 974	3.59	1.27
NORTH AMERICA	85 122	87 232	-0.24	0.13	3 859	3 641	2.85	-0.40	48 352	50 016	0.36	-0.01
Canada	31 298	32 805	2.61	0.21	94	93	1.36	0.02	21 572	23 618	3.07	0.37
United States	53 824	54 427	-1.64	0.09	3 765	3 548	2.89	-0.41	26 781	26 398	-1.49	-0.32
LATIN AMERICA	31 124	37 152	2.12	1.36	24 141	26 107	2.83	0.76	15 048	18 333	5.11	1.56
Argentina	18 794	22 286	6.53	1.30	3	3	0.00	0.00	13 009	15 835	11.61	1.55
Brazil	5 540	6 697	-0.56	1.72	6 569	6 548	0.99	0.03	517	517	-10.67	0.00
Chile	1 421	1 679	0.08	1.21	1 350	971	8.04	-1.54	0	0	..	..
Colombia	12	6	-15.97	2.09	1 962	2 391	4.28	1.42	7	6	17.09	-1.40
Mexico	3 436	4 221	-1.55	1.14	4 961	5 273	5.44	1.49	767	1 108	-3.58	2.60
Paraguay	857	1 020	-7.10	1.11	2	1	0.49	0.68	425	483	-10.68	1.13
Peru	181	216	-2.73	1.49	2 032	2 550	3.42	1.46	9	9	1.56	-1.25
EUROPE	256 197	287 615	2.59	1.00	10 601	10 012	0.78	-0.43	80 218	98 878	9.24	1.88
European Union ¹	130 950	144 241	0.97	0.68	6 387	6 045	-0.55	-0.71	24 332	30 980	2.46	1.30
United Kingdom	15 068	16 718	1.10	0.50	1 596	1 537	3.40	1.07	1 639	1 215	-8.26	-1.12
Russia	76 437	85 028	5.74	1.35	311	351	35.99	1.04	35 578	41 449	18.79	2.00
Ukraine	25 603	32 057	4.31	1.76	49	55	2.00	0.31	16 959	22 868	15.48	2.55
AFRICA	26 430	29 434	1.63	0.90	46 955	62 526	2.54	2.11	1 004	791	-5.04	-1.64
Egypt	8 867	10 082	1.40	1.06	12 067	15 218	2.69	1.32	0	0	..	..
Ethiopia	4 594	5 299	6.39	1.45	1 350	2 637	0.43	4.86	0	0	-75.14	..
Nigeria	69	72	-5.92	0.12	4 567	5 920	1.95	2.44	600	466	3.39	-2.38
South Africa	1 761	2 077	-0.77	1.53	1 438	1 656	0.17	0.30	93	56	-13.63	6.03
ASIA	329 583	369 011	1.36	1.18	88 528	100 692	4.80	1.16	16 584	17 051	1.37	1.16
China ²	133 012	141 030	1.84	0.81	3 813	3 675	12.72	1.29	127	205	-16.80	3.41
India	96 833	112 285	2.05	1.44	2 525	145	52.80	-5.96	516	633	18.68	1.06
Indonesia	0	0	..	..	10 521	13 536	7.61	2.24	127	98	24.63	-2.19
Iran	12 333	15 360	2.01	1.39	584	656	-20.86	-6.78	187	30	11.15	-1.89
Japan	863	939	4.05	0.49	5 736	5 561	-0.04	-0.27	0	0	..	..
Kazakhstan	14 929	16 124	0.42	1.00	67	60	188.85	-0.15	8 123	8 993	1.25	1.17
Korea	35	37	1.37	2.24	4 545	5 315	-0.72	1.62	50	54	0.00	0.67
Malaysia	0	0	..	..	1 514	1 731	2.47	0.44	125	139	9.99	-0.44
Pakistan	25 932	29 879	1.11	1.45	7	6	-38.58	-1.40	815	625	5.74	8.47
Philippines	0	0	..	..	5 790	7 382	8.22	1.91	44	33	496.82	-1.88
Saudi Arabia	10	16	-49.94	5.27	3 519	4 215	7.85	1.12	0	0	..	..
Thailand	1	1	2.15	0.75	3 428	4 218	9.70	2.13	17	11	8.05	-2.09
Turkey	20 700	24 651	0.17	1.37	5 335	4 866	6.32	-1.43	4 575	4 516	5.37	1.46
Viet Nam	0	0	..	..	5 157	6 446	12.58	2.57	51	40	202.19	-2.51
OCEANIA	23 753	27 589	-2.31	1.42	865	996	4.76	1.15	15 373	18 905	-4.09	1.75
Australia	23 339	27 104	-2.33	1.40	26	20	8.94	0.00	15 373	18 905	-4.09	1.75
New Zealand	414	484	-1.13	2.53	521	574	8.11	1.04	0	0	-36.38	..
DEVELOPED COUNTRIES	394 277	434 820	1.41	0.86	30 784	31 062	1.40	-0.04	152 938	177 597	3.71	1.25
DEVELOPING COUNTRIES	357 932	403 212	1.59	1.17	144 164	172 912	4.08	1.52	23 641	26 377	3.02	1.38
LEAST DEVELOPED COUNTRIES (LDC)	8 343	9 521	0.62	1.43	17 328	23 492	5.49	2.24	121	94	-4.37	-1.77
OECD³	282 260	308 333	0.26	0.63	37 226	37 060	2.01	0.12	95 095	106 795	0.14	0.73
BRICS	313 583	347 116	2.64	1.16	14 655	12 375	5.32	0.35	36 831	42 861	14.53	1.97

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.13.2. Wheat projections: Consumption, food

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	741 113	834 844	1.50	1.13	503 381	554 470	1.28	0.85	67.0	66.3	0.11	-0.11
NORTH AMERICA	39 979	40 739	-0.11	0.27	28 900	30 310	0.46	0.36	80.0	77.7	-0.28	-0.35
Canada	9 479	9 224	2.00	0.10	2 745	2 798	-0.13	-0.06	75.0	69.8	-1.12	-0.85
United States	30 500	31 514	-0.68	0.32	26 155	27 512	0.53	0.40	80.6	78.6	-0.19	-0.29
LATIN AMERICA	39 470	44 829	1.76	1.03	35 011	40 139	1.64	1.01	54.4	56.8	0.53	0.19
Argentina	5 838	6 457	1.47	0.95	5 205	5 848	1.17	1.04	117.6	120.3	0.14	0.20
Brazil	11 123	12 677	0.84	0.88	10 837	12 362	0.88	0.89	51.8	55.3	0.00	0.32
Chile	2 519	2 641	2.37	0.38	1 959	1 975	1.10	-0.03	108.5	101.6	0.23	-0.67
Colombia	1 873	2 374	3.97	1.58	1 709	2 170	3.42	1.55	34.8	41.2	2.45	0.93
Mexico	7 596	8 398	2.30	1.23	6 299	7 320	3.64	1.34	48.8	50.5	2.22	0.30
Paraguay	482	533	0.16	1.47	356	404	1.72	1.12	52.3	52.4	0.38	0.03
Peru	2 219	2 751	3.13	1.53	2 085	2 580	3.40	1.51	64.8	71.4	2.07	0.46
EUROPE	188 856	198 750	0.19	0.68	80 995	80 683	0.28	-0.04	109.0	108.8	0.18	-0.01
European Union ¹	113 937	119 285	0.17	0.61	49 962	50 204	0.32	0.04	112.8	113.4	0.24	0.06
United Kingdom	15 682	17 059	1.83	0.66	6 907	7 203	1.47	0.49	104.4	102.9	0.82	0.00
Russia	41 232	43 958	0.55	1.02	14 670	14 133	0.22	-0.40	101.9	99.9	0.14	-0.21
Ukraine	9 471	9 239	-4.08	0.12	4 681	4 358	-1.48	-0.64	105.9	104.5	-0.99	-0.10
AFRICA	73 786	90 761	2.86	1.93	62 626	77 853	2.59	2.00	50.4	48.3	-0.01	-0.36
Egypt	21 283	25 225	2.68	1.56	18 150	21 464	2.26	1.52	186.1	184.4	0.13	-0.05
Ethiopia	5 994	7 910	5.65	2.52	4 827	6 322	4.74	2.46	46.0	47.1	2.09	0.23
Nigeria	4 043	5 517	1.58	2.99	3 838	5 283	3.02	3.00	20.1	21.0	0.33	0.46
South Africa	3 282	3 674	0.72	0.90	3 203	3 556	0.98	0.91	56.5	56.1	-0.37	-0.08
ASIA	389 923	450 086	2.03	1.28	293 101	322 460	1.33	0.84	65.5	66.3	0.30	0.12
China ²	122 365	143 518	0.93	1.11	88 367	90 302	0.31	0.16	62.7	62.6	-0.20	-0.01
India	98 843	110 836	2.78	1.32	80 095	89 780	1.52	1.05	59.8	60.3	0.31	0.10
Indonesia	10 444	13 411	8.12	2.32	6 777	8 732	3.48	2.39	25.7	30.0	2.24	1.51
Iran	14 650	15 956	0.75	0.85	13 500	14 679	1.23	0.70	166.4	166.6	0.01	0.01
Japan	6 577	6 500	0.13	-0.16	5 185	5 081	0.01	-0.30	40.7	41.4	0.13	0.07
Kazakhstan	6 754	7 165	-1.12	1.05	2 587	2 645	1.04	0.06	142.2	132.0	-0.44	-0.77
Korea	4 430	5 297	-0.33	1.62	2 437	2 513	0.59	0.29	47.8	47.8	0.19	0.03
Malaysia	1 455	1 590	4.12	0.65	1 015	1 063	2.41	0.20	32.1	29.4	0.71	-0.99
Pakistan	25 858	29 224	1.62	1.34	24 499	28 230	2.04	1.31	124.3	118.9	-0.03	-0.35
Philippines	5 613	7 319	7.95	2.04	2 450	2 899	1.93	1.50	23.3	23.7	0.30	0.11
Saudi Arabia	3 607	4 174	1.97	1.48	3 250	3 830	2.74	1.50	98.7	99.1	0.10	0.12
Thailand	3 280	4 151	11.21	2.33	1 115	1 305	2.35	1.50	16.2	18.7	1.96	1.44
Turkey	22 122	24 965	1.45	0.84	16 930	18 439	1.55	0.59	209.7	210.9	-0.02	0.04
Viet Nam	4 830	6 366	14.72	2.74	1 624	2 330	4.67	2.99	17.0	22.2	3.54	2.14
OCEANIA	9 098	9 679	4.68	0.85	2 748	3 026	2.91	1.13	69.0	66.2	1.36	-0.10
Australia	7 844	8 225	4.89	0.70	2 041	2 215	3.59	1.10	83.4	80.0	2.11	0.00
New Zealand	929	1 059	4.54	1.69	399	434	0.82	0.75	84.8	84.3	-0.24	-0.04
DEVELOPED COUNTRIES	273 571	288 068	0.27	0.66	134 782	137 420	0.49	0.15	95.4	94.2	0.09	-0.12
DEVELOPING COUNTRIES	467 542	546 776	2.28	1.38	368 598	417 050	1.58	1.09	60.5	60.4	0.22	-0.02
LEAST DEVELOPED COUNTRIES (LDC)	26 062	32 751	4.42	2.10	21 494	27 412	3.79	2.19	25.4	25.4	1.37	-0.05
OECD³	225 380	238 443	0.59	0.61	123 199	128 156	0.80	0.32	92.8	92.4	0.25	-0.06
BRICS	276 846	314 663	1.48	1.16	197 172	210 133	0.82	0.55	62.4	62.5	0.00	0.01

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.14.1. Maize projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	1 128 161	1 311 242	3.59	1.47	149 077	182 557	6.82	1.63	160 127	193 607	7.28	1.53
NORTH AMERICA	387 975	420 131	2.32	0.64	2 525	2 619	2.55	-0.22	62 351	67 438	5.42	0.76
Canada	13 956	15 301	3.19	0.60	1 399	1 607	2.04	-0.34	1 539	1 723	21.75	0.74
United States	374 019	404 830	2.29	0.64	1 126	1 012	10.78	-0.01	60 812	65 715	5.41	0.76
LATIN AMERICA	184 693	233 553	5.63	2.03	35 506	42 274	7.10	1.46	57 550	79 040	9.79	2.18
Argentina	49 157	66 532	10.86	1.98	4	4	0.00	0.00	26 760	36 696	9.78	1.59
Brazil	90 094	114 582	4.80	2.34	1 070	695	8.96	-3.21	27 745	38 834	11.14	2.96
Chile	1 116	1 251	-2.76	1.69	1 689	1 985	13.33	1.91	21	20	-14.33	-0.63
Colombia	1 631	1 947	0.18	2.02	4 912	6 170	5.70	1.92	2	1	3.54	-0.15
Mexico	27 717	30 635	4.10	1.10	15 751	18 557	9.77	1.22	1 166	1 268	18.85	2.42
Paraguay	5 169	6 773	10.28	1.65	11	10	-3.81	0.12	1 836	2 201	4.60	-0.67
Peru	1 517	2 009	-0.15	2.30	3 406	3 767	10.09	2.14	10	10	2.69	-0.27
EUROPE	116 236	131 621	3.54	1.29	17 936	21 123	15.64	0.49	32 298	40 776	15.81	2.05
European Union ¹	63 635	66 041	0.31	0.63	15 198	17 924	18.69	0.56	3 417	3 200	3.29	-0.16
United Kingdom	28	32	224.28	0.00	1 861	2 322	8.38	0.78	128	69	22.01	-5.53
Russia	13 149	18 004	18.13	3.24	80	101	5.34	0.12	5 057	7 884	47.87	3.87
Ukraine	29 314	35 297	11.01	1.50	55	60	4.26	-0.39	21 733	27 343	17.28	1.82
AFRICA	80 544	100 192	3.12	2.12	22 737	27 209	6.71	2.33	4 247	3 843	-1.95	0.33
Egypt	7 467	8 823	0.15	1.52	9 500	11 145	7.49	1.37	0	0	..	..
Ethiopia	8 198	9 968	7.96	1.85	0	0	-83.06	..	700	615	14.04	-2.63
Nigeria	11 454	13 104	5.48	1.27	443	1 025	19.31	18.84	150	105	-10.02	-5.60
South Africa	13 097	15 227	0.45	1.81	745	0	-39.52	..	1 839	2 209	-2.55	2.94
ASIA	358 077	425 035	4.30	1.93	70 291	89 241	5.59	1.85	3 614	2 430	-5.19	-2.44
China ²	260 005	307 180	4.49	2.09	3 588	6 312	11.46	2.72	34	14	-27.91	15.77
India	27 707	33 320	4.75	1.67	52	55	24.20	2.46	709	33	-20.00	-21.22
Indonesia	23 462	29 056	3.80	1.31	752	2 222	-3.35	12.40	99	208	2.14	-2.72
Iran	899	1 080	-7.57	1.78	7 446	10 344	10.37	2.79	0	0	..	..
Japan	0	0	..	..	15 500	15 628	-0.23	-0.11	0	0	..	..
Kazakhstan	799	969	7.87	1.39	5	4	178.18	-0.04	30	89	21.20	0.61
Korea	74	76	-0.33	0.14	9 809	11 034	2.89	0.59	0	0	..	..
Malaysia	68	81	4.80	1.66	3 910	4 780	3.78	1.85	31	25	20.78	-1.82
Pakistan	5 910	7 123	6.62	1.93	12	114	5.63	14.04	42	2	353.43	-20.05
Philippines	7 711	9 124	1.80	1.57	667	1 269	36.82	5.27	0	0	..	..
Saudi Arabia	86	132	-3.82	5.55	4 133	5 923	11.79	2.86	0	0	..	..
Thailand	4 831	5 731	0.07	1.64	126	168	-9.23	2.11	443	82	-2.67	-8.01
Turkey	6 000	7 227	4.93	1.49	2 263	2 758	20.41	1.84	80	69	6.86	-0.40
Viet Nam	5 095	5 160	1.46	0.55	9 045	14 311	33.71	4.11	105	86	40.68	-1.49
OCEANIA	635	709	1.17	0.39	82	92	56.00	1.22	67	80	14.32	1.46
Australia	407	449	0.99	0.64	2	0	69.99	..	63	77	18.01	1.52
New Zealand	218	239	1.47	0.14	79	92	85.01	1.22	3	3	-3.96	0.00
DEVELOPED COUNTRIES	520 524	570 810	2.53	0.82	38 712	41 577	5.55	0.25	96 589	110 603	7.33	1.26
DEVELOPING COUNTRIES	607 637	740 432	4.62	1.99	110 365	140 981	7.32	2.07	63 538	83 004	7.62	1.90
LEAST DEVELOPED COUNTRIES (LDC)	41 292	53 982	4.51	2.58	3 414	5 081	12.80	1.17	3 216	2 382	5.75	-1.34
OECD³	487 399	526 313	2.13	0.68	66 613	75 091	6.21	0.65	67 230	72 143	5.30	0.74
BRICS	404 050	488 313	4.72	2.15	5 536	7 164	12.65	1.93	35 384	48 974	9.00	3.03

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.14.2. Maize projections: Consumption, feed, food

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴		FEED (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	1 111 485	1 300 749	3.44	1.28	651 943	771 953	3.78	1.43	17.8	19.3	0.70	0.72
NORTH AMERICA	328 797	355 030	1.68	0.68	145 459	167 502	1.69	1.39	16.8	15.8	-1.50	-0.56
Canada	13 897	15 189	2.18	0.48	8 770	10 115	3.21	0.95	22.6	14.9	-8.61	-4.11
United States	314 900	339 841	1.66	0.69	136 688	157 387	1.60	1.42	16.1	15.9	-0.02	-0.10
LATIN AMERICA	158 450	195 728	4.49	1.84	101 486	125 785	4.87	1.87	52.9	56.6	0.56	0.49
Argentina	22 311	29 735	12.61	2.49	16 500	22 291	14.91	2.61	35.7	36.6	1.79	0.19
Brazil	61 753	76 114	2.97	1.97	43 277	53 184	2.09	1.88	23.3	25.6	-0.07	0.48
Chile	2 614	3 166	2.14	1.57	1 962	2 458	1.98	1.80	21.3	21.8	0.84	0.20
Colombia	6 475	8 088	4.22	1.92	3 999	5 145	4.18	2.60	49.3	54.7	3.15	0.22
Mexico	41 513	47 850	5.19	1.11	23 181	26 587	9.17	0.98	130.9	133.9	-0.16	0.23
Paraguay	2 428	4 437	14.36	3.08	774	1 562	19.90	2.45	54.4	59.1	0.87	0.73
Peru	4 037	5 590	4.15	2.09	2 764	4 039	2.90	2.48	20.6	22.1	1.15	0.56
EUROPE	100 075	111 819	2.08	0.88	76 675	84 023	2.23	0.51	8.2	8.5	0.27	0.25
European Union ¹	73 936	80 762	1.67	0.64	56 547	59 498	1.97	0.07	9.8	10.1	-0.46	0.24
United Kingdom	1 766	2 287	8.15	1.03	702	1 153	7.66	1.10	8.4	9.0	7.85	0.15
Russia	8 005	10 172	14.07	2.89	6 171	7 962	15.00	3.30	1.4	1.5	4.10	0.78
Ukraine	7 975	7 987	1.92	0.36	5 973	5 954	2.27	0.25	10.8	11.4	-0.29	0.50
AFRICA	96 987	122 843	4.10	2.19	33 901	40 491	5.20	1.85	40.4	41.6	0.38	0.37
Egypt	16 867	19 916	3.71	1.55	12 200	14 795	4.56	1.79	41.7	38.8	-0.56	-0.54
Ethiopia	7 414	9 325	7.51	2.21	1 333	1 322	17.13	1.99	45.4	47.8	1.96	0.28
Nigeria	11 477	13 964	5.92	2.03	2 067	2 365	14.12	1.81	37.0	36.2	1.80	0.20
South Africa	11 536	12 954	1.55	1.37	5 275	6 453	1.20	2.33	89.2	85.2	-0.03	-0.49
ASIA	426 524	514 611	4.81	1.38	293 956	353 628	4.89	1.48	8.3	8.5	0.38	0.23
China ²	264 962	316 499	4.79	1.18	189 000	219 374	4.44	1.18	6.1	6.1	-0.40	-0.01
India	27 033	33 331	7.39	1.75	11 331	15 590	12.16	2.52	7.0	7.2	-0.01	0.23
Indonesia	24 115	31 060	3.48	1.85	10 333	15 009	8.39	2.37	28.7	29.4	0.31	0.25
Iran	8 011	11 386	6.12	2.62	7 786	11 112	6.28	2.64	0.9	0.8	-1.20	-0.96
Japan	15 592	15 648	-0.26	-0.10	11 704	11 638	-0.16	-0.27	0.8	0.9	0.28	0.37
Kazakhstan	780	881	7.67	1.57	677	777	7.19	1.64	0.5	0.6	-1.46	0.15
Korea	10 166	11 110	3.20	0.83	7 867	8 808	3.73	1.06	2.0	1.9	0.82	-0.03
Malaysia	3 898	4 830	3.54	1.87	3 637	4 509	3.35	1.93	1.8	1.9	1.22	0.25
Pakistan	6 213	7 223	7.97	2.00	3 133	3 931	10.81	2.55	8.2	8.4	1.43	0.32
Philippines	8 218	10 357	2.31	1.95	5 476	7 061	1.55	2.15	18.5	19.0	1.24	0.18
Saudi Arabia	4 203	6 046	11.14	2.88	3 997	5 824	10.57	2.97	0.2	0.2	-2.57	-0.99
Thailand	4 597	5 801	0.52	1.85	4 258	5 470	0.77	1.97	1.2	1.1	-0.39	-0.65
Turkey	8 184	9 877	7.71	1.69	6 283	7 724	9.48	1.89	16.1	16.4	0.47	0.15
Viet Nam	14 296	19 360	13.59	3.06	10 842	15 318	11.99	3.51	7.2	8.7	3.47	1.65
OCEANIA	652	719	2.48	0.54	467	524	3.47	0.64	2.3	2.2	-1.11	-0.66
Australia	347	372	-0.04	0.46	186	196	-0.53	0.67	3.2	3.0	-0.92	-0.58
New Zealand	294	328	5.99	0.43	278	317	6.27	0.42	1.5	1.5	-1.05	-0.03
DEVELOPED COUNTRIES	461 133	501 278	1.72	0.72	243 546	274 699	1.80	1.06	12.5	12.6	-0.18	0.00
DEVELOPING COUNTRIES	650 352	799 472	4.83	1.64	408 397	497 255	5.14	1.64	19.1	20.7	0.79	0.77
LEAST DEVELOPED COUNTRIES (LDC)	40 974	56 356	5.24	2.61	10 141	13 104	9.43	1.85	26.8	30.3	0.79	1.19
OECD³	485 340	528 825	2.01	0.72	256 189	288 158	2.41	1.00	22.5	23.7	0.14	0.46
BRICS	373 290	449 070	4.66	1.39	255 054	302 563	4.32	1.44	8.9	9.2	0.01	0.20

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.

2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.

3. Excludes Iceland but includes all EU member countries

4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.15.1. Other coarse grain projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	292 081	325 009	0.63	0.94	39 336	44 516	5.29	1.51	43 078	46 104	4.25	1.46
NORTH AMERICA	26 984	25 485	1.12	-0.18	1 652	1 770	-0.27	0.62	9 820	8 101	3.50	-0.55
Canada	12 348	12 878	0.48	0.16	81	94	10.01	-0.66	5 084	5 438	2.15	0.58
United States	14 636	12 607	1.67	-0.51	1 571	1 676	-0.65	0.70	4 737	2 663	4.78	-2.54
LATIN AMERICA	18 975	21 983	0.18	0.85	1 954	1 996	-11.46	0.24	3 026	3 532	-0.90	0.57
Argentina	6 805	7 809	2.69	0.38	1	1	0.00	0.00	2 825	3 217	-0.96	0.03
Brazil	2 954	4 036	3.14	1.33	579	796	8.50	3.29	2	2	-7.03	-1.25
Chile	870	933	3.17	1.36	109	112	-21.71	-2.72	36	71	-5.79	2.36
Colombia	22	26	-18.93	2.31	343	358	-6.40	0.69	0	0	..	..
Mexico	5 937	6 226	-2.68	0.62	647	554	-19.61	-0.73	0	0	-2.77	..
Paraguay	108	134	5.05	2.09	0	0	..	..	2	0	-0.31	-30.42
Peru	260	322	0.35	1.83	162	150	4.26	-1.11	36	41	295.47	1.12
EUROPE	132 781	141 066	0.34	0.42	2 459	1 910	0.29	-1.51	19 289	23 115	7.10	2.14
European Union ¹	82 141	87 316	-0.07	0.08	1 581	1 079	1.00	-1.36	8 283	10 275	7.02	1.19
United Kingdom	7 740	7 979	2.57	0.23	204	256	1.76	1.73	1 373	1 370	6.16	-0.02
Russia	26 582	27 077	3.09	0.86	212	178	-4.25	0.76	4 516	5 371	16.99	4.28
Ukraine	10 053	11 466	-2.22	1.82	50	52	4.35	0.15	4 925	5 829	3.69	2.35
AFRICA	54 026	67 544	1.59	2.29	3 872	5 601	7.91	3.84	1 427	1 033	1.45	0.69
Egypt	949	1 115	-0.60	1.38	36	53	-11.65	-2.19	0	0	..	..
Ethiopia	13 337	18 557	5.45	3.21	0	0	-75.39	..	432	737	6.13	3.43
Nigeria	8 310	9 982	-2.15	2.36	20	19	0.00	-20.40	100	97	-1.21	27.73
South Africa	516	665	0.54	1.97	202	248	9.60	-1.51	18	27	-7.36	1.11
ASIA	46 149	54 587	0.59	1.27	29 294	33 116	8.43	1.50	1 539	2 031	6.40	1.08
China ²	7 540	9 436	3.87	2.00	12 671	12 878	28.65	1.49	32	21	-8.48	3.08
India	17 370	19 307	-1.39	0.64	207	209	73.33	1.61	76	71	-15.47	-0.87
Indonesia	0	0	..	..	107	132	4.54	1.77	0	0	..	..
Iran	2 953	3 563	1.36	1.50	2 151	4 041	14.10	3.91	0	0	..	..
Japan	225	219	1.54	-0.37	1 998	1 708	-7.07	-1.63	0	0	..	..
Kazakhstan	4 090	5 044	8.68	1.57	7	5	-12.01	-0.27	1 407	1 919	22.19	1.16
Korea	96	115	-1.24	0.55	114	121	4.44	0.61	0	0	..	..
Malaysia	0	0	..	..	15	16	339.46	1.85	0	0	..	..
Pakistan	512	606	-0.52	1.42	134	131	37.45	1.04	0	0	..	..
Philippines	1	1	9.98	1.42	37	52	-0.68	2.25	0	0	..	..
Saudi Arabia	202	271	2.99	2.35	8 059	9 242	1.74	0.89	0	0	..	..
Thailand	170	191	0.41	1.15	24	42	0.00	0.63	2	2	-0.17	-0.12
Turkey	7 635	9 531	-0.52	1.62	394	411	18.94	8.36	12	10	-27.60	-0.74
Viet Nam	3	3	8.42	1.43	123	119	5.59	1.36	0	0	..	..
OCEANIA	13 166	14 343	0.64	1.16	104	123	7.30	0.85	7 977	8 293	2.26	2.41
Australia	12 773	13 871	0.65	1.17	0	0	..	..	7 976	8 292	2.26	2.41
New Zealand	389	467	-0.02	0.71	19	26	69.15	-0.78	0	0	..	..
DEVELOPED COUNTRIES	180 043	189 396	0.69	0.44	6 865	6 681	-2.52	-0.09	38 514	41 454	5.44	1.56
DEVELOPING COUNTRIES	112 039	135 613	0.65	1.69	32 471	37 835	7.75	1.82	4 564	4 650	-2.29	0.55
LEAST DEVELOPED COUNTRIES (LDC)	26 144	31 139	2.67	1.93	580	1 894	-0.08	10.16	857	154	-0.11	-8.53
OECD³	145 857	153 193	0.21	0.25	7 336	6 749	-5.58	-0.14	27 502	28 120	3.91	0.92
BRICS	54 962	60 522	1.33	1.00	13 871	14 311	25.01	1.51	4 645	5 492	13.82	4.17

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.15.2. Other coarse grain projections: Consumption, feed, food

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴		FEED (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	290 801	322 938	0.48	1.05	161 679	175 625	0.13	0.85	10.3	11.0	0.15	0.72
NORTH AMERICA	18 992	19 152	-1.10	-0.01	11 644	11 733	-2.31	-0.10	4.1	4.0	-0.17	-0.46
Canada	7 594	7 535	-1.41	-0.08	7 011	6 996	-1.44	-0.07	6.7	5.7	-1.31	-2.27
United States	11 398	11 617	-0.94	0.05	4 633	4 737	-3.90	-0.13	3.8	3.8	0.02	-0.12
LATIN AMERICA	17 968	20 389	-1.21	1.01	12 211	13 629	-3.39	0.73	3.8	3.9	1.01	0.24
Argentina	4 162	4 592	6.96	0.72	2 506	2 821	5.60	0.05	18.2	17.9	3.09	-0.20
Brazil	3 557	4 831	4.14	1.62	2 121	2 920	3.17	1.11	1.8	2.2	2.74	1.95
Chile	835	948	-6.06	1.67	534	594	-10.32	2.09	3.9	4.5	2.69	1.00
Colombia	366	384	-7.96	0.80	45	44	-27.81	2.58	0.8	0.4	-7.71	-1.05
Mexico	6 584	6 777	-5.79	0.50	5 876	5 994	-6.48	0.46	5.5	5.4	0.68	-0.22
Paraguay	106	134	5.34	2.28	96	111	5.35	1.63	0.0	0.0	-1.57	-1.16
Peru	390	431	0.65	0.79	23	33	-0.65	2.70	6.4	6.1	0.82	-0.46
EUROPE	117 706	119 917	-0.90	0.29	84 068	86 568	-0.87	0.30	13.7	13.3	-0.60	-0.10
European Union ¹	78 212	78 336	-0.62	0.17	57 462	57 870	-0.90	0.08	9.5	9.6	-0.10	0.14
United Kingdom	6 789	6 868	1.97	0.33	3 780	3 806	1.86	0.14	35.6	35.3	0.72	0.24
Russia	21 201	21 839	-0.61	0.12	14 658	15 410	0.60	0.30	14.4	12.2	-2.43	-1.26
Ukraine	5 180	5 649	-6.02	1.57	3 436	3 830	-5.90	2.42	17.0	15.9	-2.86	-0.74
AFRICA	56 064	71 762	1.64	2.41	8 160	9 637	-1.91	2.13	32.2	32.9	0.10	0.34
Egypt	985	1 164	-1.03	1.40	630	797	-1.74	1.98	3.0	2.5	-1.65	-1.54
Ethiopia	12 426	17 612	4.93	3.20	600	650	5.19	0.72	93.8	108.2	1.70	1.39
Nigeria	8 220	9 864	-3.84	2.07	272	331	-24.84	3.13	39.5	35.4	-1.26	-0.63
South Africa	708	885	3.21	0.89	107	151	-1.96	2.27	2.7	2.6	-1.19	0.05
ASIA	74 805	85 547	3.12	1.41	42 024	49 610	5.79	1.99	5.2	5.0	-0.99	-0.12
China ²	20 153	22 356	14.15	1.68	10 940	11 904	50.32	2.98	2.4	2.2	2.44	-0.64
India	18 084	19 451	-0.94	0.67	796	712	8.78	-2.40	12.4	11.9	-1.86	-0.21
Indonesia	107	132	4.54	1.77	0	0	..	..	0.4	0.5	3.31	0.89
Iran	5 137	7 601	4.98	2.71	4 959	7 425	5.19	2.79	0.3	0.3	-1.20	-0.97
Japan	2 226	1 939	-6.02	-1.43	1 592	1 362	-7.92	-1.56	3.8	4.0	1.32	0.40
Kazakhstan	2 610	3 121	4.29	1.94	1 717	2 102	3.30	2.42	2.5	2.3	-1.46	-1.04
Korea	210	235	1.17	0.58	59	59	0.41	-0.19	3.0	3.4	1.10	0.59
Malaysia	14	16	275.93	1.93	13	15	333.97	1.95	0.0	0.0	125.78	0.93
Pakistan	646	738	2.65	1.35	196	202	0.13	0.09	2.1	2.1	2.22	0.32
Philippines	37	53	-0.57	2.23	26	38	-2.56	2.30	0.0	0.1	-0.90	1.14
Saudi Arabia	8 728	9 446	2.37	0.92	8 532	9 247	2.43	0.93	2.7	2.4	-2.57	-0.99
Thailand	192	231	0.37	1.11	56	87	0.85	2.27	1.4	1.4	-0.48	0.15
Turkey	8 046	9 888	0.59	1.80	6 993	8 817	0.71	2.05	3.6	3.3	-1.46	-0.57
Viet Nam	126	123	5.66	1.36	0	0	..	..	0.0	0.0	6.04	1.66
OCEANIA	5 265	6 171	-0.76	0.13	3 571	4 448	-1.20	0.13	6.7	6.6	-3.58	-0.19
Australia	4 770	5 579	-0.96	0.06	3 202	3 996	-1.46	0.07	7.8	7.6	-5.32	-0.36
New Zealand	408	493	0.64	0.62	350	435	0.74	0.71	1.7	1.6	-1.05	-0.80
DEVELOPED COUNTRIES	150 060	154 611	-0.84	0.32	104 936	109 458	-1.03	0.35	8.9	8.5	-0.76	-0.32
DEVELOPING COUNTRIES	140 741	168 327	2.05	1.76	56 743	66 167	2.58	1.73	10.7	11.5	0.31	0.86
LEAST DEVELOPED COUNTRIES (LDC)	25 783	32 792	2.79	2.29	1 775	2 095	6.15	1.85	23.0	24.1	0.32	0.42
OECD³	128 757	131 976	-1.00	0.26	92 903	96 147	-1.56	0.24	7.7	7.6	-0.03	-0.02
BRICS	63 702	69 362	2.75	0.87	28 622	31 098	7.90	1.26	7.1	6.9	-1.12	-0.11

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.16.1. Rice projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	513 426	578 182	1.19	1.04	47 801	59 580	5.09	1.92	47 302	59 580	4.47	1.92
NORTH AMERICA	6 593	7 031	-0.59	0.71	1 212	1 481	3.31	1.58	3 176	3 466	-0.99	0.51
Canada	0	0	..	..	381	454	0.49	1.72	0	0	..	..
United States	6 593	7 031	-0.59	0.71	831	1 027	4.84	1.51	3 176	3 466	-0.99	0.51
LATIN AMERICA	18 528	21 336	0.38	1.23	4 428	4 318	3.66	-0.21	3 419	4 174	2.40	1.80
Argentina	929	1 154	-0.27	2.32	9	10	3.05	0.00	439	532	-5.07	3.25
Brazil	7 932	8 533	-0.61	0.52	743	656	0.13	-1.20	734	969	1.46	0.96
Chile	111	151	4.70	1.46	150	165	3.15	-0.01	3	4	38.32	0.00
Colombia	1 774	1 988	2.22	1.31	185	82	3.69	-2.24	1	1	..	0.17
Mexico	266	238	3.05	-1.35	782	917	3.75	2.27	69	4	18.61	0.00
Paraguay	648	814	17.93	1.40	2	1	7.44	-0.23	581	695	20.72	1.45
Peru	2 192	2 720	1.72	1.82	331	161	14.70	-5.81	66	102	30.61	3.70
EUROPE	2 486	2 535	-0.93	0.53	2 538	2 726	2.16	0.54	710	711	2.27	1.49
European Union ¹	1 756	1 715	-0.89	0.04	1 332	1 483	3.40	0.93	493	484	2.81	0.56
United Kingdom	0	0	..	..	671	687	0.46	0.25	46	27	2.92	-5.00
Russia	674	753	0.22	1.66	231	239	1.68	-0.24	162	192	1.51	6.33
Ukraine	44	52	-12.08	1.42	76	68	3.48	-1.65	2	2	-16.72	1.21
AFRICA	20 834	25 920	3.26	2.22	16 900	29 212	5.97	4.47	462	253	-1.52	-2.58
Egypt	4 043	4 051	1.33	1.41	190	705	21.35	-0.52	125	14	-14.30	-0.48
Ethiopia	104	124	7.23	1.31	497	916	33.25	5.05	0	0	..	..
Nigeria	4 144	4 860	7.47	0.87	2 577	5 275	1.13	6.23	0	0	..	..
South Africa	2	2	0.00	1.70	892	1 050	2.65	1.08	0	0	..	..
ASIA	464 445	520 362	1.19	0.99	22 196	21 279	5.33	-0.21	39 286	50 399	5.54	2.07
China ²	148 376	152 613	0.93	0.32	5 606	5 328	27.90	-0.13	1 239	1 991	10.91	1.99
India	112 650	133 388	2.23	1.44	2	1	22.30	0.80	12 239	16 167	17.99	1.02
Indonesia	46 202	54 346	1.65	1.26	1 257	541	4.40	-10.07	4	9	17.88	1.48
Iran	1 933	2 287	4.11	1.54	1 313	1 396	0.69	0.72	1	1	12.31	-0.05
Japan	7 592	7 573	-0.32	0.11	820	824	0.34	0.00	87	89	-9.53	0.22
Kazakhstan	322	403	5.22	1.67	9	6	-13.77	-1.56	90	117	10.37	1.58
Korea	4 012	3 633	-1.51	-0.87	425	517	2.59	1.55	36	43	20.89	0.00
Malaysia	1 814	2 174	1.66	1.49	904	1 084	-1.12	1.13	21	15	57.05	-0.22
Pakistan	7 130	8 249	2.76	1.45	7	7	-17.89	-0.02	3 886	4 441	0.56	1.47
Philippines	12 443	14 932	1.99	1.55	1 598	1 548	1.81	-0.14	0	1	-4.54	0.01
Saudi Arabia	0	0	..	..	1 187	1 478	0.02	1.38	0	0	..	..
Thailand	22 186	25 262	-1.12	1.02	257	241	-6.24	2.22	10 704	12 038	3.16	2.47
Turkey	552	668	1.53	1.26	289	270	0.23	-0.86	52	51	0.09	0.87
Viet Nam	28 289	32 053	1.15	1.11	600	543	-1.11	-0.72	6 494	8 444	-0.15	2.33
OCEANIA	540	999	-4.75	1.58	526	564	2.72	0.72	249	577	-5.64	2.44
Australia	531	988	-4.84	1.58	175	169	1.52	-0.05	248	576	-5.64	2.45
New Zealand	0	0	..	..	48	56	2.48	1.57	0	0	..	..
DEVELOPED COUNTRIES	17 852	18 946	-0.52	0.53	6 131	6 838	2.20	0.77	4 312	4 960	-1.08	0.87
DEVELOPING COUNTRIES	495 574	559 236	1.26	1.06	41 670	52 742	5.60	2.08	42 990	54 620	5.17	2.02
LEAST DEVELOPED COUNTRIES (LDC)	76 444	91 003	0.99	1.54	10 877	16 039	8.90	4.05	4 704	7 162	12.12	4.06
OECD³	21 414	21 997	-0.70	0.21	6 169	6 884	2.25	0.98	4 212	4 745	-0.98	0.68
BRICS	269 634	295 291	1.40	0.82	7 474	7 274	15.36	-0.07	14 374	19 320	14.91	1.15

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

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- Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
- Excludes Iceland but includes all EU member countries
- Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.16.2. Rice projections: Consumption, food

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	510 499	577 622	1.44	1.07	54.4	55.4	0.00	0.14
NORTH AMERICA	4 622	5 041	0.43	0.94	12.8	12.9	-0.32	0.23
Canada	381	454	0.49	1.72	10.4	11.3	-0.51	0.91
United States	4 241	4 588	0.43	0.86	13.1	13.1	-0.29	0.16
LATIN AMERICA	19 616	21 456	0.73	0.80	28.6	28.4	-0.44	-0.03
Argentina	555	630	4.67	1.56	10.5	11.9	3.83	1.00
Brazil	8 027	8 222	-0.37	0.35	38.4	36.8	-1.24	-0.22
Chile	251	311	3.16	0.77	11.7	13.5	2.38	0.10
Colombia	1 847	2 070	1.64	0.70	34.3	35.6	0.29	0.01
Mexico	930	1 151	1.78	1.31	7.2	7.9	0.39	0.28
Paraguay	122	120	14.35	1.12	6.8	6.8	3.28	0.02
Peru	2 417	2 771	2.33	1.13	65.8	65.8	0.68	0.10
EUROPE	4 331	4 548	0.52	0.39	5.8	6.1	0.43	0.42
European Union ¹	2 584	2 715	0.54	0.36	5.8	6.1	0.47	0.38
United Kingdom	624	661	0.43	0.53	9.4	9.4	-0.21	0.04
Russia	767	798	1.04	0.43	5.3	5.6	0.96	0.62
Ukraine	117	118	-3.64	-0.44	2.6	2.8	-2.91	0.06
AFRICA	37 008	54 791	4.56	3.45	26.1	30.7	2.17	1.26
Egypt	4 128	4 734	1.99	1.30	38.6	37.9	0.07	-0.17
Ethiopia	585	1 028	23.95	4.57	5.0	7.1	20.71	2.59
Nigeria	6 721	10 128	4.91	3.33	29.8	34.4	1.87	0.76
South Africa	917	1 051	3.14	1.08	15.8	16.2	1.86	0.10
ASIA	444 099	490 802	1.26	0.86	77.8	78.7	-0.10	0.11
China ²	149 309	156 547	1.49	0.32	77.3	77.2	0.10	0.01
India	98 712	116 822	1.21	1.54	68.3	72.4	-0.10	0.56
Indonesia	47 321	54 718	1.88	1.17	133.8	136.0	-0.06	0.06
Iran	3 165	3 671	1.89	1.29	34.8	36.7	0.45	0.41
Japan	8 633	8 134	0.38	-0.55	53.8	51.6	-1.09	-0.36
Kazakhstan	236	289	1.96	1.76	11.5	12.8	0.15	0.99
Korea	4 612	4 107	-0.83	-0.60	62.1	54.7	-2.22	-1.13
Malaysia	2 784	3 238	1.03	1.40	80.8	82.5	-0.08	0.22
Pakistan	3 145	3 800	2.87	1.50	12.8	13.1	0.30	-0.05
Philippines	14 035	16 473	1.76	1.28	115.8	116.8	-0.03	0.02
Saudi Arabia	1 320	1 476	1.36	1.39	39.5	37.7	-1.17	0.02
Thailand	13 546	13 456	0.75	0.03	98.7	90.2	-0.14	-0.92
Turkey	791	885	1.74	0.72	9.2	9.5	0.08	0.15
Viet Nam	22 271	24 130	1.41	0.69	153.1	150.2	-0.87	-0.21
OCEANIA	822	985	2.93	1.25	20.4	21.3	1.32	0.03
Australia	467	580	2.80	1.37	19.1	21.0	1.33	0.26
New Zealand	48	56	2.48	1.57	10.2	10.9	1.41	0.77
DEVELOPED COUNTRIES	20 027	20 642	0.70	0.25	12.9	12.9	-0.32	-0.01
DEVELOPING COUNTRIES	490 471	556 981	1.47	1.10	64.1	64.4	-0.13	0.03
LEAST DEVELOPED COUNTRIES (LDC)	82 002	99 659	1.35	1.79	76.4	75.2	-0.03	-0.15
OECD³	23 834	23 956	0.34	0.09	15.5	15.0	-0.86	-0.29
BRICS	257 732	283 439	1.32	0.81	66.5	68.2	-0.02	0.26

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

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2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.17. Main policy assumptions for cereal markets

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ARGENTINA												
Crops export tax ¹	%	4.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rice export tax ¹	%	4.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANADA												
Tariff-quotas ²												
Wheat	kt	350.0	350.0	350.0	350.0	350.0	350.0	350.0	350.0	350.0	350.0	350.0
In-quota tariff	%	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Out-of-quota tariff	%	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
Barley	kt	399.0	399.0	399.0	399.0	399.0	399.0	399.0	399.0	399.0	399.0	399.0
In-quota tariff	%	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Out-of-quota tariff	%	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
EUROPEAN UNION³												
Voluntary coupled support												
Wheat ⁴	mIn EUR	89.9	89.3	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
Rice ⁵	mIn EUR	56.1	55.7	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
Cereal reference price ⁶	EUR/t	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3
Direct payments ceilings ⁷	bln EUR	41.5	41.6	42.2	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3
Rice reference price ⁸	EUR/t	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
Wheat tariff-quota ²	kt	4 482.8	4 523.2	4 523.2	4 523.2	4 523.2	4 523.2	4 523.2	4 523.2	4 523.2	4 523.2	4 523.2
Coarse grain tariff-quota ²	kt	4 296.9	4 439.5	4 460.8	4 461.8	4 462.8	4 463.8	4 464.8	4 465.8	4 466.8	4 467.8	4 468.8
JAPAN												
Wheat tariff-quota	kt	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0	5 740.0
In-quota tariff	'000 JPY/t	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	'000 JPY/t	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Barley tariff-quota	kt	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0	1 369.0
In-quota tariff	'000 JPY/t	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	'000 JPY/t	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
Rice tariff-quota	kt	682.2	682.2	682.2	682.2	682.2	682.2	682.2	682.2	682.2	682.2	682.2
In-quota tariff	'000 JPY/t	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	'000 JPY/t	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0	341.0
KOREA												
Wheat tariff	%	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Maize tariff-quota	kt	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0	6 102.0
In-quota tariff	%	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Out-of-quota tariff	%	304.7	304.7	304.7	304.7	304.7	304.7	304.7	304.7	304.7	304.7	304.7
Barley tariff-quota	kt	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
In-quota tariff	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Out-of-quota tariff	%	271.4	271.4	271.4	271.4	271.4	271.4	271.4	271.4	271.4	271.4	271.4
Rice quota ⁹	kt	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7
In-quota tariff	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
MERCOSUR												
Wheat tariff	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Coarse grain tariff ¹⁰	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Rice tariff	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
MEXICO												
Barley import tariff	%	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UNITED STATES												
ARC participation rate												
Wheat	%	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
Coarse grains	%	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
Wheat loan rate	USD/t	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0
Maize loan rate	USD/t	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
CHINA												
Wheat tariff-quota	kt	9 636	9 636	9 636	9 636	9 636	9 636	9 636	9 636	9 636	9 636	9 636
In-quota tariff	%	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Out-of-quota tariff	%	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Coarse grains tariff	%	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Maize tariff-quota	kt	7 200	7 200	7 200	7 200	7 200	7 200	7 200	7 200	7 200	7 200	7 200
In-quota tariff	%	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Out-of-quota tariff	%	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Rice tariff-quota	kt	5 320	5 320	5 320	5 320	5 320	5 320	5 320	5 320	5 320	5 320	5 320
In-quota tariff	%	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Out-of-quota tariff	%	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7

Table C.17. Main policy assumptions for cereal markets (cont.)

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
INDIA												
Minimum support price												
Rice	INR/t	15 743	16 880	17 401	17 887	18 354	18 827	19 317	19 814	20 326	20 851	21 389
Wheat	INR/t	16 268	16 638	17 019	17 455	17 953	18 468	18 953	19 321	19 711	20 116	20 525
Wheat tariff	%	61.7	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Rice tariff	%	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2
RUSSIA												
Wheat ad valorem import tax	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Rice tariff equivalent of import barriers	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Coarse grains tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Coarse grain specific tariff	RUB/t	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Coarse grain ad valorem import tax	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. The sources for tariffs and Tariff Rate Quotas are the national questionnaire reply, UNCTAD and WTO.

1. In Argentina, a temporary export tax is applied on all goods from September 4th 2018 until December 31st 2020.
2. Year beginning 1 July.
3. Since 2015 the Basic payment scheme (BPS) holds, which shall account for 68% maximum of the national direct payment envelopes. On top of this, compulsory policy instruments have been introduced: the Green Payment (30%) and young farmer scheme (2%).
4. Mainly for durum wheat. Implemented in 6 Member States.
5. Implemented in 6 Member States.
6. Buying-in at the fixed reference price is operable automatically only for common wheat up to a maximum quantity of 3 million tons per marketing year. Above that ceiling and for durum wheat, maize and barley intervention can take place only via tender.
7. Estimated net amounts for all direct payments based on Annex II of EU Regulation No 1307/2013, accounting for the transfers between direct aids and rural development envelopes.
8. Intervention is set at zero tonnes per marketing year. However, the Commission may initiate intervention if market requires.
9. Milled rice basis.
10. Applied by Brazil only.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", *OECD Agriculture statistics* (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.18.1. Soybean projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	352 838	411 002	4.35	1.59	150 824	170 225	7.20	1.22	150 794	170 225	6.47	1.22
NORTH AMERICA	127 995	132 032	4.75	1.50	1 168	1 292	5.55	1.09	60 192	62 101	5.18	1.23
Canada	7 274	8 668	8.40	2.07	457	521	5.70	3.00	5 054	6 071	10.43	1.78
United States	120 721	123 364	4.56	1.46	711	771	6.02	-0.03	55 137	56 030	4.78	1.17
LATIN AMERICA	181 455	223 704	4.49	1.58	9 636	7 911	7.88	0.97	85 442	101 700	6.99	1.12
Argentina	48 985	61 914	-0.18	1.34	2 574	0	243.23	..	8 231	10 260	-10.09	0.76
Brazil	116 234	140 989	7.01	1.60	410	410	21.91	0.00	68 568	79 699	12.01	0.97
Chile	0	0	..	..	250	462	3.48	2.10	2	1	0.00	-2.06
Colombia	70	90	0.31	2.61	840	939	7.72	0.64	33	19	76.21	-0.64
Mexico	459	545	15.78	1.87	4 160	4 749	2.44	1.46	0	0	..	..
Paraguay	10 083	13 231	5.90	2.13	5	5	-8.06	0.09	5 833	8 332	2.72	2.80
Peru	5	6	0.00	2.26	400	461	21.32	0.88	0	0	..	..
EUROPE	11 171	14 386	14.62	2.34	16 398	16 817	2.52	0.50	4 126	5 545	25.08	3.45
European Union ¹	2 799	3 662	15.01	2.81	13 245	14 076	1.97	0.75	578	364	18.09	0.29
United Kingdom	0	0	..	..	747	758	-1.59	0.00	11	11	18.64	0.00
Russia	3 843	5 199	17.67	1.93	1 910	1 445	10.39	-1.58	755	1 574	122.68	4.68
Ukraine	4 063	4 978	14.99	2.53	4	5	19.37	-0.18	2 775	3 585	22.99	3.31
AFRICA	2 801	3 646	6.37	1.78	4 720	5 673	7.57	0.83	212	218	1.16	-0.37
Egypt	35	42	1.60	1.61	2 727	3 632	6.03	1.28	50	43	15.22	-1.26
Ethiopia	106	124	30.97	1.42	2	2	0.00	-1.10	67	75	410.28	1.11
Nigeria	703	884	1.37	1.93	20	15	-2.17	-1.62	10	11	-0.79	0.71
South Africa	1 203	1 689	11.33	1.67	100	1	26.83	-6.07	4	6	-40.30	0.67
ASIA	29 366	37 136	-0.26	1.69	118 900	138 531	7.95	1.35	816	640	8.22	-0.17
China ²	14 948	19 496	-0.14	1.65	93 032	108 482	8.11	1.48	233	100	-4.67	0.00
India	12 198	14 905	-0.24	1.75	100	50	91.77	-0.18	281	250	27.49	-0.78
Indonesia	598	742	-5.05	1.78	2 456	3 056	4.87	1.24	2	2	-35.47	-0.12
Iran	202	242	2.01	1.82	2 360	2 682	21.52	0.52	107	112	82.96	-0.52
Japan	246	274	1.36	1.02	3 203	3 011	0.16	-0.26	0	0	..	..
Kazakhstan	248	330	11.27	2.43	10	6	-22.69	-5.38	20	40	0.00	8.34
Korea	88	105	-4.36	0.54	1 267	1 270	0.88	0.32	0	0	..	..
Malaysia	0	0	..	..	813	941	5.51	0.97	23	9	3.03	-0.96
Pakistan	4	5	-9.30	1.73	2 257	3 148	33.32	1.53	0	0	..	..
Philippines	1	1	0.00	1.58	180	353	14.16	1.84	0	0	..	..
Saudi Arabia	0	0	..	..	583	852	23.85	1.39	0	0	..	..
Thailand	44	47	-14.89	1.56	2 825	3 102	6.23	0.83	6	4	-7.25	-0.82
Turkey	148	184	10.93	1.99	2 054	2 002	5.57	0.37	108	90	437.24	-0.37
Viet Nam	117	136	-10.21	1.72	1 558	1 935	24.88	1.57	1	1	-4.89	-0.23
OCEANIA	50	99	0.23	5.04	2	2	-1.42	0.22	6	21	7.13	10.35
Australia	50	99	0.23	5.04	1	1	-2.69	0.45	6	21	7.13	10.35
New Zealand	0	0	..	..	1	1	0.00	0.00	0	0	..	..
DEVELOPED COUNTRIES	140 918	148 815	5.35	1.58	21 678	22 031	2.24	0.44	64 348	67 713	5.79	1.40
DEVELOPING COUNTRIES	211 920	262 186	3.72	1.59	129 146	148 194	8.27	1.35	86 446	102 512	7.01	1.11
LEAST DEVELOPED COUNTRIES (LDC)	810	975	1.96	1.90	1 498	2 212	35.90	2.02	64	66	7.80	-1.56
OECD³	131 791	136 907	4.91	1.54	27 247	28 924	1.99	0.73	60 897	62 589	5.29	1.23
BRICS	148 425	182 278	5.57	1.63	95 552	110 388	8.20	1.43	69 841	81 629	12.06	1.02

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

ANNEX C

Table C.18.2. Soybean projections: Consumption, domestic crush

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴		DOMESTIC CRUSH (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	346 981	410 923	4.53	1.50	311 794	372 450	4.59	1.58
NORTH AMERICA	62 088	71 329	2.83	1.15	56 641	65 711	2.55	1.17
Canada	2 669	3 108	4.86	2.79	1 900	2 480	4.81	3.00
United States	59 419	68 221	2.75	1.08	54 740	63 231	2.48	1.10
LATIN AMERICA	105 715	129 878	3.24	1.91	98 862	121 671	3.32	1.93
Argentina	43 495	51 648	3.36	1.46	42 573	50 581	3.45	1.48
Brazil	48 076	61 696	2.40	2.47	42 879	55 411	2.39	2.56
Chile	247	461	3.64	2.18	247	461	3.64	2.18
Colombia	875	1 010	8.08	0.82	872	1 005	8.06	0.83
Mexico	4 562	5 294	3.08	1.50	4 326	5 045	3.25	1.55
Paraguay	4 188	4 883	10.84	1.06	4 036	4 697	11.06	1.03
Peru	418	467	22.48	0.89	417	465	22.49	0.89
EUROPE	23 454	25 697	4.65	0.83	20 935	22 175	4.33	0.84
European Union ¹	15 555	17 413	3.23	1.07	13 542	14 442	2.50	1.12
United Kingdom	736	747	-1.70	0.00	673	655	-1.31	-0.31
Russia	4 904	5 073	12.68	0.15	4 815	4 995	12.47	0.16
Ukraine	1 308	1 397	8.13	0.74	1 182	1 264	8.87	0.78
AFRICA	7 027	9 080	6.93	1.28	6 358	8 215	7.77	1.07
Egypt	2 652	3 626	5.54	1.39	2 652	3 626	5.57	1.39
Ethiopia	40	51	13.92	1.76	21	29	12.61	2.33
Nigeria	713	888	1.26	1.88	500	670	5.65	1.12
South Africa	1 111	1 670	14.64	1.78	1 010	1 518	14.75	1.77
ASIA	148 654	174 859	6.28	1.45	128 961	154 604	6.69	1.63
China ²	108 980	127 742	7.15	1.55	93 486	112 084	7.52	1.82
India	11 962	14 697	0.03	1.79	10 062	12 493	-0.58	1.76
Indonesia	3 085	3 794	2.45	1.35	2 519	3 147	4.54	1.25
Iran	2 443	2 810	17.56	0.65	2 434	2 796	17.90	0.64
Japan	3 438	3 284	-0.13	-0.44	2 692	2 527	0.99	-0.49
Kazakhstan	238	296	7.30	1.61	124	151	2.68	1.45
Korea	1 347	1 375	0.57	0.34	905	952	0.51	0.56
Malaysia	790	931	5.46	1.01	790	931	5.46	1.01
Pakistan	2 227	3 149	32.69	1.53	2 227	3 149	32.74	1.53
Philippines	180	354	13.50	1.88	180	354	13.87	1.88
Saudi Arabia	582	852	23.80	1.40	582	852	23.80	1.40
Thailand	2 872	3 144	5.41	0.84	2 839	3 144	5.74	0.84
Turkey	2 139	2 092	5.29	0.58	2 096	2 067	5.58	0.57
Viet Nam	1 703	2 066	15.37	1.57	1 616	1 951	19.93	1.55
OCEANIA	43	80	-1.91	3.84	37	74	-2.25	4.23
Australia	42	79	-1.96	3.90	37	74	-2.25	4.23
New Zealand	1	1	0.00	0.00	0	0	..	..
DEVELOPED COUNTRIES	91 170	103 263	3.25	1.03	82 233	93 062	3.02	1.05
DEVELOPING COUNTRIES	255 812	307 661	5.04	1.66	229 561	279 388	5.22	1.77
LEAST DEVELOPED COUNTRIES (LDC)	2 240	3 119	14.84	2.09	1 868	2 638	20.38	1.87
OECD³	91 307	103 380	2.75	1.07	82 307	93 237	2.52	1.10
BRICS	175 032	210 878	5.24	1.79	152 251	186 500	5.36	1.98

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.19.1. Other oilseed projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	152 814	177 995	3.08	1.41	20 507	23 589	4.07	1.20	21 372	23 589	4.48	1.20
NORTH AMERICA	24 946	26 379	5.72	1.14	1 016	1 191	1.26	1.20	11 650	12 281	5.37	1.41
Canada	20 478	22 043	6.12	1.32	248	248	-1.67	-0.04	11 017	11 747	5.62	1.53
United States	4 467	4 336	4.23	0.27	768	943	2.62	1.55	633	534	2.11	-0.96
LATIN AMERICA	5 862	8 789	2.33	3.61	1 811	2 305	2.02	1.81	902	1 310	6.11	1.64
Argentina	4 367	6 976	2.67	4.16	1	1	0.00	0.00	694	1 058	7.67	1.86
Brazil	454	583	5.10	2.22	5	5	-10.71	0.00	79	101	8.96	-0.54
Chile	199	237	11.86	1.51	14	10	-4.49	-2.53	9	13	18.68	2.25
Colombia	2	3	0.00	2.25	7	7	0.00	0.48	0	0	..	..
Mexico	111	119	3.08	0.61	1 752	2 255	2.21	1.91	3	4	15.23	0.00
Paraguay	190	223	-3.10	1.54	5	4	0.00	-1.53	32	40	-2.59	1.79
Peru	6	8	0.00	2.02	1	1	0.00	-1.59	0	0	..	..
EUROPE	61 930	73 597	4.03	1.32	4 874	4 193	1.27	-1.51	3 946	4 800	0.95	1.98
European Union ¹	28 174	30 391	1.41	0.64	4 302	3 703	1.62	-1.66	897	638	-1.82	-0.22
United Kingdom	2 074	2 304	-0.42	0.04	281	187	-4.38	-0.19	262	377	2.72	0.07
Russia	13 175	17 659	7.96	2.29	190	202	7.67	-0.13	368	738	9.72	6.61
Ukraine	16 697	20 873	7.78	1.68	33	36	7.47	-0.18	1 943	2 481	0.95	1.64
AFRICA	9 281	11 045	1.81	1.62	493	571	5.63	1.90	203	148	-1.26	-3.18
Egypt	117	140	-0.48	1.50	72	71	5.01	0.19	21	23	6.10	-0.19
Ethiopia	99	120	4.85	1.83	0	0	..	..	0	0	..	..
Nigeria	2 125	2 486	0.29	1.31	4	73	0.00	41.97	42	1	-10.32	-34.41
South Africa	1 015	1 246	3.91	1.63	49	12	-2.69	-8.68	3	3	-19.03	0.94
ASIA	47 335	54 047	1.17	1.33	12 287	15 304	6.07	1.96	2 249	1 923	10.77	-1.56
China ²	28 603	31 629	1.24	1.03	5 332	7 397	14.72	3.14	649	591	3.18	-0.12
India	11 717	14 275	0.39	1.95	267	308	8.24	-0.54	678	277	10.80	-9.10
Indonesia	637	745	-2.42	1.68	252	243	5.37	-0.73	1	1	-3.81	0.06
Iran	359	426	4.19	0.67	200	282	45.93	2.09	1	1	0.00	-0.18
Japan	23	24	1.46	0.76	2 368	2 407	-0.19	0.08	0	0	..	..
Kazakhstan	1 036	1 266	10.68	1.58	7	7	-0.72	-0.12	468	674	36.99	1.95
Korea	15	15	3.04	0.04	27	27	-1.94	0.07	0	0	..	..
Malaysia	5	6	1.85	1.66	44	49	2.76	1.03	4	3	1.97	-1.02
Pakistan	748	834	-3.41	1.19	1 300	1 529	4.94	1.66	5	5	-28.47	-0.21
Philippines	20	23	0.53	1.42	61	72	2.12	1.53	0	0	..	..
Saudi Arabia	3	4	0.00	3.48	4	4	0.00	-1.07	1	2	0.00	1.08
Thailand	90	102	-0.15	1.31	58	55	4.20	-0.62	4	4	8.16	0.45
Turkey	1 816	2 225	7.71	2.26	706	869	-3.80	1.25	65	45	6.86	-0.91
Viet Nam	330	389	0.76	1.60	174	217	433.26	1.56	35	31	9.41	-1.54
OCEANIA	3 462	4 138	2.53	1.17	26	26	-1.12	0.00	2 422	3 127	2.41	1.25
Australia	3 449	4 125	2.54	1.18	21	21	1.16	0.00	2 421	3 126	2.42	1.25
New Zealand	10	10	0.00	-0.01	5	5	-6.70	0.02	1	1	0.00	0.00
DEVELOPED COUNTRIES	92 541	106 821	4.45	1.28	8 639	8 221	1.08	-0.59	18 518	20 911	4.19	1.53
DEVELOPING COUNTRIES	60 274	71 174	1.23	1.61	11 868	15 368	6.80	2.30	2 854	2 678	6.63	-1.05
LEAST DEVELOPED COUNTRIES (LDC)	6 346	7 317	1.48	1.42	178	370	-5.87	7.36	105	98	5.29	-0.28
OECD³	60 960	65 992	3.17	0.90	10 653	10 822	0.56	-0.02	15 324	16 499	4.13	1.27
BRICS	54 964	65 392	2.39	1.58	5 842	7 924	13.60	2.84	1 776	1 710	6.49	-0.32

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.19.2. Other oilseed projections: Consumption, domestic crush

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴		DOMESTIC CRUSH (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	151 943	177 960	2.96	1.41	130 822	154 675	3.27	1.46
NORTH AMERICA	14 211	15 300	5.33	0.90	12 086	13 208	6.03	0.90
Canada	9 654	10 562	6.38	1.01	9 195	10 140	6.46	0.97
United States	4 557	4 738	3.47	0.66	2 890	3 068	4.92	0.66
LATIN AMERICA	6 778	9 782	1.71	3.45	6 325	9 241	1.79	3.56
Argentina	3 678	5 918	1.59	4.64	3 549	5 731	1.58	4.67
Brazil	382	486	4.24	3.12	316	417	3.68	3.58
Chile	206	234	9.54	1.27	186	212	9.34	1.23
Colombia	9	10	0.00	0.92	8	9	0.00	1.14
Mexico	1 860	2 370	2.24	1.84	1 735	2 243	2.73	1.94
Paraguay	163	187	-2.20	1.41	133	150	-2.47	1.25
Peru	7	8	0.00	1.73	3	3	0.00	1.36
EUROPE	62 923	72 989	3.93	1.09	57 751	67 246	3.88	1.13
European Union ¹	31 568	33 455	1.44	0.38	28 376	29 894	0.99	0.38
United Kingdom	2 093	2 112	-0.57	0.01	1 925	1 973	-0.94	0.10
Russia	13 062	17 120	7.68	2.11	12 432	16 255	8.43	2.06
Ukraine	14 791	18 434	8.97	1.68	13 791	17 473	9.43	1.76
AFRICA	9 588	11 466	2.04	1.71	5 844	6 605	2.45	1.10
Egypt	169	187	1.05	1.25	118	132	3.23	1.52
Ethiopia	99	120	4.85	1.83	62	71	8.44	1.15
Nigeria	2 088	2 557	0.69	1.76	733	689	0.68	-1.18
South Africa	1 076	1 253	3.26	1.45	966	1 120	3.25	1.45
ASIA	57 343	67 386	1.78	1.56	47 784	57 408	2.26	1.74
China ²	33 451	38 433	2.52	1.42	27 157	32 196	3.32	1.71
India	11 096	14 278	0.10	2.27	9 640	12 621	0.13	2.37
Indonesia	889	986	-0.54	1.03	297	349	3.88	1.38
Iran	556	708	10.09	1.22	519	645	10.63	1.00
Japan	2 412	2 432	-0.02	0.09	2 394	2 414	0.04	0.09
Kazakhstan	551	597	3.53	1.14	422	441	3.35	0.93
Korea	42	42	-0.72	0.06	38	38	-0.72	0.06
Malaysia	45	51	2.72	1.26	44	50	2.79	1.23
Pakistan	2 050	2 356	1.52	1.49	1 920	2 197	1.83	1.44
Philippines	80	95	1.66	1.51	68	81	1.89	1.69
Saudi Arabia	6	6	0.00	0.88	5	5	0.00	0.95
Thailand	145	153	1.15	0.59	88	101	2.30	1.39
Turkey	2 461	3 046	3.40	2.03	2 258	2 801	3.00	2.05
Viet Nam	485	575	6.26	1.78	361	436	9.33	1.76
OCEANIA	1 100	1 037	3.63	0.92	1 032	968	3.64	0.98
Australia	1 083	1 019	3.76	0.93	1 021	956	3.68	0.99
New Zealand	14	14	-3.30	0.00	10	10	0.00	0.00
DEVELOPED COUNTRIES	82 669	94 137	4.02	1.04	75 015	85 892	4.07	1.07
DEVELOPING COUNTRIES	69 274	83 823	1.81	1.83	55 807	68 784	2.26	1.98
LEAST DEVELOPED COUNTRIES (LDC)	6 418	7 587	1.18	1.67	4 422	5 120	1.28	1.42
OECD³	56 241	60 320	2.35	0.63	50 294	54 017	2.13	0.64
BRICS	59 067	71 570	2.97	1.76	50 511	62 609	3.64	1.94

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.20.1. Protein meal projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	342 967	407 162	3.90	1.53	90 567	107 472	3.27	1.28	91 834	107 472	3.10	1.28
NORTH AMERICA	56 021	64 021	2.98	1.10	4 546	4 192	5.42	-0.16	17 242	19 372	5.06	0.84
Canada	6 700	7 699	6.06	1.45	855	756	-3.39	0.23	4 911	5 598	8.69	1.33
United States	49 321	56 322	2.63	1.05	3 692	3 436	8.92	-0.24	12 331	13 774	4.00	0.65
LATIN AMERICA	82 364	103 576	3.19	2.01	9 333	12 076	3.13	2.42	51 180	63 261	3.10	1.98
Argentina	35 296	42 652	3.33	1.64	0	0	..	..	31 381	38 267	3.48	1.72
Brazil	34 478	46 072	2.28	2.59	6	6	-22.22	0.00	15 286	20 163	1.16	2.96
Chile	303	487	5.20	1.93	1 112	1 469	3.01	2.96	7	6	-9.99	-1.20
Colombia	833	980	6.38	1.13	1 434	2 203	11.19	3.67	91	63	5.07	-3.54
Mexico	4 697	5 573	3.30	1.57	2 038	2 582	3.18	2.53	116	111	-1.68	0.00
Paraguay	3 233	3 752	10.34	1.03	7	7	0.38	0.17	2 589	2 985	15.72	0.67
Peru	353	396	16.90	0.96	1 332	1 875	7.51	2.85	5	5	0.00	-0.63
EUROPE	44 614	49 230	3.44	0.93	31 313	31 918	1.06	-0.40	9 039	11 564	5.43	1.79
European Union ¹	26 651	27 871	1.58	0.66	26 144	26 786	1.26	-0.59	1 834	1 708	0.67	-0.78
United Kingdom	1 661	1 539	-0.95	-0.03	3 155	3 003	0.20	0.18	160	167	-2.50	-0.31
Russia	8 064	9 551	8.14	1.18	231	88	-12.31	-0.64	1 458	2 380	5.88	5.05
Ukraine	7 063	8 796	9.42	1.64	42	33	-7.89	-0.08	5 188	6 905	8.91	1.76
AFRICA	9 546	10 478	5.63	1.48	5 370	8 198	4.40	2.46	641	642	1.34	-0.63
Egypt	2 213	2 962	4.79	1.15	1 182	1 316	8.79	3.07	11	7	23.42	-0.33
Ethiopia	98	114	11.41	1.54	0	0	..	..	4	1	3.00	-8.90
Nigeria	876	1 011	3.24	0.46	410	614	31.55	2.15	174	145	7.60	-2.11
South Africa	1 270	1 753	9.60	1.67	713	793	-6.62	3.27	22	23	-16.18	-0.96
ASIA	149 323	178 517	4.72	1.58	36 933	47 334	4.74	2.18	13 661	12 519	-0.01	-1.37
China ²	91 406	109 159	6.06	1.72	2 602	2 980	4.57	-1.91	1 702	1 879	8.41	1.25
India	18 806	23 369	-0.09	1.94	407	621	23.36	5.02	2 723	1 933	-9.86	-4.78
Indonesia	7 511	9 049	5.74	1.25	4 536	5 347	5.73	1.25	4 864	4 511	6.48	-1.23
Iran	2 249	2 609	15.63	0.71	1 671	2 322	-3.51	3.59	27	9	-28.97	-0.73
Japan	3 517	3 397	0.61	-0.27	1 776	1 865	-2.80	0.17	4	4	-0.86	0.00
Kazakhstan	341	380	2.08	1.16	5	5	0.00	-0.34	86	73	-7.50	-0.41
Korea	811	851	0.86	0.49	3 372	3 980	0.64	1.42	60	60	0.77	0.00
Malaysia	3 356	3 874	1.53	1.16	1 549	1 608	4.54	0.17	2 649	2 660	1.58	-0.17
Pakistan	4 406	5 581	4.98	1.45	672	1 846	2.97	13.63	77	43	-10.29	-4.31
Philippines	1 023	1 319	0.95	1.64	2 953	3 915	7.60	2.34	393	338	-4.39	-2.29
Saudi Arabia	463	676	23.12	1.40	1 489	1 733	13.64	1.58	58	49	20.35	-1.56
Thailand	2 714	3 060	6.74	0.99	3 575	5 162	2.57	2.86	13	14	5.28	-0.31
Turkey	3 419	3 957	4.17	1.46	2 153	3 156	9.87	5.08	115	94	8.90	-3.41
Viet Nam	1 501	1 812	16.02	1.58	5 560	7 476	8.42	2.91	42	27	9.31	-1.49
OCEANIA	1 099	1 340	3.52	3.09	3 072	3 755	7.59	1.84	70	115	-7.63	0.68
Australia	964	1 174	4.06	3.27	840	1 057	5.02	2.08	17	64	-15.83	1.49
New Zealand	8	8	0.00	0.00	2 219	2 684	8.77	1.76	0	0	..	..
DEVELOPED COUNTRIES	108 728	122 194	3.10	1.01	42 174	43 594	1.53	-0.04	26 428	31 112	4.99	1.18
DEVELOPING COUNTRIES	234 238	284 968	4.29	1.76	48 393	63 878	5.00	2.29	65 405	76 360	2.42	1.32
LEAST DEVELOPED COUNTRIES (LDC)	4 782	6 225	6.34	1.95	937	1 393	10.77	4.22	359	410	3.11	0.23
OECD³	99 111	110 062	2.47	0.98	48 648	52 414	2.07	0.40	19 738	21 767	4.30	0.66
BRICS	154 025	189 904	4.37	1.92	3 958	4 488	1.22	-0.38	21 192	26 379	-0.03	2.15

.. Not available

Note: Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

ANNEX C

Table C.20.2. Protein meal projections: Consumption

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28
WORLD	341 955	407 053	4.05	1.53
NORTH AMERICA	43 305	48 841	2.48	1.07
Canada	2 658	2 857	-0.10	1.34
United States	40 647	45 984	2.67	1.06
LATIN AMERICA	40 532	52 368	3.39	2.14
Argentina	3 919	4 384	2.99	0.94
Brazil	19 131	25 915	3.19	2.30
Chile	1 428	1 946	3.77	2.70
Colombia	2 178	3 117	9.52	2.99
Mexico	6 619	8 043	3.40	1.89
Paraguay	664	765	0.96	2.43
Peru	1 680	2 265	9.01	2.50
EUROPE	66 815	69 576	2.05	0.17
European Union ¹	50 944	52 949	1.43	0.06
United Kingdom	4 657	4 375	-0.06	0.12
Russia	6 835	7 259	7.73	0.15
Ukraine	1 861	1 919	10.00	1.19
AFRICA	14 333	18 024	5.51	2.00
Egypt	3 432	4 270	6.82	1.72
Ethiopia	94	113	11.91	1.73
Nigeria	1 107	1 480	7.89	1.45
South Africa	1 967	2 521	1.78	2.17
ASIA	172 870	213 264	5.37	1.92
China ²	92 227	110 261	6.28	1.61
India	16 576	22 039	2.32	2.91
Indonesia	7 248	9 881	5.67	2.62
Iran	3 887	4 920	5.46	1.97
Japan	5 291	5 258	-0.67	-0.12
Kazakhstan	263	311	8.65	1.53
Korea	4 142	4 771	0.74	1.26
Malaysia	2 247	2 820	3.22	1.94
Pakistan	5 033	7 377	5.18	3.50
Philippines	3 596	4 887	7.21	2.55
Saudi Arabia	1 895	2 359	15.60	1.60
Thailand	6 280	8 205	4.36	2.13
Turkey	5 468	7 005	6.33	3.04
Viet Nam	7 154	9 260	10.12	2.65
OCEANIA	4 101	4 980	7.17	2.19
Australia	1 788	2 167	5.47	2.73
New Zealand	2 225	2 692	9.01	1.76
DEVELOPED COUNTRIES	124 391	134 666	2.22	0.62
DEVELOPING COUNTRIES	217 565	272 387	5.25	2.01
LEAST DEVELOPED COUNTRIES (LDC)	5 357	7 204	7.31	2.45
OECD³	128 036	140 690	2.09	0.80
BRICS	136 737	167 995	5.26	1.82

Note: Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.21.1. Vegetable oil projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	202 563	239 817	4.05	1.45	80 243	95 417	3.50	1.33	81 852	95 417	3.69	1.33
NORTH AMERICA	17 866	19 952	3.79	1.04	4 560	5 100	3.08	0.08	4 669	5 068	1.86	1.63
Canada	4 434	4 815	6.37	1.14	264	184	-3.99	-4.03	3 325	3 604	5.21	1.28
United States	13 432	15 138	3.08	1.00	4 296	4 916	3.69	0.27	1 344	1 463	-3.42	2.55
LATIN AMERICA	27 151	34 550	4.01	2.21	4 859	4 839	2.85	-0.22	11 116	15 307	4.69	2.89
Argentina	9 289	11 738	3.10	2.15	18	18	5.44	0.00	6 111	8 263	3.19	2.40
Brazil	9 312	12 019	2.81	2.37	504	514	1.04	0.00	1 454	2 804	-2.06	7.61
Chile	116	164	6.34	1.70	454	499	6.83	0.68	1	1	-8.45	-0.10
Colombia	1 938	2 506	8.29	2.44	739	716	10.30	-1.11	855	992	21.43	1.12
Mexico	1 924	2 335	3.42	1.65	1 032	1 064	3.61	0.42	66	54	2.24	0.00
Paraguay	784	911	9.37	1.04	13	11	-1.44	-1.02	679	796	16.45	1.03
Peru	249	303	12.14	1.77	563	703	6.30	1.71	1	1	0.00	-0.17
EUROPE	28 390	32 783	3.99	1.11	12 934	12 015	1.96	-1.33	11 357	14 144	9.45	1.81
European Union ¹	14 474	15 277	1.24	0.50	9 668	8 793	1.78	-1.66	2 034	2 161	4.44	0.31
United Kingdom	941	1 016	-0.77	0.04	1 094	1 125	1.14	0.00	214	231	-4.90	-0.82
Russia	5 938	7 604	8.91	1.90	1 070	1 104	4.86	-0.15	2 808	4 011	17.40	3.67
Ukraine	6 406	8 068	9.41	1.73	262	226	-4.61	-1.48	5 960	7 287	10.54	1.50
AFRICA	8 131	9 388	3.67	1.48	11 563	15 819	4.88	2.72	1 312	1 073	-1.34	-2.28
Egypt	561	729	3.88	0.88	2 006	2 622	2.32	2.27	151	107	-9.85	-2.22
Ethiopia	54	62	9.92	1.40	518	896	17.54	5.67	0	0	..	..
Nigeria	1 637	1 799	1.81	0.63	1 449	2 393	6.23	4.83	48	45	-11.51	-2.78
South Africa	555	709	6.09	1.59	843	861	0.86	0.42	25	25	-17.67	-0.37
ASIA	119 638	141 479	4.16	1.40	45 991	57 290	3.76	1.90	52 461	58 746	2.87	0.90
China ²	28 254	33 857	5.25	1.71	8 706	8 635	-1.03	-1.28	274	246	0.16	0.18
India	8 913	11 055	0.14	2.02	15 186	22 077	7.30	3.67	76	61	-3.04	-0.67
Indonesia	44 592	52 641	6.67	1.22	94	91	0.58	-0.02	30 540	35 104	6.02	1.07
Iran	666	782	13.89	0.79	1 291	1 683	-1.91	3.01	56	12	-19.49	-2.92
Japan	1 508	1 486	0.56	-0.11	882	967	2.02	0.46	1	1	45.72	0.00
Kazakhstan	245	263	2.71	1.03	106	111	0.91	0.02	60	65	22.61	-0.02
Korea	215	225	0.86	0.45	1 122	1 101	4.62	-0.51	5	4	-14.14	0.00
Malaysia	22 311	25 577	1.13	1.20	1 237	1 083	-7.76	-1.06	18 049	20 290	-0.65	1.07
Pakistan	1 997	2 432	1.96	1.43	3 205	4 076	5.38	2.62	91	66	-3.91	-2.48
Philippines	1 744	2 087	-0.12	1.58	1 233	1 466	12.97	1.32	894	757	-2.19	-1.30
Saudi Arabia	107	156	22.69	1.39	769	1 016	12.33	2.00	73	58	19.95	-1.96
Thailand	3 597	4 305	7.67	1.55	305	631	11.37	5.95	520	350	1.29	-5.61
Turkey	1 732	2 131	3.70	1.82	1 434	1 257	5.34	-0.92	510	487	9.00	0.92
Viet Nam	625	755	9.26	1.62	1 007	1 265	5.01	2.04	133	131	-0.95	-2.00
OCEANIA	1 387	1 665	2.68	2.12	337	354	3.98	0.46	937	1 079	3.14	1.34
Australia	524	576	3.88	2.39	204	209	5.20	0.21	193	190	8.00	0.16
New Zealand	5	5	1.17	0.00	100	117	3.60	1.53	0	0	..	..
DEVELOPED COUNTRIES	50 012	56 813	3.74	1.06	19 999	19 814	2.30	-0.73	16 331	19 512	6.58	1.73
DEVELOPING COUNTRIES	152 551	183 004	4.15	1.57	60 244	75 603	3.93	1.95	65 521	75 905	3.07	1.23
LEAST DEVELOPED COUNTRIES (LDC)	3 838	4 744	3.01	1.83	7 417	9 996	7.16	2.88	453	371	3.41	-2.57
OECD³	39 621	43 513	2.52	0.86	21 252	20 912	2.75	-0.74	7 775	8 293	2.58	1.10
BRICS	52 972	65 245	4.13	1.90	26 309	33 191	3.53	1.86	4 638	7 147	5.41	4.81

.. Not available

Note: Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.21.2. Vegetable oil projections: Consumption, food

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	201 163	239 711	4.24	1.43	18.2	19.7	1.98	0.81
NORTH AMERICA	17 729	19 980	4.04	0.64	39.6	39.2	1.29	0.79
Canada	1 389	1 390	5.98	-0.05	32.3	28.3	2.55	-1.07
United States	16 340	18 591	3.89	0.70	40.4	40.5	1.20	0.95
LATIN AMERICA	20 971	24 076	3.58	1.28	20.1	20.8	0.81	0.58
Argentina	3 197	3 491	3.17	1.57	18.9	21.3	0.12	1.14
Brazil	8 424	9 729	4.17	1.13	25.4	25.3	0.39	0.57
Chile	571	662	6.85	0.91	11.3	13.1	1.40	0.99
Colombia	1 818	2 228	5.43	1.69	20.3	24.8	3.46	1.76
Mexico	2 892	3 345	3.55	1.27	22.4	23.1	2.14	0.24
Paraguay	118	127	-5.74	0.86	16.2	15.3	-6.91	-0.22
Peru	810	1 005	7.77	1.71	9.6	11.4	4.81	1.47
EUROPE	30 193	30 630	1.75	-0.22	24.1	25.1	1.38	0.29
European Union ¹	22 279	21 891	1.31	-0.43	23.7	23.7	0.36	0.20
United Kingdom	1 822	1 910	1.04	0.13	27.5	27.3	0.40	-0.36
Russia	4 254	4 696	5.47	0.14	29.6	33.2	5.39	0.33
Ukraine	704	1 001	-2.75	2.53	11.9	19.5	-3.26	3.61
AFRICA	18 403	24 119	5.07	2.48	9.8	10.5	2.34	0.76
Egypt	2 437	3 240	4.94	2.14	8.1	11.0	2.40	2.46
Ethiopia	572	958	16.63	5.34	5.0	6.8	13.73	3.32
Nigeria	3 029	4 145	4.32	2.91	10.3	11.0	2.24	0.56
South Africa	1 394	1 546	4.20	0.93	13.4	14.0	2.13	0.46
ASIA	113 080	139 967	5.05	1.79	17.5	20.2	2.72	1.23
China ²	37 206	42 246	4.30	1.03	26.4	29.1	3.76	0.69
India	24 238	33 014	4.45	3.07	11.0	14.9	0.96	3.07
Indonesia	13 574	17 698	8.93	1.51	19.7	25.0	3.97	1.33
Iran	1 875	2 450	3.25	2.26	10.7	12.5	0.12	1.48
Japan	2 368	2 452	1.09	0.11	18.5	19.9	1.18	0.48
Kazakhstan	289	309	0.45	0.83	15.1	14.7	-0.97	-0.01
Korea	1 325	1 322	4.12	-0.35	14.0	13.5	-0.44	-0.63
Malaysia	5 301	6 340	5.04	0.92	27.0	27.8	4.04	-0.39
Pakistan	5 097	6 434	4.21	2.19	20.2	22.1	2.45	0.95
Philippines	2 097	2 793	7.32	2.36	12.7	14.4	6.63	1.35
Saudi Arabia	794	1 111	12.58	2.12	19.2	23.9	9.10	1.14
Thailand	3 410	4 582	9.02	2.91	12.2	16.0	7.16	2.68
Turkey	2 673	2 900	4.32	0.69	24.3	24.5	1.96	0.09
Viet Nam	1 501	1 887	7.55	2.20	2.4	4.3	3.52	5.96
OCEANIA	786	939	2.80	2.39	19.2	20.0	1.35	1.20
Australia	538	595	3.41	2.36	22.0	21.5	1.93	1.24
New Zealand	104	122	3.48	1.46	22.2	23.7	2.40	0.66
DEVELOPED COUNTRIES	53 877	57 086	2.51	0.19	26.4	27.1	1.34	0.53
DEVELOPING COUNTRIES	147 287	182 625	4.94	1.85	16.2	18.1	2.36	0.98
LEAST DEVELOPED COUNTRIES (LDC)	10 808	14 358	5.81	2.69	8.7	9.7	2.90	1.14
OECD³	53 239	56 109	2.62	0.19	27.1	27.3	1.10	0.46
BRICS	75 517	91 232	4.39	1.68	19.7	22.4	2.70	1.14

Note: Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.22. Main policy assumptions for oilseed markets

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ARGENTINA												
Export tax ¹												
Soybean	%	29.0	28.9	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Other oilseeds	%	4.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean meal	%	27.0	28.9	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Soybean oil	%	27.0	28.9	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
AUSTRALIA												
Tariffs												
Soybean oil	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Rapeseed oil	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
CANADA												
Tariffs												
Rapeseed oil	%	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
EUROPEAN UNION²												
Voluntary coupled support												
Soybean	mIn EUR	86	27	28	29	29	30	31	31	33	34	35
Tariffs												
Soybean oil	%	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Rapeseed oil	%	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
JAPAN												
New output payments												
Soybean	JPY/kg	165.2	150.7	150.7	150.7	150.7	150.7	150.7	150.7	150.7	150.7	150.7
Tariffs												
Soybean oil	JPY/kg	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Rapeseed oil	JPY/kg	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
KOREA												
Soybean tariff-quota	kt	1 032	1 032	1 032	1 032	1 032	1 032	1 032	1 032	1 032	1 032	1 032
In-quota tariff	%	5	5	5	5	5	5	5	5	5	5	5
Out-of-quota tariff	%	487	487	487	487	487	487	487	487	487	487	487
Soybean (for food) mark up	'000 KRW/t	131	131	131	131	131	131	131	131	131	131	131
MEXICO												
Tariffs												
Soybean	%	33	33	33	33	33	33	33	33	33	33	33
Soybean meal	%	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Soybean oil	%	45	45	45	45	45	45	45	45	45	45	45
UNITED STATES												
ARC participation rate												
Soybean	%	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
Soybean loan rate	USD/t	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7
Tariffs												
Rapeseed	%	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Soybean meal	%	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Rapeseed meal	%	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Soybean oil	%	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
Rapeseed oil	%	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
CHINA												
Tariffs												
Soybean	%	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Soybean meal	%	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
Soybean oil in-quota tariff	%	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Vegetable oil tariff-quota	kt	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1	7 998.1
INDIA												
Soybean tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Rapeseed tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Soybean meal tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Soybean oil tariff	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
INDONESIA												
Protein meal tariff	%	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PAKISTAN												
Protein meal tariff	%	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
VIET NAM												
Protein meal tariff	%	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

ANNEX C

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. The sources for tariffs and Tariff Rate Quotas are the national questionnaire reply, UNCTAD and WTO.

1. In Argentina, a temporary export tax is applied on all goods from September 4th 2018 until December 31st 2020. A specific export tax of 18% will be added for soybean and soybean products; future decrease envisaged but no fixed schedule.
2. Since 2015 the Basic payment scheme (BPS) holds, which shall account for 68% maximum of the national direct payment envelopes. On top of this, compulsory policy instruments have been introduced: the Green Payment (30%) and young farmer scheme (2%).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", *OECD Agriculture statistics* (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.23.1. Sugar projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	177 620	206 769	1.73	1.52	56 381	63 245	1.06	1.93	61 445	66 917	1.53	1.82
NORTH AMERICA	7 717	8 015	1.51	0.08	3 795	3 657	-3.29	-0.07	122	112	-12.54	0.00
Canada	100	104	1.66	0.52	1 137	1 150	-0.12	0.00	35	30	-8.07	0.00
United States	7 617	7 911	1.51	0.07	2 658	2 507	-4.41	-0.10	87	82	-14.15	0.00
LATIN AMERICA	54 853	59 659	-0.40	1.86	2 030	1 476	-3.42	-1.50	31 048	33 209	-0.84	2.73
Argentina	1 914	2 338	0.00	2.13	0	0	-77.78	..	334	820	2.30	8.92
Brazil	33 891	36 373	-1.52	2.31	1	0	35.00	..	23 775	25 690	-1.60	3.53
Chile	235	304	-3.81	2.60	489	450	1.35	-0.39	0	0	..	..
Colombia	2 214	2 072	0.61	0.13	110	126	-13.13	6.22	561	198	-5.56	-5.86
Mexico	6 038	6 565	2.27	1.07	22	10	-34.23	-0.03	1 367	1 472	3.56	0.52
Paraguay	136	141	0.94	1.34	107	89	10.69	-0.21	107	83	7.74	0.21
Peru	1 180	1 887	1.94	4.06	376	83	7.01	-10.16	139	189	7.51	2.98
EUROPE	28 578	31 131	2.48	1.19	3 541	2 763	-10.12	-3.31	4 498	6 457	4.07	5.29
European Union ¹	17 681	18 791	1.50	0.87	1 549	1 022	-10.58	-5.57	2 574	3 435	3.57	5.44
United Kingdom	1 168	1 161	0.10	1.33	1 016	1 057	-2.96	-0.56	234	237	-7.93	0.32
Russia	6 262	6 902	7.50	1.48	252	74	-23.46	-10.94	406	1 007	34.84	11.37
Ukraine	2 010	2 453	1.69	2.40	1	0	-74.82	..	577	825	94.70	4.92
AFRICA	11 265	16 664	2.71	3.21	13 594	15 971	3.64	3.04	3 980	3 227	1.87	0.18
Egypt	2 635	4 089	4.83	3.77	1 321	1 252	-0.94	0.08	211	141	-1.11	-0.08
Ethiopia	502	1 313	9.08	6.43	160	9	4.06	-13.78	46	342	477.26	11.36
Nigeria	47	72	4.50	1.57	1 402	1 986	4.18	3.33	0	0	-6.09	..
South Africa	1 930	3 098	-0.83	3.48	463	79	-2.68	-5.94	205	573	-15.19	6.32
ASIA	70 065	85 955	2.98	1.33	33 044	38 974	3.24	2.39	17 608	19 482	5.67	0.15
China ²	10 351	13 269	-1.60	1.65	4 756	6 835	11.54	1.78	97	96	5.23	2.27
India	28 123	33 860	3.39	0.56	1 922	32	7.00	-14.85	2 834	2 046	16.37	-5.57
Indonesia	2 247	2 657	0.44	1.42	4 679	7 696	8.76	4.73	0	0	..	..
Iran	1 828	2 563	10.03	2.61	677	189	-11.71	-10.23	2	0	-65.45	..
Japan	744	749	0.55	-0.01	1 339	1 296	0.47	-0.52	4	5	15.91	0.00
Kazakhstan	30	32	2.72	2.52	456	520	2.31	0.62	8	5	-4.66	-0.62
Korea	0	0	..	..	1 885	2 135	1.78	1.01	318	375	-0.92	2.28
Malaysia	0	0	-77.61	..	1 988	2 434	1.57	2.66	134	52	-9.65	-2.59
Pakistan	6 592	7 775	6.51	2.06	8	11	-32.31	0.46	894	1 125	23.13	-1.22
Philippines	2 267	2 441	0.49	1.03	95	84	14.16	0.60	170	94	-7.88	-4.79
Saudi Arabia	0	0	..	..	1 487	1 916	2.53	2.10	322	391	4.08	2.00
Thailand	12 570	15 567	5.43	1.83	0	0	-61.71	..	8 766	12 178	5.36	1.54
Turkey	2 675	3 283	1.39	1.98	93	26	45.86	-6.90	165	757	2.05	11.59
Viet Nam	1 510	2 145	4.65	2.37	192	320	0.29	17.41	68	20	241.22	-15.02
OCEANIA	5 142	5 345	3.99	0.44	375	404	-0.05	-0.15	4 190	4 429	4.39	0.34
Australia	4 887	5 034	4.07	0.36	84	120	-3.86	0.00	3 978	4 201	4.45	0.33
New Zealand	0	0	..	..	247	239	0.74	-0.13	22	20	-0.28	0.00
DEVELOPED COUNTRIES	44 083	48 364	2.31	1.03	11 880	10 884	-4.74	-0.80	9 080	11 561	2.68	3.07
DEVELOPING COUNTRIES	133 537	158 405	1.55	1.68	44 501	52 361	3.26	2.61	52 366	55 356	1.38	1.57
LEAST DEVELOPED COUNTRIES (LDC)	3 888	5 462	3.87	3.17	8 944	11 528	6.80	4.70	2 466	348	6.60	-8.00
OECD³	41 417	44 229	1.79	0.78	11 263	10 937	-3.12	-0.53	8 792	10 624	2.50	2.41
BRICS	80 556	93 501	0.66	1.54	7 395	7 019	1.31	1.26	27 317	29 412	-0.77	2.79

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. Sugar data are expressed on a ten-year average basis.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.23.2. Sugar projections: Consumption, food

Marketing year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	170 757	202 543	1.60	1.55	22.7	24.2	0.43	0.59
NORTH AMERICA	11 521	11 558	0.13	0.03	31.9	29.6	-0.57	-0.67
Canada	1 220	1 224	0.47	0.05	33.3	30.5	-0.52	-0.75
United States	10 300	10 335	0.09	0.03	31.7	29.5	-0.58	-0.66
LATIN AMERICA	26 431	27 919	-0.06	0.52	41.1	39.5	-1.16	-0.31
Argentina	1 560	1 520	-0.66	-0.23	35.2	31.3	-1.66	-1.05
Brazil	10 967	10 747	-1.19	-0.05	52.4	48.1	-2.06	-0.62
Chile	752	756	0.34	0.07	41.7	38.9	-0.53	-0.57
Colombia	1 747	1 999	1.70	1.19	35.6	38.0	0.74	0.58
Mexico	4 579	5 070	1.37	0.88	35.5	34.9	-0.02	-0.14
Paraguay	133	146	1.18	0.88	19.5	19.0	-0.14	-0.22
Peru	1 358	1 760	2.87	2.33	42.2	48.7	1.55	1.27
EUROPE	27 578	27 334	-0.01	-0.13	37.1	36.9	-0.10	-0.09
European Union ¹	16 776	16 278	0.18	-0.36	37.9	36.8	0.10	-0.33
United Kingdom	1 944	1 981	-0.30	0.39	29.4	28.3	-0.94	-0.11
Russia	5 817	5 965	0.49	0.17	40.4	42.2	0.41	0.36
Ukraine	1 541	1 626	-2.50	0.68	34.9	39.0	-2.02	1.23
AFRICA	20 426	28 988	3.89	3.20	16.4	18.0	1.26	0.81
Egypt	3 613	5 119	3.85	3.15	37.0	44.0	1.68	1.56
Ethiopia	587	972	5.88	4.52	5.6	7.2	3.20	2.25
Nigeria	1 449	2 042	4.27	3.25	7.6	8.1	1.55	0.70
South Africa	2 135	2 585	2.16	1.73	37.7	40.8	0.79	0.74
ASIA	83 542	105 419	2.50	2.11	18.7	21.7	1.46	1.38
China ²	16 337	19 947	2.44	1.68	11.6	13.8	1.92	1.51
India	25 602	32 345	2.53	2.17	19.1	21.7	1.30	1.22
Indonesia	6 944	10 265	4.61	3.61	26.3	35.2	3.35	2.72
Iran	2 519	2 749	0.99	0.77	31.0	31.2	-0.22	0.08
Japan	2 111	2 040	-0.82	-0.34	16.6	16.6	-0.71	0.03
Kazakhstan	502	548	1.39	0.60	27.6	27.3	-0.10	-0.23
Korea	1 598	1 759	2.85	0.83	31.4	33.5	2.43	0.57
Malaysia	1 839	2 354	3.58	2.31	58.2	65.2	1.86	1.10
Pakistan	5 148	6 603	2.30	2.27	26.1	27.8	0.22	0.60
Philippines	2 143	2 425	1.49	1.19	20.4	19.8	-0.13	-0.19
Saudi Arabia	1 230	1 517	3.10	1.83	37.4	39.3	0.45	0.44
Thailand	2 943	3 335	2.09	1.27	42.6	47.9	1.70	1.21
Turkey	2 429	2 543	1.18	0.18	30.1	29.1	-0.38	-0.36
Viet Nam	1 583	2 421	4.69	3.59	16.6	23.1	3.55	2.73
OCEANIA	1 259	1 324	-0.54	0.42	31.6	29.0	-2.04	-0.80
Australia	925	959	-1.11	0.28	37.8	34.6	-2.52	-0.81
New Zealand	220	218	0.36	-0.12	46.8	42.4	-0.69	-0.90
DEVELOPED COUNTRIES	46 923	47 559	0.15	0.09	33.2	32.6	-0.25	-0.18
DEVELOPING COUNTRIES	123 834	154 984	2.20	2.05	20.3	22.5	0.83	0.93
LEAST DEVELOPED COUNTRIES (LDC)	10 166	16 350	5.53	4.40	12.0	15.1	3.07	2.10
OECD³	43 884	44 398	0.34	0.06	33.1	32.0	-0.20	-0.31
BRICS	60 857	71 590	1.54	1.48	19.3	21.3	0.71	0.94

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. Sugar data are expressed on a t equivalent basis.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", *OECD Agriculture statistics* (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.24. Main policy assumptions for sugar markets

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ARGENTINA												
Tariff, sugar	ARS/t	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
BRAZIL												
Tariff, raw sugar	%	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Tariff, white sugar	%	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
CANADA												
Tariff, raw sugar	CAD/t	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
Tariff, white sugar	CAD/t	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9
CHINA¹												
TRQ sugar	kt	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0	1 954.0
In-quota tariff, raw sugar	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
In-quota tariff, white sugar	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Tariff, over-quota	%	69.4	88.3	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
EUROPEAN UNION²												
Voluntary coupled support												
Sugarbeet ³	mIn EUR	178.0	180.2	169.3	169.3	169.3	169.3	169.3	169.3	169.3	169.3	169.3
Tariff, raw sugar	EUR/t	339.0	339.0	339.0	339.0	339.0	339.0	339.0	339.0	339.0	339.0	339.0
Tariff, white sugar	EUR/t	419.0	419.0	419.0	419.0	419.0	419.0	419.0	419.0	419.0	419.0	419.0
INDIA												
Tariff, sugar	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
INDONESIA												
Tariff, sugar	%	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
JAPAN												
Minimum stabilisation price, raw sugar	JPY/kg	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2
Tariff, raw sugar	JPY/kg	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8
Tariff, white sugar	JPY/kg	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1
KOREA												
Tariff, raw sugar	%	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Tariff, white sugar	%	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
MEXICO												
Mexico common external tariff, raw sugar	USD/t	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6
Mexico common external tariff, white sugar	USD/t	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4
RUSSIA												
Minimum tariff, raw sugar	USD/t	230.3	240.0	240.0	240.0	240.0	240.0	240.0	203.0	203.0	203.0	203.0
Minimum tariff, white sugar	USD/t	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0
UNITED STATES												
Loan rate, raw sugar	USD/t	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4	413.4
Loan rate, white sugar	USD/t	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1
TRQ, raw sugar	kt rse	1 463	1 422	1 426	1 487	1 596	1 761	1 843	1 951	2 038	2 188	2 250
TRQ, refined sugar	kt rse	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
Raw sugar 2nd tier WTO tariff	USD/t	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6
White sugar 2nd tier WTO tariff	USD/t	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4	357.4
VIET NAM												
Tariff, sugar	%	58.5	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.8

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated. The sources for tariffs and Tariff Rate Quotas are the national questionnaire reply, UNCTAD and WTO.

1. Refers to mainland only.
2. Production supported by a EU sugar production quota at 13.5 million tonnes of sugar and 720 kt of HFCS until 30 september 2017.
3. Implemented in 10 Member States.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.25.1. Meat projections: Production and trade

Calendar year

	PRODUCTION (kt cwe) ⁴		Growth (%) ⁵		IMPORTS (kt cwe) ⁶		Growth (%) ⁵		EXPORTS (kt cwe) ⁶		Growth (%) ⁵	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	323 876	364 383	1.74	1.09	33 028	39 262	3.05	1.48	33 577	39 762	3.01	1.39
NORTH AMERICA	49 220	55 216	1.09	0.79	2 674	2 840	3.11	0.70	9 177	11 054	1.35	1.25
Canada	4 833	5 268	0.43	0.60	638	728	0.44	1.03	2 005	2 309	1.28	0.89
United States	44 387	49 947	1.17	0.81	2 036	2 112	4.09	0.58	7 172	8 745	1.38	1.35
LATIN AMERICA	52 156	61 411	1.80	1.40	4 363	5 226	4.92	1.46	8 435	11 363	1.85	2.68
Argentina	5 498	6 706	1.67	1.52	52	51	-5.30	0.30	494	1 141	-3.21	5.90
Brazil	26 678	30 263	1.60	1.08	53	67	5.50	1.17	6 212	8 190	1.74	2.62
Chile	1 474	1 801	1.21	1.83	528	581	11.59	0.35	335	379	2.81	0.54
Colombia	2 739	3 542	3.99	2.26	192	294	15.51	2.50	27	57	-2.21	3.54
Mexico	6 605	8 168	2.17	1.75	1 941	2 102	5.93	0.54	321	378	13.49	0.83
Paraguay	687	802	4.47	2.16	37	49	8.47	0.39	360	426	6.85	2.67
Peru	1 866	2 278	4.56	1.55	82	231	14.61	7.75	5	3	-5.65	-1.54
EUROPE	62 710	64 825	1.82	0.23	5 187	5 244	-3.77	-0.01	7 902	8 247	4.66	0.25
European Union ¹	43 462	43 986	1.06	0.05	1 594	1 667	-1.15	0.25	6 002	6 206	3.79	0.21
United Kingdom	3 900	4 025	1.89	0.24	1 832	1 999	1.12	0.82	792	711	2.50	-0.62
Russia	10 338	11 218	5.56	0.58	939	702	-12.81	-2.18	229	305	35.68	2.35
Ukraine	2 157	2 405	1.83	1.44	299	355	-5.94	-1.26	333	401	28.40	1.10
AFRICA	16 941	20 322	2.35	1.88	2 959	4 496	5.23	4.29	300	311	7.41	1.33
Egypt	2 081	2 763	2.15	2.43	438	645	7.22	3.74	7	8	8.54	-0.41
Ethiopia	498	585	-2.80	1.71	0	0	..	..	17	25	8.02	3.27
Nigeria	1 189	1 346	0.58	1.42	4	7	-4.03	4.03	1	1	..	-1.97
South Africa	3 142	3 906	2.57	2.27	630	762	8.58	1.77	170	196	21.22	3.47
ASIA	136 393	155 282	1.84	1.35	17 327	20 826	5.17	1.47	4 574	5 138	7.05	0.84
China ²	83 592	92 216	1.07	1.14	3 371	3 489	17.83	-1.26	518	579	-1.03	2.25
India	7 141	9 121	2.63	2.26	1	15	-9.40	26.35	1 651	1 639	9.30	0.44
Indonesia	3 217	3 921	5.19	2.25	175	290	8.89	4.04	1	1	-10.60	-0.36
Iran	3 030	3 600	2.95	1.80	166	165	-3.48	-0.22	81	82	11.71	0.74
Japan	3 323	3 312	0.50	-0.18	3 011	3 246	2.90	0.49	17	17	7.61	-0.21
Kazakhstan	867	1 078	2.40	1.86	262	279	0.55	2.45	12	11	45.03	-2.02
Korea	2 470	2 719	3.48	0.67	1 323	1 544	5.90	1.11	29	32	-0.98	0.00
Malaysia	2 092	2 483	4.19	1.67	340	444	6.10	2.70	183	170	5.11	-1.03
Pakistan	3 599	4 610	4.52	2.18	34	39	9.76	1.22	74	87	6.84	1.24
Philippines	3 504	4 276	2.75	1.85	542	924	9.68	4.43	11	7	-6.99	-0.47
Saudi Arabia	682	922	2.58	2.30	991	952	1.29	1.50	73	62	21.12	-1.44
Thailand	2 923	3 546	2.10	1.54	25	22	8.18	-1.33	1 129	1 537	7.20	2.14
Turkey	3 412	4 167	6.21	1.81	48	68	3.55	-2.02	536	715	15.24	0.20
Viet Nam	4 970	6 014	3.00	1.80	1 465	1 957	8.69	3.54	38	12	5.77	-8.28
OCEANIA	6 456	7 327	1.89	1.30	516	629	3.00	1.81	3 190	3 651	2.42	1.53
Australia	4 915	5 717	2.17	1.53	333	389	2.20	1.57	2 124	2 576	2.91	2.12
New Zealand	1 403	1 445	0.98	0.35	78	94	6.74	1.33	1 063	1 073	1.45	0.23
DEVELOPED COUNTRIES	128 554	138 978	1.56	0.59	12 582	13 459	-0.14	0.60	20 491	23 191	2.81	0.94
DEVELOPING COUNTRIES	195 322	225 405	1.86	1.41	20 446	25 802	5.52	1.98	13 086	16 571	3.33	2.05
LEAST DEVELOPED COUNTRIES (LDC)	10 940	13 063	4.12	1.93	1 176	2 181	3.83	6.72	27	24	-4.83	-1.46
OECD³	121 749	132 333	1.36	0.63	13 587	14 804	2.93	0.66	20 415	23 153	2.63	0.88
BRICS	130 891	146 724	1.60	1.18	4 996	5 034	3.47	-0.96	8 780	10 908	3.19	2.25

.. Not available

Note: Calendar year; except year ending 30 September for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Gross indigenous production.
5. Least-squares growth rate (see glossary).
6. Excludes trade of live animals.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.25.2. Meat projections: Consumption, food

Calendar year

	CONSUMPTION (kt cwe)		Growth (%) ⁴		FOOD (kg rwe/cap) ⁵		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	323 399	363 611	1.74	1.10	34.7	35.1	0.63	0.15
NORTH AMERICA	42 929	47 331	1.10	0.70	95.3	97.2	0.43	-0.01
Canada	3 134	3 371	0.63	0.71	68.6	67.8	-0.24	-0.04
United States	39 795	43 960	1.14	0.69	98.3	100.5	0.50	0.00
LATIN AMERICA	47 688	54 580	2.07	1.15	59.6	62.3	1.05	0.33
Argentina	5 056	5 616	2.21	0.81	89.0	90.3	1.35	0.00
Brazil	20 363	21 823	1.67	0.53	77.7	78.0	0.89	-0.04
Chile	1 662	1 997	3.23	1.64	73.8	82.4	2.35	0.98
Colombia	2 872	3 741	4.67	2.29	47.8	58.2	3.91	1.69
Mexico	8 011	9 615	2.85	1.49	50.6	54.2	1.54	0.46
Paraguay	365	427	2.92	1.46	40.9	42.2	1.52	0.35
Peru	1 943	2 506	4.90	2.00	51.5	59.3	3.63	0.95
EUROPE	60 013	61 630	0.87	0.22	64.8	66.8	0.89	0.27
European Union ¹	39 015	39 209	0.67	0.05	70.3	70.9	0.67	0.10
United Kingdom	4 939	5 312	1.51	0.58	60.5	61.6	0.91	0.10
Russia	11 097	11 648	1.73	0.34	62.6	66.9	1.93	0.52
Ukraine	2 116	2 353	-1.20	1.04	39.1	46.4	-0.63	1.62
AFRICA	19 561	24 523	2.67	2.32	12.7	12.3	0.11	-0.03
Egypt	2 537	3 425	2.91	2.65	20.8	23.6	0.99	1.11
Ethiopia	461	546	-3.37	1.86	3.2	2.9	-6.48	-0.35
Nigeria	1 250	1 460	0.38	1.72	5.3	4.6	-2.41	-0.82
South Africa	3 604	4 461	2.79	2.09	52.3	57.8	1.46	1.07
ASIA	149 749	171 627	2.08	1.36	27.0	28.5	1.07	0.65
China ²	86 363	95 050	1.48	1.02	49.0	52.9	0.96	0.86
India	5 481	7 488	1.21	2.73	3.5	4.3	0.53	1.83
Indonesia	3 512	4 375	5.09	2.34	11.1	12.5	3.88	1.48
Iran	3 113	3 696	2.56	1.73	32.4	35.3	1.35	1.01
Japan	6 307	6 543	1.50	0.15	39.7	42.8	1.67	0.52
Kazakhstan	1 120	1 348	1.81	2.02	48.4	53.1	0.44	1.20
Korea	3 738	4 231	4.10	0.84	58.0	63.8	3.71	0.59
Malaysia	2 264	2 772	4.24	2.01	61.0	65.3	2.58	0.80
Pakistan	3 552	4 554	4.51	2.20	14.2	15.1	2.56	0.52
Philippines	4 039	5 197	3.54	2.27	31.2	34.6	2.02	0.90
Saudi Arabia	1 720	1 928	1.53	1.93	44.9	42.7	-1.09	0.52
Thailand	1 661	1 780	-0.14	0.83	19.6	20.8	-0.45	0.78
Turkey	3 140	3 799	5.63	1.69	32.0	35.7	3.77	1.12
Viet Nam	6 450	8 007	4.14	2.21	53.0	59.8	2.89	1.33
OCEANIA	3 459	3 920	1.79	1.27	70.7	70.0	0.44	0.04
Australia	2 793	3 144	1.71	1.25	92.9	92.5	0.44	0.14
New Zealand	425	469	2.03	0.75	74.0	74.8	1.23	-0.02
DEVELOPED COUNTRIES	120 573	128 978	1.13	0.54	68.5	71.0	0.82	0.28
DEVELOPING COUNTRIES	202 826	234 632	2.12	1.42	26.8	27.5	0.80	0.32
LEAST DEVELOPED COUNTRIES (LDC)	11 967	15 128	4.15	2.55	11.4	11.2	1.79	0.32
OECD³	114 792	123 746	1.34	0.58	69.4	71.6	0.87	0.22
BRICS	126 907	140 470	1.55	1.00	32.3	33.7	0.78	0.48

Note: Calendar year; except year ending 30 September New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.26.1. Beef and veal projections: Production and trade

Calendar year

	PRODUCTION (kt cwe) ⁴		Growth (%) ⁵		IMPORTS (kt cwe) ⁶		Growth (%) ⁵		EXPORTS (kt cwe) ⁶		Growth (%) ⁵	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	68 441	77 476	0.66	1.06	9 971	12 161	4.44	1.61	9 773	11 928	3.67	1.64
NORTH AMERICA	12 884	14 575	-0.13	0.67	1 566	1 661	3.16	0.57	1 777	2 084	2.63	0.58
Canada	1 399	1 538	-1.07	0.74	205	215	-1.16	0.47	473	618	0.78	1.86
United States	11 485	13 037	0.00	0.66	1 361	1 446	4.00	0.58	1 303	1 466	3.52	0.09
LATIN AMERICA	17 527	20 541	0.64	1.31	775	866	0.31	1.03	2 782	4 305	2.83	3.39
Argentina	2 786	3 454	-0.32	1.57	7	7	1.71	0.00	294	795	-3.57	6.65
Brazil	8 890	10 142	0.52	0.99	41	47	5.75	1.92	1 314	2 098	3.41	3.41
Chile	211	241	0.67	1.49	280	337	7.61	1.22	11	11	-1.26	-1.10
Colombia	808	971	-0.06	1.75	6	6	14.83	-1.20	20	48	2.57	4.38
Mexico	1 919	2 211	1.32	1.35	134	137	-6.00	0.39	195	221	17.40	0.83
Paraguay	471	554	5.46	2.55	8	14	22.97	-2.66	351	414	6.66	2.74
Peru	189	216	1.39	1.69	7	7	5.00	-2.92	0	0	..	..
EUROPE	10 744	10 562	-0.25	-0.23	1 379	1 361	-2.57	0.53	1 020	970	3.68	-0.55
European Union ¹	7 141	6 826	-0.17	-0.59	379	375	-1.42	1.04	546	496	3.24	-0.84
United Kingdom	907	857	0.51	-0.53	339	403	1.79	1.56	138	98	1.25	-3.40
Russia	1 633	1 760	-0.55	0.86	503	416	-6.76	-0.80	8	10	6.79	0.00
Ukraine	375	388	-1.81	0.78	2	2	-17.27	-0.85	46	62	15.62	4.55
AFRICA	6 645	7 850	2.12	1.66	652	1 076	2.33	4.77	116	149	5.89	5.05
Egypt	796	905	-0.54	1.32	296	520	4.92	4.03	2	3	21.59	-0.35
Ethiopia	413	487	0.77	1.58	0	0	..	..	0	0	..	..
Nigeria	321	380	3.04	1.66	2	3	17.31	1.90	1	1	..	-1.96
South Africa	1 058	1 413	3.56	3.13	23	16	0.43	-2.85	68	121	19.96	8.41
ASIA	17 464	20 349	1.26	1.54	5 568	7 162	8.79	1.75	1 945	1 945	9.03	0.38
China ²	6 280	7 150	0.15	1.17	970	1 235	65.40	-0.52	39	35	-8.48	-0.06
India	2 526	2 774	0.04	0.81	0	0	-29.84	..	1 625	1 598	9.92	0.41
Indonesia	425	457	3.57	1.02	165	274	8.49	3.99	0	0	-8.61	..
Iran	481	641	4.50	3.08	142	129	-2.52	-0.62	6	5	32.79	0.13
Japan	471	448	-1.20	-0.67	814	911	1.84	0.45	4	3	24.03	-2.02
Kazakhstan	444	579	1.70	2.26	68	39	-0.74	-1.50	3	3	38.25	0.20
Korea	281	299	0.60	0.49	492	593	5.99	1.35	5	3	2.30	0.00
Malaysia	37	48	11.00	2.28	201	267	4.48	2.90	11	9	5.56	-2.82
Pakistan	1 868	2 374	3.25	2.22	4	4	2.86	-0.30	64	83	9.74	2.40
Philippines	308	361	0.62	1.81	159	213	4.59	2.20	4	4	-1.11	-0.51
Saudi Arabia	41	61	4.08	3.63	168	199	2.44	1.79	17	16	32.32	-1.75
Thailand	196	229	-3.46	1.84	16	14	10.85	-2.83	45	57	13.27	2.92
Turkey	790	938	7.53	4.09	29	45	23.40	-2.98	24	39	11.29	3.51
Viet Nam	359	509	-0.91	2.42	929	1 232	18.73	4.06	0	0	..	..
OCEANIA	3 176	3 599	1.07	1.38	31	35	-0.01	1.22	2 133	2 476	2.17	1.59
Australia	2 502	2 946	1.16	1.79	10	10	-0.17	0.00	1 550	1 914	2.31	2.26
New Zealand	663	643	0.71	-0.30	9	10	7.48	0.14	580	560	1.76	-0.39
DEVELOPED COUNTRIES	30 189	32 719	0.21	0.57	4 019	4 230	0.48	0.63	5 006	5 657	2.77	0.92
DEVELOPING COUNTRIES	38 252	44 757	1.03	1.43	5 952	7 930	8.03	2.18	4 767	6 271	4.70	2.33
LEAST DEVELOPED COUNTRIES (LDC)	3 848	4 537	2.94	1.62	165	377	1.12	8.67	2	1	2.37	-3.01
OECD³	28 072	30 315	0.28	0.53	4 204	4 665	2.30	0.83	4 831	5 429	2.79	0.82
BRICS	20 387	23 239	0.39	1.13	1 537	1 714	7.82	-0.55	3 054	3 862	6.19	2.13

.. Not available

Note: Calendar year; except year ending 30 September for New Zealand. Average 2016-18est: Data for 2018 are estimated.

- Refers to all current European Union member States except the United Kingdom.
- Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
- Excludes Iceland but includes all EU member countries
- Gross indigenous production.
- Least-squares growth rate (see glossary).
- Excludes trade of live animals.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.26.2. Beef and veal projections: Consumption, food

Calendar year

	CONSUMPTION (kt cwe)		Growth (%) ⁴		FOOD (kg rwe/cap) ⁵		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	68 567	77 570	0.72	1.05	6.4	6.5	-0.44	0.09
NORTH AMERICA	12 911	14 458	-0.17	0.69	25.0	25.9	-0.91	-0.02
Canada	943	954	-0.72	0.20	18.0	16.7	-1.70	-0.60
United States	11 968	13 504	-0.12	0.72	25.8	27.0	-0.84	0.03
LATIN AMERICA	15 114	16 395	0.27	0.78	16.4	16.2	-0.83	-0.04
Argentina	2 499	2 666	0.25	0.43	39.5	38.4	-0.77	-0.40
Brazil	7 461	7 774	0.29	0.38	25.0	24.3	-0.58	-0.19
Chile	475	562	4.08	1.40	18.4	20.2	3.18	0.74
Colombia	762	891	0.13	1.70	10.9	11.8	-0.81	1.08
Mexico	1 633	1 836	0.14	1.20	8.9	8.9	-1.23	0.17
Paraguay	129	156	3.98	1.47	13.2	14.2	2.62	0.37
Peru	196	223	1.49	1.50	4.3	4.3	0.19	0.45
EUROPE	10 917	10 792	-1.19	-0.08	10.3	10.2	-1.28	-0.05
European Union ¹	6 749	6 518	-0.67	-0.45	10.7	10.3	-0.75	-0.42
United Kingdom	1 109	1 162	0.82	0.45	11.7	11.6	0.18	-0.04
Russia	2 177	2 205	-3.14	0.51	10.6	10.9	-3.22	0.71
Ukraine	323	320	-3.63	0.25	5.1	5.4	-3.15	0.80
AFRICA	7 215	8 876	2.05	2.01	4.1	3.9	-0.53	-0.35
Egypt	1 115	1 447	0.81	2.19	8.0	8.7	-1.29	0.61
Ethiopia	392	472	0.48	1.83	2.6	2.5	-2.06	-0.39
Nigeria	375	482	2.28	2.50	1.4	1.3	-0.39	-0.03
South Africa	1 004	1 287	2.37	2.54	12.4	14.2	1.00	1.54
ASIA	21 644	26 253	2.44	1.63	3.4	3.8	1.40	0.90
China ²	7 240	8 393	2.31	0.91	3.6	4.1	1.79	0.74
India	901	1 176	-8.19	1.39	0.5	0.6	-9.29	0.44
Indonesia	726	913	3.36	1.97	1.9	2.2	2.12	1.09
Iran	622	770	2.37	2.35	5.4	6.1	1.15	1.65
Japan	1 281	1 357	0.75	0.07	7.0	7.7	0.87	0.44
Kazakhstan	512	617	1.33	1.98	19.7	21.6	-0.16	1.13
Korea	769	889	4.33	1.06	10.6	11.8	3.91	0.80
Malaysia	239	318	3.69	2.89	5.3	6.2	1.97	1.67
Pakistan	1 802	2 289	3.07	2.22	6.4	6.8	0.97	0.54
Philippines	466	575	1.97	1.96	3.1	3.3	0.34	0.57
Saudi Arabia	193	245	1.48	2.50	4.1	4.4	-1.12	1.11
Thailand	125	136	-4.87	0.45	1.3	1.4	-5.23	0.39
Turkey	1 011	1 222	9.94	2.00	8.8	9.8	8.24	1.45
Viet Nam	1 341	1 788	10.59	3.44	9.8	11.9	9.38	2.58
OCEANIA	766	796	-2.00	1.24	13.5	12.2	-3.47	0.01
Australia	664	692	-1.75	1.37	19.0	17.5	-3.15	0.27
New Zealand	82	82	-3.67	0.11	12.2	11.1	-4.68	-0.67
DEVELOPED COUNTRIES	28 994	31 110	-0.34	0.54	14.4	14.9	-0.74	0.26
DEVELOPING COUNTRIES	39 572	46 460	1.56	1.42	4.5	4.7	0.20	0.30
LEAST DEVELOPED COUNTRIES (LDC)	3 965	4 907	2.90	2.13	3.3	3.2	0.50	-0.11
OECD³	27 196	29 347	0.19	0.51	14.3	14.8	-0.36	0.14
BRICS	18 783	20 836	0.07	0.78	4.2	4.3	-0.75	0.25

Note: Calendar year; except year ending 30 September New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.27.1. Pigmeat projections: Production and trade

Calendar year

	PRODUCTION (kt cwe) ⁴		Growth (%) ⁵		IMPORTS (kt cwe) ⁶		Growth (%) ⁵		EXPORTS (kt cwe) ⁶		Growth (%) ⁵	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	119 440	128 819	1.37	0.85	8 806	9 798	3.64	0.62	8 672	9 624	2.98	0.47
NORTH AMERICA	13 495	15 020	1.54	0.59	720	782	3.49	0.92	3 909	4 475	2.71	0.37
Canada	2 050	2 200	0.67	0.43	226	279	2.28	0.89	1 373	1 510	2.04	0.43
United States	11 445	12 820	1.71	0.62	494	503	4.11	0.94	2 536	2 966	3.10	0.34
LATIN AMERICA	8 098	10 002	2.75	1.75	1 380	1 704	8.85	1.23	936	1 167	3.46	1.00
Argentina	561	743	9.78	1.70	34	37	-6.47	0.42	13	24	14.75	1.84
Brazil	3 822	4 510	2.25	1.27	1	11	15.55	0.86	602	785	2.18	1.23
Chile	510	630	-0.23	2.09	99	104	32.60	-0.45	172	183	2.79	0.45
Colombia	361	463	8.54	2.17	97	193	32.56	4.10	0	0	..	..
Mexico	1 430	1 948	2.75	2.64	830	937	8.13	0.57	124	151	11.43	0.63
Paraguay	192	225	3.08	1.68	3	3	9.20	-1.52	4	7	57.34	3.01
Peru	156	198	4.17	2.35	12	23	19.36	4.36	0	0	..	..
EUROPE	29 168	29 616	1.27	0.07	1 332	1 372	-6.44	0.21	3 547	3 709	3.38	0.30
European Union ¹	22 872	22 886	0.62	-0.04	156	167	-0.34	0.44	3 168	3 275	3.21	0.19
United Kingdom	885	977	3.10	0.69	805	807	0.03	0.22	239	274	5.71	1.39
Russia	3 513	3 811	6.10	0.47	217	214	-19.84	1.35	58	73	53.70	3.70
Ukraine	718	746	2.55	1.44	16	26	-31.62	-6.98	4	3	19.87	2.56
AFRICA	1 464	1 773	3.89	2.00	276	509	3.78	6.50	28	26	20.97	-1.07
Egypt	0	0	-2.32	..	1	1	26.39	1.62	1	0	..	..
Ethiopia	2	2	1.73	2.46	0	0	..	..	0	0	..	..
Nigeria	276	292	2.37	0.90	1	3	38.96	5.08	0	0	..	..
South Africa	237	287	2.79	1.96	38	47	0.50	1.07	24	23	33.02	-1.06
ASIA	66 665	71 751	1.16	1.10	4 698	4 958	7.30	-0.03	205	191	-0.31	4.10
China ²	54 342	58 050	0.99	1.11	1 620	1 426	26.49	-2.44	102	109	-3.73	92.82
India	307	290	-2.56	-0.15	1	14	-5.42	33.02	0	0	-22.69	..
Indonesia	359	400	6.62	1.24	4	4	20.65	-0.46	0	0	..	..
Iran	0	0	..	..	4	4	24.96	0.00	3	2	22.03	0.00
Japan	1 280	1 215	-0.19	-0.65	1 308	1 451	3.00	0.80	3	4	15.05	1.04
Kazakhstan	93	83	-1.84	-0.78	27	36	-4.00	3.89	1	1	147.39	-0.69
Korea	1 306	1 400	3.51	0.34	659	722	5.85	0.65	2	2	4.72	0.00
Malaysia	195	197	-1.33	-0.02	29	47	13.04	5.67	5	4	-2.30	-2.30
Pakistan	0	0	..	..	0	0	..	..	0	0	..	..
Philippines	1 861	2 226	1.81	1.76	134	193	8.50	3.48	2	2	-3.22	-0.34
Saudi Arabia	0	0	..	..	20	26	49.34	0.00	3	4	354.67	0.00
Thailand	1 026	1 183	0.66	0.99	1	1	1.47	1.84	24	29	4.04	-3.05
Turkey	0	0	..	..	10	11	7.52	0.00	10	11	7.48	0.00
Viet Nam	3 680	4 327	2.62	1.72	48	96	4.58	5.75	38	11	6.03	-8.42
OCEANIA	550	658	2.20	1.26	399	472	3.09	1.51	47	55	-0.36	0.88
Australia	408	493	2.84	1.16	323	379	2.30	1.61	47	54	-0.48	0.90
New Zealand	46	49	-0.53	0.36	65	80	7.43	1.56	1	1	..	-0.18
DEVELOPED COUNTRIES	44 823	46 857	1.32	0.24	3 863	4 214	-1.09	0.75	7 532	8 269	3.05	0.34
DEVELOPING COUNTRIES	74 616	81 961	1.40	1.22	4 943	5 584	9.23	0.53	1 140	1 356	2.62	1.36
LEAST DEVELOPED COUNTRIES (LDC)	1 983	2 467	5.83	2.21	147	333	1.82	8.81	1	1	-2.79	-0.55
OECD³	42 624	45 032	1.07	0.33	4 990	5 458	3.66	0.70	7 681	8 438	3.09	0.34
BRICS	62 221	66 948	1.29	1.08	1 877	1 711	6.08	-1.98	787	990	2.50	2.23

.. Not available

Note: Calendar year; except year ending 30 September New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Gross indigenous production.
5. Least-squares growth rate (see glossary).
6. Excludes trade of live animals.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.27.2. Pigmeat projections: Consumption, food

Calendar year

	CONSUMPTION (kt cwe)		Growth (%) ⁴		FOOD (kg rwe/cap) ⁵		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	119 435	128 779	1.40	0.85	12.4	12.0	0.22	-0.10
NORTH AMERICA	10 314	11 316	1.27	0.71	22.3	22.6	0.52	0.00
Canada	756	795	-0.13	0.57	16.1	15.5	-1.12	-0.23
United States	9 558	10 521	1.39	0.72	23.0	23.4	0.66	0.02
LATIN AMERICA	8 550	10 546	3.49	1.74	10.4	11.6	2.35	0.91
Argentina	582	756	8.13	1.63	10.3	12.1	7.03	0.79
Brazil	3 222	3 734	2.27	1.27	12.0	13.0	1.37	0.69
Chile	437	550	1.50	2.17	18.9	22.1	0.62	1.51
Colombia	458	656	11.29	2.70	7.3	9.7	10.24	2.07
Mexico	2 142	2 743	4.20	1.99	12.9	14.7	2.78	0.96
Paraguay	190	221	2.83	1.59	21.8	22.4	1.49	0.48
Peru	167	222	4.90	2.53	4.1	4.8	3.55	1.47
EUROPE	26 956	27 288	0.46	0.05	28.3	28.7	0.37	0.09
European Union ¹	19 842	19 761	0.30	-0.07	35.0	34.8	0.22	-0.04
United Kingdom	1 451	1 510	0.98	0.32	17.1	16.8	0.34	-0.18
Russia	3 672	3 953	1.47	0.42	19.9	21.8	1.39	0.61
Ukraine	731	772	-0.78	0.97	12.9	14.4	-0.28	1.52
AFRICA	1 713	2 257	3.70	2.90	1.1	1.1	1.08	0.52
Egypt	1	1	3.96	2.09	0.0	0.0	1.79	0.51
Ethiopia	2	3	1.92	2.51	0.0	0.0	-0.66	0.28
Nigeria	279	298	2.47	0.93	1.1	0.9	-0.21	-1.56
South Africa	249	310	1.24	2.09	3.4	3.8	-0.12	1.09
ASIA	71 001	76 296	1.49	0.99	12.4	12.2	0.46	0.27
China ²	55 747	59 247	1.34	0.98	30.9	32.1	0.82	0.81
India	308	304	-2.53	0.25	0.2	0.2	-3.70	-0.69
Indonesia	347	387	7.31	1.23	1.0	1.0	6.02	0.35
Iran	1	2	..	0.00	0.0	0.0	4.26	-0.68
Japan	2 581	2 662	1.25	0.11	15.8	16.9	1.37	0.48
Kazakhstan	120	118	-2.51	0.41	5.1	4.6	-3.93	-0.42
Korea	1 936	2 120	3.60	0.44	29.6	31.5	3.19	0.18
Malaysia	219	240	-0.14	0.93	5.4	5.2	-1.80	-0.26
Pakistan	0	0	..	..	0.0	0.0	-49.63	-1.64
Philippines	1 992	2 417	2.17	1.89	14.8	15.4	0.54	0.50
Saudi Arabia	17	22	45.52	0.00	0.4	0.4	41.78	-1.36
Thailand	887	954	0.28	0.78	10.0	10.7	-0.10	0.72
Turkey	0	0	..	..	0.0	0.0	-1.55	-0.67
Viet Nam	3 690	4 411	2.63	1.84	30.1	32.8	1.51	0.99
OCEANIA	901	1 075	2.67	1.39	17.7	18.4	1.12	0.16
Australia	683	818	2.75	1.38	21.8	23.0	1.29	0.28
New Zealand	110	129	3.47	1.09	18.3	19.5	2.39	0.30
DEVELOPED COUNTRIES	41 160	42 801	0.75	0.27	22.7	22.9	0.35	0.00
DEVELOPING COUNTRIES	78 275	85 977	1.75	1.16	10.0	9.7	0.39	0.05
LEAST DEVELOPED COUNTRIES (LDC)	2 140	2 809	5.53	2.80	2.0	2.0	3.08	0.54
OECD³	39 899	42 032	1.01	0.38	23.4	23.6	0.46	0.00
BRICS	63 198	67 548	1.37	0.96	15.6	15.7	0.54	0.43

.. Not available

Note: Calendar year; except year ending 30 September for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.28.1. Poultry meat projections: Production and trade

Calendar year

	PRODUCTION (kt rtc)		Growth (%) ⁴		IMPORTS (kt rtc)		Growth (%) ⁴		EXPORTS (kt rtc)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	121 083	141 091	2.82	1.30	13 121	16 045	1.78	2.00	13 942	16 922	2.69	1.79
NORTH AMERICA	22 749	25 517	1.57	0.98	257	281	1.22	1.39	3 489	4 492	-0.53	2.58
Canada	1 368	1 513	1.78	0.72	184	210	0.14	1.90	159	182	-2.53	1.70
United States	21 381	24 005	1.56	1.00	74	71	4.60	0.00	3 330	4 310	-0.43	2.62
LATIN AMERICA	26 151	30 461	2.41	1.36	2 180	2 628	4.95	1.78	4 699	5 875	1.09	2.55
Argentina	2 100	2 454	3.30	1.41	11	6	-7.30	0.00	185	320	-1.42	4.61
Brazil	13 842	15 481	2.18	1.08	3	3	14.86	-1.73	4 296	5 307	1.20	2.55
Chile	740	918	2.58	1.80	149	140	13.68	-0.94	147	182	3.45	0.95
Colombia	1 563	2 100	5.79	2.53	89	95	7.43	0.17	7	9	-1.95	-0.02
Mexico	3 195	3 938	2.46	1.57	967	1 018	7.26	0.54	2	6	-15.79	7.95
Paraguay	21	18	-1.29	-1.99	25	32	5.45	2.38	4	4	23.12	-2.32
Peru	1 482	1 821	5.23	1.47	64	200	15.38	8.93	5	2	-6.08	-1.64
EUROPE	21 531	23 303	3.99	0.65	2 166	2 205	-2.67	-0.53	3 185	3 421	6.85	0.45
European Union ¹	12 839	13 640	2.83	0.53	864	923	-0.70	-0.22	2 247	2 380	4.82	0.42
United Kingdom	1 804	1 879	2.35	0.42	581	693	3.33	1.24	318	262	2.35	-0.93
Russia	4 965	5 393	8.18	0.57	217	69	-15.92	-10.96	158	222	37.31	2.07
Ukraine	1 051	1 256	3.11	1.67	281	326	0.03	-0.62	283	336	34.75	0.62
AFRICA	5 722	7 237	3.03	2.14	2 003	2 881	6.76	3.79	125	99	9.57	-1.91
Egypt	1 158	1 705	4.83	3.08	140	124	14.12	2.66	4	5	3.23	-0.25
Ethiopia	14	17	-18.62	1.59	0	0	..	..	0	0	..	..
Nigeria	203	199	-1.98	0.19	0	0	-47.59	..	0	0	..	..
South Africa	1 687	2 034	2.29	1.86	562	692	10.22	1.96	76	51	24.96	-1.68
ASIA	43 403	52 797	3.15	1.63	6 455	7 958	1.41	2.29	2 381	2 942	6.93	0.98
China ²	18 304	21 502	1.29	1.10	518	504	-2.49	-0.07	374	430	1.27	0.69
India	3 561	5 224	6.56	3.52	0	1	..	4.50	5	2	5.76	-10.90
Indonesia	2 311	2 921	5.66	2.66	4	5	15.22	3.57	0	0	..	..
Iran	2 184	2 589	3.57	1.69	2	2	-32.90	-0.09	72	75	10.59	0.81
Japan	1 572	1 649	1.68	0.33	867	862	4.22	0.07	10	10	3.18	0.00
Kazakhstan	160	206	8.42	1.76	166	204	2.06	3.18	8	7	57.22	-2.75
Korea	882	1 019	4.65	1.22	157	210	5.38	2.04	22	27	-0.65	0.00
Malaysia	1 858	2 235	4.84	1.82	75	83	7.52	0.89	167	157	5.37	-0.89
Pakistan	1 261	1 704	8.47	2.52	30	34	11.39	1.43	4	4	25.88	-0.48
Philippines	1 276	1 619	5.00	2.02	248	513	15.76	5.86	4	1	-14.26	-0.53
Saudi Arabia	640	861	2.76	2.21	758	681	0.93	1.51	49	39	26.65	-1.48
Thailand	1 698	2 132	3.93	1.83	5	6	4.84	0.95	1 059	1 451	7.11	2.25
Turkey	2 220	2 814	5.98	1.39	8	11	1.72	0.36	502	665	15.92	0.04
Viet Nam	916	1 155	6.75	1.80	487	624	0.14	2.23	0	0	..	..
OCEANIA	1 527	1 775	4.30	1.29	60	92	9.25	3.83	64	94	6.79	3.98
Australia	1 269	1 468	4.05	1.27	0	0	..	..	43	59	3.08	3.85
New Zealand	226	268	5.89	1.29	0	0	..	..	21	34	20.47	4.21
DEVELOPED COUNTRIES	50 025	55 455	2.70	0.88	4 223	4 552	0.37	0.46	6 849	8 081	2.64	1.58
DEVELOPING COUNTRIES	71 058	85 636	2.91	1.59	8 898	11 493	2.54	2.68	7 093	8 840	2.72	2.00
LEAST DEVELOPED COUNTRIES (LDC)	3 014	3 775	5.83	2.19	860	1 467	4.93	5.89	19	16	-6.92	-2.21
OECD³	48 323	54 097	2.33	0.93	3 900	4 198	3.36	0.47	6 811	8 121	2.10	1.51
BRICS	42 359	49 634	2.67	1.30	1 300	1 269	-3.42	-0.27	4 910	6 012	1.79	2.33

.. Not available

Note: Calendar year; except year ending 30 September for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.28.2. Poultry meat projections: Consumption, food

Calendar year

	CONSUMPTION (kt rfc)		Growth (%) ⁴		FOOD (kg rwe/cap) ⁵		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	120 487	140 253	2.74	1.33	14.1	14.8	1.55	0.36
NORTH AMERICA	19 491	21 347	1.91	0.70	47.5	48.1	1.16	-0.01
Canada	1 395	1 581	2.10	1.11	33.5	34.8	1.10	0.33
United States	18 096	19 766	1.90	0.67	49.1	49.7	1.17	-0.03
LATIN AMERICA	23 632	27 214	2.90	1.15	32.3	33.9	1.77	0.33
Argentina	1 926	2 140	3.78	1.00	38.3	38.8	2.73	0.17
Brazil	9 549	10 177	2.68	0.39	40.2	40.1	1.78	-0.18
Chile	741	876	3.92	1.49	36.1	39.7	3.02	0.83
Colombia	1 644	2 186	5.92	2.42	29.5	36.5	4.92	1.80
Mexico	4 160	4 950	3.45	1.35	28.3	30.0	2.04	0.32
Paraguay	42	45	1.41	0.90	5.4	5.2	0.08	-0.20
Peru	1 541	2 020	5.58	2.03	42.2	49.2	4.22	0.97
EUROPE	20 769	22 088	2.89	0.55	24.6	26.2	2.79	0.59
European Union ¹	11 712	12 182	2.49	0.49	23.3	24.2	2.42	0.52
United Kingdom	2 067	2 310	2.61	0.83	27.5	29.0	1.95	0.33
Russia	5 025	5 240	4.85	0.20	30.7	32.6	4.77	0.39
Ukraine	1 049	1 246	-0.52	1.30	20.9	26.3	-0.03	1.85
AFRICA	7 600	10 019	3.81	2.64	5.4	5.5	1.18	0.26
Egypt	1 294	1 824	5.59	3.06	11.7	13.8	3.39	1.47
Ethiopia	14	17	-18.63	1.59	0.1	0.1	-20.69	-0.62
Nigeria	203	200	-2.58	0.21	0.9	0.7	-5.13	-2.26
South Africa	2 173	2 675	3.44	1.97	33.7	37.1	2.06	0.97
ASIA	47 472	57 812	2.73	1.75	9.3	10.5	1.69	1.02
China ²	18 448	21 576	1.16	1.08	11.5	13.2	0.65	0.92
India	3 557	5 223	6.56	3.54	2.3	3.1	5.29	2.57
Indonesia	2 315	2 926	5.66	2.67	7.7	8.8	4.39	1.78
Iran	2 114	2 516	3.09	1.71	22.9	25.1	1.85	1.02
Japan	2 423	2 501	2.30	0.24	16.7	17.9	2.43	0.61
Kazakhstan	318	402	4.51	2.56	15.4	17.7	2.98	1.71
Korea	1 017	1 202	4.81	1.39	17.5	20.1	4.39	1.13
Malaysia	1 765	2 161	4.89	2.01	49.1	52.7	3.15	0.80
Pakistan	1 287	1 735	8.48	2.51	5.7	6.4	6.27	0.83
Philippines	1 520	2 130	6.34	2.82	12.7	15.3	4.65	1.42
Saudi Arabia	1 349	1 503	1.45	2.00	36.1	34.2	-1.15	0.61
Thailand	646	686	0.33	0.96	8.2	8.7	-0.05	0.90
Turkey	1 726	2 159	4.06	1.84	18.8	21.7	2.45	1.29
Viet Nam	1 403	1 779	3.71	1.95	12.9	14.9	2.59	1.11
OCEANIA	1 523	1 773	4.36	1.28	33.7	34.2	2.79	0.05
Australia	1 227	1 409	4.08	1.17	44.2	44.8	2.60	0.07
New Zealand	205	234	4.99	0.92	38.4	40.0	3.89	0.13
DEVELOPED COUNTRIES	47 622	51 966	2.52	0.74	29.7	31.4	2.11	0.47
DEVELOPING COUNTRIES	72 865	88 287	2.88	1.69	10.5	11.3	1.51	0.57
LEAST DEVELOPED COUNTRIES (LDC)	3 855	5 226	5.74	3.12	4.0	4.3	3.28	0.85
OECD³	45 634	50 215	2.48	0.81	30.2	31.8	1.93	0.43
BRICS	38 751	44 890	2.51	1.12	10.8	11.8	1.67	0.58

Note: Calendar year; except year ending 30 September for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.29.1. Sheep meat projections: Production and trade

Calendar year

	PRODUCTION (kt cwe) ⁴		Growth (%) ⁵		IMPORTS (kt cwe) ⁶		Growth (%) ⁵		EXPORTS (kt cwe) ⁶		Growth (%) ⁵	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	14 912	16 997	1.57	1.36	1 130	1 258	2.41	0.88	1 191	1 288	1.80	1.00
NORTH AMERICA	92	104	-0.90	1.33	131	116	4.55	-0.50	3	3	-13.55	-0.38
Canada	16	18	0.78	0.92	24	24	1.63	0.59	0	0	..	..
United States	76	87	-1.22	1.42	107	92	5.30	-0.75	3	3	-13.89	0.04
LATIN AMERICA	380	406	-0.30	0.53	28	28	-2.71	0.55	18	16	-7.56	-3.09
Argentina	51	56	-1.23	0.96	0	0	..	..	2	2	-17.03	-0.36
Brazil	124	130	1.77	0.45	8	7	1.32	-0.40	0	0	..	..
Chile	14	12	-2.25	-2.41	0	0	..	..	5	3	-2.14	-7.85
Colombia	8	8	-3.98	0.21	0	0	..	..	0	0	..	..
Mexico	61	70	1.42	1.32	10	10	-4.70	-0.43	0	0	..	..
Paraguay	4	4	1.36	0.69	0	0	..	..	0	0	..	..
Peru	39	42	-0.34	0.59	0	0	..	..	0	0	..	..
EUROPE	1 267	1 344	-0.05	0.50	310	306	-3.10	0.64	150	146	0.44	0.23
European Union ¹	610	634	-1.35	0.54	194	201	-3.10	0.97	41	55	3.47	3.01
United Kingdom	304	312	0.31	0.02	106	95	-2.59	0.03	98	77	-1.28	-1.85
Russia	227	254	2.97	0.69	3	2	-14.62	0.32	4	..	74.60	..
Ukraine	14	15	-5.09	0.64	0	0	..	..	0	0	..	..
AFRICA	3 110	3 462	1.01	1.80	29	31	-2.22	2.99	32	37	1.50	0.93
Egypt	126	153	-0.91	2.29	1	0	-22.03	..	0	0	..	..
Ethiopia	69	79	-11.22	2.56	0	0	..	..	16	24	8.49	3.38
Nigeria	389	474	-0.75	2.12	0	0	..	..	0	0	..	..
South Africa	160	172	-0.69	1.05	8	7	-1.68	2.06	1	1	14.24	-0.28
ASIA	8 861	10 384	2.19	1.39	606	748	7.08	1.12	42	59	-5.12	0.81
China ²	4 666	5 514	2.52	1.52	263	323	20.81	0.06	3	4	-14.79	-0.35
India	747	832	-0.61	1.03	0	0	..	..	21	38	-1.65	3.70
Indonesia	122	143	0.35	1.15	2	6	16.55	11.98	0	0	..	..
Iran	365	369	-1.66	0.62	18	31	24.47	1.60	0	0	..	..
Japan	0	0	..	..	22	23	-6.18	-0.36	..	..	..	..
Kazakhstan	171	211	2.64	2.08	0	0	..	..	0	0	..	..
Korea	2	2	0.70	0.00	15	20	19.73	1.37	0	0	..	..
Malaysia	2	3	5.60	3.33	36	47	9.33	2.39	0	0	..	..
Pakistan	470	532	1.15	1.03	0	0	..	..	7	1	-7.79	-19.88
Philippines	60	70	1.17	1.23	1	5	4.61	27.33	0	0	..	..
Saudi Arabia	0	0	-55.34	..	45	46	-2.14	0.99	3	4	0.90	-0.98
Thailand	2	3	4.63	1.23	2	2	9.83	4.20	0	0	..	..
Turkey	402	416	5.08	0.18	1	1	5.46	-0.47	0	0	..	..
Viet Nam	15	23	9.04	2.68	1	5	-30.15	21.17	0	0	..	..
OCEANIA	1 203	1 296	1.32	1.11	26	29	-3.05	1.82	945	1 027	2.93	1.21
Australia	735	810	2.51	1.32	..	..	..	..	484	549	5.54	1.62
New Zealand	468	485	-0.35	0.76	4	4	-1.30	0.00	461	478	0.63	0.76
DEVELOPED COUNTRIES	3 517	3 946	1.35	1.12	477	463	-1.54	0.44	1 104	1 184	2.52	1.07
DEVELOPING COUNTRIES	11 395	13 050	1.65	1.43	653	795	6.27	1.15	87	104	-4.73	0.19
LEAST DEVELOPED COUNTRIES (LDC)	2 094	2 284	2.63	1.83	4	5	0.25	1.97	6	6	8.99	1.16
OECD³	2 729	2 889	0.91	0.71	493	483	-1.11	0.43	1 092	1 164	2.38	1.01
BRICS	5 925	6 903	1.98	1.39	281	340	16.57	0.09	28	44	-2.24	3.11

.. Not available

Note: Calendar year; except year ending 30 September for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Gross indigenous production.
5. Least-squares growth rate (see glossary).
6. Excludes trade of live animals.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.29.2. Sheep meat projections: Consumption, food

Calendar year

	CONSUMPTION (kt cwe)		Growth (%) ⁴		FOOD (kg rwe/cap) ⁵		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	14 911	17 009	1.72	1.35	1.7	1.8	0.54	0.39
NORTH AMERICA	213	210	2.36	0.35	0.5	0.5	1.60	-0.35
Canada	40	41	0.90	0.78	0.9	0.9	-0.10	-0.03
United States	173	169	2.72	0.25	0.5	0.4	1.98	-0.44
LATIN AMERICA	393	425	0.05	0.70	0.5	0.5	-1.05	-0.13
Argentina	49	54	0.14	1.01	1.0	1.0	-0.87	0.17
Brazil	131	138	1.67	0.42	0.6	0.5	0.78	-0.15
Chile	9	9	-2.20	0.31	0.4	0.4	-3.04	-0.34
Colombia	8	8	-4.25	0.29	0.1	0.1	-5.15	-0.32
Mexico	75	86	0.54	1.02	0.5	0.5	-0.83	-0.01
Paraguay	4	4	1.37	0.69	0.5	0.5	0.04	-0.40
Peru	39	42	-0.34	0.59	1.1	1.0	-1.62	-0.45
EUROPE	1 371	1 463	-1.27	0.67	1.6	1.7	-1.37	0.70
European Union ¹	713	747	-2.77	0.72	1.4	1.5	-2.84	0.75
United Kingdom	313	330	-0.25	0.52	4.2	4.1	-0.89	0.02
Russia	222	250	1.89	0.70	1.4	1.6	1.81	0.89
Ukraine	14	15	-5.12	0.64	0.3	0.3	-4.65	1.18
AFRICA	3 033	3 370	0.98	1.85	2.1	1.8	-1.58	-0.50
Egypt	127	153	-1.00	2.31	1.1	1.2	-3.07	0.73
Ethiopia	53	54	-13.86	2.22	0.4	0.4	-16.04	0.00
Nigeria	393	481	-0.78	2.17	1.8	1.7	-3.37	-0.35
South Africa	178	190	0.15	1.03	2.8	2.6	-1.19	0.04
ASIA	9 632	11 266	2.62	1.36	1.9	2.0	1.58	0.63
China ²	4 929	5 833	3.09	1.43	3.1	3.6	2.57	1.26
India	716	784	-0.51	0.93	0.5	0.5	-1.71	-0.02
Indonesia	125	149	0.61	1.46	0.4	0.4	-0.60	0.58
Iran	376	408	0.32	0.73	4.1	4.1	-0.88	0.04
Japan	22	23	-6.18	-0.36	0.2	0.2	-6.07	0.01
Kazakhstan	171	211	2.64	2.10	8.3	9.3	1.14	1.25
Korea	17	20	16.01	1.33	0.3	0.3	15.55	1.07
Malaysia	41	53	9.20	2.32	1.1	1.3	7.39	1.11
Pakistan	463	530	1.38	1.17	2.1	2.0	-0.68	-0.48
Philippines	61	75	1.22	1.92	0.5	0.5	-0.40	0.53
Saudi Arabia	162	158	1.15	0.71	4.3	3.6	-1.45	-0.67
Thailand	3	4	5.25	2.64	0.0	0.1	4.85	2.58
Turkey	403	417	4.74	0.18	4.4	4.2	3.12	-0.36
Viet Nam	16	28	1.70	4.48	0.1	0.2	0.60	3.62
OCEANIA	269	275	-1.07	0.87	5.9	5.3	-2.56	-0.35
Australia	219	225	-0.82	0.88	7.9	7.1	-2.24	-0.21
New Zealand	28	24	-0.97	-0.37	5.2	4.1	-2.01	-1.15
DEVELOPED COUNTRIES	2 798	3 101	0.41	1.08	1.7	1.9	0.01	0.81
DEVELOPING COUNTRIES	12 114	13 908	2.04	1.42	1.7	1.8	0.68	0.30
LEAST DEVELOPED COUNTRIES (LDC)	2 008	2 186	2.60	1.89	2.1	1.8	0.22	-0.35
OECD³	2 064	2 152	-0.20	0.57	1.4	1.4	-0.74	0.20
BRICS	6 175	7 195	2.46	1.32	1.7	1.9	1.62	0.78

Note: Calendar year; except year ending 30 September for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
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3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).
5. Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factors of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

ANNEX C

Table C.30. Main policy assumptions for meat markets

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ARGENTINA												
Beef export tax ¹	%	2.7	8.2	8.2	..	..	..	..	..	..	..	..
CANADA												
Beef tariff-quota	kt pw	129.2	129.2	129.2	129.2	129.2	129.2	129.2	129.2	129.2	129.2	129.2
In-quota tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	%	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
Poultry meat tariff-quota	kt pw	92.5	96.4	98.6	99.2	100.3	101.4	102.2	103.0	103.6	104.2	104.8
In-quota tariff	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Out-of-quota tariff	%	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0
EUROPEAN UNION²												
Voluntary coupled support												
Beef and veal ³	mIn EUR	1 695	1 693	1 693	1 693	1 693	1 693	1 693	1 693	1 693	1 693	1 693
Sheep and goat meat ⁴	mIn EUR	484	491	496	496	496	496	496	496	496	496	496
Beef basic price ⁵	EUR/kg dwt	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Beef buy-in price ^{5,6}	EUR/kg dwt	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Beef tariff-quota	kt cwe	340.4	359.8	369.0	378.3	387.5	389.0	390.6	392.2	392.7	393.2	393.7
Pig tariff-quota	kt cwe	176.7	203.5	216.9	230.3	245.7	246.6	247.5	248.4	249.3	250.2	251.1
Poultry tariff-quota	kt rtc	1 011.5	1 017.9	1 021.1	1 024.3	1 026.3	1 028.4	1 030.5	1 032.5	1 034.6	1 036.7	1 038.7
Sheep meat tariff-quota	kt cwe	295.1	296.1	296.3	296.5	296.7	296.9	297.1	297.1	297.5	297.7	297.9
JAPAN⁷												
Beef stabilisation prices												
Upper price	JPY/kg dwt	1 208.3	1 255.0	1 255.0	1 255.0	1 255.0	1 255.0	1 255.0	1 255.0	1 255.0	1 255.0	1 255.0
Lower price	JPY/kg dwt	905.0	925.0	925.0	925.0	925.0	925.0	925.0	925.0	925.0	925.0	925.0
Beef tariff	%	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
Pigmeat stabilisation prices												
Upper price	JPY/kg dwt	596.7	595.0	595.0	595.0	595.0	595.0	595.0	595.0	595.0	595.0	595.0
Lower price	JPY/kg dwt	441.7	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0
Pig meat import system												
Tariff	%	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Standard import price	JPY/kg dwt	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9
Poultry meat tariff	%	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
KOREA												
Beef tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Pigmeat tariff	%	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Poultry meat tariff	%	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
MEXICO⁸												
Beef and veal tariff-quota	kt pw	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	0.0	0.0
In-quota tariff	%	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff ⁹	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Poultry meat tariff-quota	kt pw	300.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
In-quota tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	%	83.3	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
RUSSIA												
Beef tariff-quota	kt pw	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0
In-quota tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Out-of-quota tariff	%	53.3	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Pigmeat tariff-quota ¹⁰	kt pw	430.0	430.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
In-quota tariff	%	..	..	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Out-of-quota tariff	%	65.0	65.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Poultry tariff-quota	kt pw	357.3	354.0	354.0	354.0	354.0	354.0	354.0	354.0	354.0	354.0	354.0
In-quota tariff	%	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Out-of-quota tariff	%	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
UNITED STATES												
Beef tariff-quota	kt pw	696.6	696.6	696.6	696.6	696.6	696.6	696.6	696.6	696.6	696.6	696.6
In-quota tariff	%	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Out-of-quota tariff	%	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4

Table C.30. Main policy assumptions for meat markets (cont.)

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
CHINA												
Beef tariff	%	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Pigmeat tariff	%	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Sheep meat tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Poultry meat tariff	%	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
INDIA												
Beef tariff	%	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
Pigmeat tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Sheep meat tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Poultry meat tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
SOUTH AFRICA												
Sheep meat tariff-quota	kt pw	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
In-quota tariff	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Out-of-quota tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0

.. Not available

Note: Average 2016-18est: Data for 2018 are estimated.

1. In Argentina, a temporary export tax is applied on all goods from September 4th 2018 until December 31st 2020.
2. Since 2015 the Basic payment scheme (BPS) holds, which shall account for 68% maximum of the national direct payment envelopes. On top of this, compulsory policy instruments have been introduced: the Green Payment (30%) and young farmer scheme (2%).
3. Implemented in 24 Member States.
4. Implemented in 22 Member States.
5. Price for R3 grade male cattle.
6. Safety-net trigger.
7. Year beginning 1 April.
8. Intended for countries which whom Mexico has no free trade agreements.
9. 25% for frozen beef.
10. Eliminated in 2020 and replaced by import tariff.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.31.1. Butter projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	10 906	13 035	2.22	1.90	994	1 252	2.05	1.63	1 077	1 252	1.35	1.63
NORTH AMERICA	953	1 043	1.95	0.54	48	33	22.05	-5.06	28	35	-2.20	0.10
Canada	107	146	2.99	1.75	18	12	15.42	0.00	0	0	3.72	..
United States	846	898	1.82	0.36	29	21	28.15	-7.03	28	35	-2.26	0.23
LATIN AMERICA	450	507	2.81	1.38	62	79	1.48	1.89	39	41	-0.84	1.58
Argentina	32	33	-6.40	1.00	0	0	..	..	9	6	-8.30	1.98
Brazil	99	103	3.64	0.33	4	5	2.11	2.60	0	1	-29.06	-3.88
Chile	23	26	2.48	1.00	6	9	26.59	3.57	4	3	9.62	-3.44
Colombia	21	21	0.26	0.17	0	0	..	..	0	0	..	..
Mexico	201	233	6.64	1.48	31	36	-0.12	2.72	10	12	29.91	2.09
Paraguay	0	0	..	..	0	0	..	..	0	0	..	..
Peru	4	4	2.64	3.47	6	11	6.64	2.64	0	0	..	..
EUROPE	2 760	3 026	1.69	1.01	257	329	-0.20	2.25	463	645	2.68	3.11
European Union ¹	2 003	2 212	1.82	1.01	61	117	-1.91	5.02	297	450	1.58	3.23
United Kingdom	145	142	2.39	-0.01	97	99	-0.33	0.46	55	42	8.89	-1.33
Russia	314	331	0.69	0.53	91	97	3.13	1.45	2	3	-5.31	0.00
Ukraine	105	95	4.42	-0.22	2	11	-22.31	5.78	13	2	42.78	-5.91
AFRICA	310	374	0.33	2.31	124	159	-1.96	2.04	9	8	3.06	1.70
Egypt	122	139	-0.47	1.62	54	74	0.43	3.03	1	0	-29.25	..
Ethiopia	17	25	-0.28	3.93	0	0	..	..	0	0	..	..
Nigeria	12	16	1.06	2.93	5	5	-18.69	0.21	0	0	..	..
South Africa	12	15	-0.69	5.23	6	5	8.41	-4.39	3	4	16.92	4.60
ASIA	5 748	7 371	2.77	2.67	466	590	3.51	1.53	37	25	0.38	-2.76
China ²	98	103	-1.22	0.70	96	139	18.30	2.04	1	1	-10.39	1.00
India	4 224	5 561	3.40	2.87	4	38	-9.49	27.60	7	0	-0.47	-40.47
Indonesia	0	0	..	..	23	25	6.55	3.21	0	0	..	..
Iran	210	264	0.43	2.53	42	33	-3.38	-0.73	1	0	-20.56	..
Japan	61	60	-2.59	0.01	12	12	27.49	0.00	0	0	..	..
Kazakhstan	13	18	-1.75	4.09	8	8	0.89	-2.26	0	0	..	..
Korea	2	3	0.51	2.00	10	13	5.26	2.66	0	0	..	..
Malaysia	0	0	..	..	20	22	7.52	0.44	9	8	12.68	-0.44
Pakistan	729	861	1.59	2.12	1	3	..	0.66	0	0	..	..
Philippines	0	0	..	..	22	7	-5.19	4.15	0	0	..	..
Saudi Arabia	5	4	-0.74	0.77	52	61	6.54	0.91	3	2	1.33	-0.91
Thailand	0	0	..	..	13	14	4.99	0.08	1	1	16.68	-0.08
Turkey	210	281	3.86	3.10	12	1	-0.14	-23.52	0	0	..	..
Viet Nam	0	0	..	..	10	25	-0.61	4.31	0	0	..	..
OCEANIA	686	714	0.96	0.49	37	61	7.43	3.48	502	498	0.84	0.34
Australia	104	98	-3.68	-0.21	32	57	9.58	3.61	22	6	-15.37	-9.80
New Zealand	579	613	2.01	0.61	1	0	3.00	..	480	491	2.39	0.58
DEVELOPED COUNTRIES	4 522	4 921	1.52	0.85	386	486	2.38	1.33	998	1 185	1.53	1.75
DEVELOPING COUNTRIES	6 384	8 115	2.75	2.59	608	766	1.87	1.84	79	67	-0.57	-0.28
LEAST DEVELOPED COUNTRIES (LDC)	201	234	1.02	1.90	15	20	6.22	1.66	4	4	14.19	-0.36
OECD³	4 349	4 778	1.88	0.91	312	389	2.71	1.33	900	1 043	1.31	1.41
BRICS	4 747	6 112	3.08	2.65	201	284	6.94	3.04	14	9	-2.15	-5.03

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.

2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.

3. Excludes Iceland but includes all EU member countries

4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.31.2. Butter projections: Consumption, food

Calendar year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	10 847	13 035	2.29	1.90	1.4	1.6	1.10	0.93
NORTH AMERICA	965	1 043	2.48	0.38	2.7	2.7	1.71	-0.34
Canada	119	159	3.54	2.06	3.3	4.0	2.52	1.25
United States	846	884	2.33	0.10	2.6	2.5	1.60	-0.60
LATIN AMERICA	478	543	3.22	1.49	0.7	0.8	2.08	0.66
Argentina	27	26	-2.73	2.00	0.6	0.5	-3.71	1.16
Brazil	103	107	3.85	0.46	0.5	0.5	2.94	-0.11
Chile	25	32	4.53	2.13	1.4	1.6	3.63	1.47
Colombia	21	21	0.28	0.17	0.4	0.4	-0.67	-0.44
Mexico	223	257	4.89	1.62	1.7	1.8	3.46	0.59
Paraguay	0	0	..	..	0.0	0.0	-51.07	-0.10
Peru	10	15	4.40	2.85	0.3	0.4	3.06	1.79
EUROPE	2 567	2 710	1.25	0.70	3.5	3.7	1.15	0.74
European Union ¹	1 779	1 879	1.62	0.75	4.0	4.2	1.54	0.77
United Kingdom	186	199	0.13	0.53	2.8	2.8	-0.51	0.03
Russia	403	425	0.89	0.74	2.8	3.0	0.81	0.93
Ukraine	94	104	1.15	0.47	2.1	2.5	1.65	1.01
AFRICA	425	525	-0.46	2.24	0.3	0.3	-2.98	-0.13
Egypt	175	213	-0.13	2.09	1.8	1.8	-2.21	0.51
Ethiopia	17	25	-0.28	3.92	0.2	0.2	-2.81	1.66
Nigeria	18	21	-9.54	2.17	0.1	0.1	-11.90	-0.34
South Africa	14	16	-0.76	1.22	0.2	0.2	-2.09	0.23
ASIA	6 177	7 936	2.84	2.61	1.4	1.6	1.79	1.87
China ²	192	240	5.36	1.45	0.1	0.2	4.82	1.28
India	4 221	5 599	3.36	2.95	3.2	3.8	2.12	1.99
Indonesia	23	25	7.61	3.25	0.1	0.1	6.32	2.36
Iran	252	297	-0.23	2.11	3.1	3.4	-1.43	1.41
Japan	72	72	-1.34	0.01	0.6	0.6	-1.23	0.38
Kazakhstan	20	26	-0.95	1.72	1.1	1.3	-2.40	0.88
Korea	12	16	3.68	2.54	0.2	0.3	3.27	2.27
Malaysia	12	14	5.10	0.98	0.4	0.4	3.35	-0.22
Pakistan	730	864	1.61	2.11	3.7	3.6	-0.46	0.44
Philippines	22	7	-5.22	4.16	0.2	0.1	-6.73	2.74
Saudi Arabia	53	63	5.63	0.97	1.6	1.6	2.92	-0.41
Thailand	12	13	4.40	0.09	0.2	0.2	4.00	0.03
Turkey	221	282	3.64	2.29	2.7	3.2	2.03	1.73
Viet Nam	10	25	-0.61	4.33	0.1	0.2	-1.69	3.46
OCEANIA	235	277	3.27	1.29	5.9	6.1	1.71	0.06
Australia	109	149	4.99	1.75	4.5	5.4	3.49	0.65
New Zealand	121	122	2.41	0.74	25.8	23.8	1.33	-0.04
DEVELOPED COUNTRIES	3 930	4 223	1.56	0.67	2.8	2.9	1.15	0.39
DEVELOPING COUNTRIES	6 917	8 812	2.73	2.55	1.1	1.3	1.35	1.42
LEAST DEVELOPED COUNTRIES (LDC)	213	250	1.17	1.92	0.3	0.2	-1.18	-0.32
OECD³	3 780	4 125	2.07	0.83	2.8	3.0	1.51	0.45
BRICS	4 933	6 387	3.21	2.68	1.6	1.9	2.36	2.14

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.32.1. Cheese projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	23 343	26 743	1.71	1.22	3 016	3 631	3.47	1.76	3 087	3 631	1.87	1.76
NORTH AMERICA	6 117	7 131	2.86	1.29	180	213	0.73	1.00	321	368	9.63	1.11
Canada	471	559	3.00	1.55	28	55	3.62	4.29	12	10	3.02	0.00
United States	5 645	6 573	2.85	1.27	152	158	0.27	0.07	309	358	10.00	1.14
LATIN AMERICA	2 376	2 827	1.88	1.76	332	430	5.33	1.88	156	150	0.30	0.21
Argentina	537	595	0.46	1.00	1	1	-17.49	0.00	49	53	-1.25	1.94
Brazil	757	950	2.32	2.00	35	50	4.63	2.42	3	5	-3.59	4.26
Chile	94	98	4.22	0.59	37	56	20.40	4.76	6	3	-8.12	-4.27
Colombia	58	55	0.05	-0.17	3	7	25.04	4.60	0	0	-19.49	..
Mexico	351	381	3.60	0.94	116	153	5.83	3.17	6	3	2.53	0.66
Paraguay	0	0	..	..	3	4	14.10	0.97	0	0	..	..
Peru	23	30	2.37	2.75	6	8	11.63	2.26	0	0	..	..
EUROPE	11 536	13 071	1.42	1.06	1 040	1 200	1.00	1.05	1 793	2 281	3.19	2.17
European Union ¹	9 775	11 093	1.27	1.03	198	206	2.63	0.54	1 303	1 755	3.47	2.60
United Kingdom	454	514	2.79	1.05	492	513	2.13	0.37	170	168	5.93	-0.51
Russia	630	754	5.03	1.62	220	317	-3.69	2.57	13	11	-3.73	-1.04
Ukraine	127	123	-8.09	-0.04	9	34	-3.36	9.15	7	2	-29.87	-8.38
AFRICA	974	1 043	-0.17	1.04	162	238	1.22	3.73	83	39	-10.52	-2.02
Egypt	636	656	-0.14	0.65	31	85	0.60	9.21	52	7	-15.49	-8.43
Ethiopia	6	9	0.11	3.63	0	0	..	..	0	0	..	..
Nigeria	10	9	1.91	-1.63	1	4	-28.87	17.70	0	0	..	..
South Africa	43	54	-0.38	2.69	14	10	11.24	-3.26	10	14	25.93	3.37
ASIA	1 613	1 862	0.72	1.62	1 187	1 430	6.25	2.27	226	247	-6.45	3.40
China ²	247	258	-1.46	0.68	104	169	24.36	4.49	0	0	..	..
India	4	1	11.44	-5.49	3	3	11.09	1.37	6	5	13.09	-1.35
Indonesia	0	0	..	..	25	34	6.29	2.77	2	1	13.40	-2.69
Iran	294	318	0.22	0.99	0	0	..	..	35	68	-9.64	5.30
Japan	47	49	0.41	0.02	271	328	4.57	1.39	0	0	..	..
Kazakhstan	26	41	4.54	5.03	22	24	-0.20	-1.24	1	2	-4.21	0.39
Korea	34	51	4.21	3.42	119	164	10.47	2.99	0	0	..	..
Malaysia	0	0	..	..	22	30	10.56	2.87	0	0	..	..
Pakistan	0	0	..	..	4	5	18.32	3.16	0	0	..	..
Philippines	2	1	65.73	-3.01	33	41	10.29	2.02	0	0	-28.46	..
Saudi Arabia	197	236	1.17	2.17	142	98	3.28	1.71	100	33	-13.24	-1.68
Thailand	5	2	0.00	-8.76	15	23	13.38	3.22	0	0	..	..
Turkey	201	271	2.98	2.64	11	5	9.06	-6.13	48	109	8.54	6.54
Viet Nam	0	0	..	..	5	10	2.09	4.04	0	0	..	..
OCEANIA	727	809	1.64	0.78	114	120	6.18	0.75	508	547	2.25	0.70
Australia	353	383	0.37	0.26	102	107	5.80	0.81	172	162	1.02	-0.56
New Zealand	374	426	2.98	1.28	10	11	11.16	0.00	336	384	2.95	1.28
DEVELOPED COUNTRIES	18 746	21 443	1.86	1.14	1 668	1 925	1.94	1.03	2 640	3 221	3.68	1.79
DEVELOPING COUNTRIES	4 597	5 300	1.10	1.56	1 347	1 706	5.68	2.65	447	410	-5.87	1.56
LEAST DEVELOPED COUNTRIES (LDC)	342	383	0.29	1.36	24	20	4.14	2.30	0	0	..	..
OECD³	18 203	20 813	1.90	1.11	1 620	1 859	3.81	1.26	2 440	3 038	3.95	1.89
BRICS	1 681	2 018	2.52	1.69	375	550	1.34	2.94	32	35	3.23	1.19

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.32.2. Cheese projections: Consumption, food

Calendar year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	23 287	26 742	1.89	1.23	3.1	3.2	0.71	0.26
NORTH AMERICA	5 964	6 975	2.36	1.29	16.5	17.9	1.60	0.58
Canada	486	602	2.90	1.79	13.3	15.0	1.89	0.98
United States	5 478	6 373	2.31	1.25	16.9	18.2	1.58	0.55
LATIN AMERICA	2 552	3 106	2.38	1.85	4.0	4.4	1.25	1.02
Argentina	489	542	0.55	0.91	11.0	11.2	-0.47	0.07
Brazil	788	995	2.43	2.01	3.8	4.4	1.54	1.43
Chile	126	151	8.48	2.08	7.0	7.8	7.55	1.43
Colombia	61	62	0.94	0.26	1.2	1.2	-0.01	-0.35
Mexico	461	531	4.15	1.54	3.6	3.7	2.73	0.51
Paraguay	3	3	16.06	1.10	0.4	0.4	14.54	0.00
Peru	29	38	3.61	2.66	0.9	1.0	2.28	1.60
EUROPE	10 810	11 991	1.13	0.87	14.6	16.2	1.03	0.91
European Union ¹	8 695	9 545	1.03	0.77	19.6	21.6	0.95	0.79
United Kingdom	777	859	1.80	0.96	11.7	12.3	1.15	0.46
Russia	837	1 061	2.33	1.93	5.8	7.5	2.25	2.12
Ukraine	130	156	-3.02	1.60	2.9	3.7	-2.53	2.15
AFRICA	1 053	1 242	1.32	1.62	0.8	0.8	-1.25	-0.73
Egypt	614	734	2.28	1.51	6.3	6.3	0.15	-0.06
Ethiopia	6	9	0.23	3.51	0.1	0.1	-2.31	1.26
Nigeria	11	13	-9.63	1.56	0.1	0.1	-11.99	-0.95
South Africa	47	51	-0.63	1.01	0.8	0.8	-1.96	0.02
ASIA	2 574	3 046	3.86	1.79	0.6	0.6	2.81	1.06
China ²	352	427	2.39	2.02	0.2	0.3	1.87	1.85
India	0	0	..	..	0.0	0.0	-65.80	0.33
Indonesia	23	33	5.74	2.96	0.1	0.1	4.47	2.06
Iran	259	250	-0.66	0.08	3.2	2.8	-1.85	-0.60
Japan	319	376	3.87	1.21	2.5	3.1	3.99	1.58
Kazakhstan	48	64	2.22	2.26	2.6	3.2	0.72	1.42
Korea	153	214	8.80	3.10	3.0	4.1	8.37	2.83
Malaysia	22	30	10.59	2.96	0.7	0.8	8.75	1.74
Pakistan	4	5	18.34	3.16	0.0	0.0	15.93	1.48
Philippines	34	43	11.27	1.81	0.3	0.3	9.50	0.42
Saudi Arabia	238	301	24.96	2.53	7.2	7.8	21.75	1.13
Thailand	20	24	8.60	1.98	0.3	0.4	8.19	1.92
Turkey	163	167	2.01	0.37	2.0	1.9	0.43	-0.17
Viet Nam	5	10	2.03	4.06	0.1	0.1	0.92	3.20
OCEANIA	334	382	3.16	0.82	8.4	8.4	1.61	-0.41
Australia	284	327	2.95	0.79	11.6	11.8	1.49	-0.31
New Zealand	48	53	4.55	0.96	10.3	10.3	3.46	0.17
DEVELOPED COUNTRIES	17 790	20 145	1.61	1.04	12.6	13.8	1.20	0.76
DEVELOPING COUNTRIES	5 498	6 597	2.84	1.83	0.9	1.0	1.46	0.71
LEAST DEVELOPED COUNTRIES (LDC)	365	402	0.48	1.40	0.4	0.4	-1.86	-0.82
OECD³	17 398	19 633	1.78	1.01	13.1	14.1	1.23	0.63
BRICS	2 024	2 533	2.30	1.96	0.6	0.8	1.46	1.42

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.33.1. Skim milk powder projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	4 411	5 024	3.28	1.33	2 444	3 046	5.80	1.67	2 481	3 046	7.41	1.67
NORTH AMERICA	1 164	1 391	3.46	1.21	2	1	-8.16	0.00	693	970	11.24	2.66
Canada	104	121	4.02	0.14	1	0	-46.60	..	54	65	26.85	-1.09
United States	1 060	1 270	3.40	1.32	1	1	18.79	0.00	639	906	10.47	3.00
LATIN AMERICA	298	366	3.07	2.19	435	535	6.90	1.74	97	151	12.54	0.59
Argentina	40	43	2.68	1.05	0	0	..	..	25	25	7.02	2.07
Brazil	155	188	2.67	1.79	32	29	9.68	0.00	0	0	..	..
Chile	28	37	11.33	1.98	12	13	13.25	1.62	2	2	6.86	-1.30
Colombia	4	7	-4.45	5.52	12	18	55.49	3.84	0	0	..	..
Mexico	41	59	6.45	4.20	310	403	6.98	1.98	51	104	97.58	0.00
Paraguay	0	0	..	..	0	0	..	..	0	0	..	..
Peru	0	0	..	..	21	29	6.26	2.50	0	0	..	..
EUROPE	1 865	2 088	5.22	1.35	213	192	8.85	-0.57	943	1 150	10.26	1.82
European Union ¹	1 461	1 651	6.14	1.40	35	30	8.03	-1.16	733	933	12.24	1.89
United Kingdom	73	75	3.13	0.19	37	37	-4.71	0.29	49	48	11.32	-0.29
Russia	74	71	1.71	-0.89	110	94	22.53	-0.65	1	1	33.89	0.00
Ukraine	112	114	0.40	0.33	1	1	-28.28	0.28	30	12	5.00	-5.96
AFRICA	19	23	0.00	2.17	354	435	3.20	1.99	12	14	7.62	-0.80
Egypt	0	0	..	..	76	108	8.36	3.83	0	0	-23.19	..
Ethiopia	0	0	..	..	0	0	-16.06	..	0	0	..	..
Nigeria	0	0	..	..	44	67	1.96	2.63	0	0	..	..
South Africa	15	18	0.07	1.89	7	6	9.33	-1.63	6	7	12.81	1.66
ASIA	399	443	0.40	1.30	1 426	1 864	5.85	1.84	162	152	7.57	-0.73
China ²	27	21	-10.61	2.13	237	344	14.26	1.99	0	1	6.34	0.00
India	224	276	5.92	2.13	0	0	-44.37	..	16	20	2.35	-0.28
Indonesia	0	0	..	..	164	217	4.40	2.67	1	1	3.13	-2.60
Iran	0	0	..	..	20	7	-1.34	0.57	14	1	6.32	0.00
Japan	121	116	-3.35	-0.48	48	42	6.78	-2.01	0	0	..	..
Kazakhstan	3	3	0.10	-0.32	20	30	13.55	2.26	0	0	..	..
Korea	9	9	-0.03	0.00	22	19	7.85	-0.29	0	0	..	..
Malaysia	0	0	..	..	137	170	6.74	1.77	36	32	25.89	-1.74
Pakistan	0	0	..	..	45	61	16.92	2.91	1	1	13.90	-2.83
Philippines	0	0	..	..	180	267	6.29	1.71	0	0	..	..
Saudi Arabia	0	0	..	..	58	65	1.49	1.41	9	6	-14.80	-1.39
Thailand	0	0	..	..	60	58	1.42	-0.09	9	9	23.51	0.09
Turkey	0	0	..	..	51	59	31.06	0.00	51	59	91.72	0.00
Viet Nam	0	0	..	..	59	131	1.27	3.86	0	0	..	..
OCEANIA	666	714	0.36	1.10	13	18	7.32	0.75	575	610	0.63	0.93
Australia	223	221	0.57	0.99	8	10	10.58	0.00	164	149	1.64	-0.13
New Zealand	443	493	0.28	1.18	3	3	-3.53	0.00	411	461	0.29	1.28
DEVELOPED COUNTRIES	3 844	4 339	3.35	1.21	319	308	8.30	-0.35	2 219	2 739	7.19	1.89
DEVELOPING COUNTRIES	567	684	2.84	2.14	2 125	2 738	5.48	1.92	262	307	9.48	-0.14
LEAST DEVELOPED COUNTRIES (LDC)	0	0	..	..	122	160	6.73	3.36	5	6	9.91	-2.74
OECD³	3 601	4 093	3.46	1.24	558	647	7.14	1.02	2 170	2 742	7.94	1.75
BRICS	495	574	2.56	1.58	386	473	13.53	1.23	23	29	3.60	0.18

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

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2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.33.2. Skim milk powder projections: Consumption, food

Calendar year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	4 361	5 026	2.62	1.13	0.6	0.6	2.15	0.26
NORTH AMERICA	469	425	-3.24	-1.47	1.2	1.0	-2.79	-2.41
Canada	47	59	-7.83	1.65	0.6	0.5	-9.53	0.79
United States	423	366	-2.71	-1.88	1.3	1.0	-2.27	-2.56
LATIN AMERICA	637	750	4.25	2.21	0.9	1.0	3.19	1.43
Argentina	15	18	-2.45	-0.20	0.3	0.4	-3.43	-1.02
Brazil	187	217	3.50	1.53	0.6	0.7	2.65	0.95
Chile	39	49	12.70	2.02	2.2	2.5	11.73	1.36
Colombia	16	25	14.86	4.30	0.3	0.5	13.77	3.66
Mexico	301	358	4.44	2.99	2.3	2.5	3.01	1.94
Paraguay	0	0	..	..	0.0	0.0	-19.68	0.00
Peru	21	29	6.28	2.50	0.7	0.8	4.91	1.45
EUROPE	1 114	1 130	2.58	-0.21	1.4	1.4	4.50	0.07
European Union ¹	744	747	2.40	-0.46	1.5	1.5	5.59	-0.08
United Kingdom	59	63	-4.54	0.63	0.9	0.9	-5.16	0.13
Russia	182	164	9.24	-0.75	1.3	1.2	9.15	-0.56
Ukraine	82	104	-1.45	1.42	1.9	2.5	-0.96	1.97
AFRICA	361	445	2.89	2.10	0.3	0.3	0.29	-0.26
Egypt	76	108	8.52	3.84	0.8	0.9	6.26	2.24
Ethiopia	0	0	..	..	0.0	0.0	-19.84	0.00
Nigeria	44	67	1.99	2.64	0.2	0.3	-0.67	0.11
South Africa	17	17	0.12	0.60	0.3	0.3	-1.21	-0.39
ASIA	1 665	2 155	4.23	1.93	0.4	0.4	3.20	1.25
China ²	264	364	8.56	1.99	0.2	0.3	8.01	1.82
India	208	256	5.41	2.34	0.2	0.2	4.15	1.38
Indonesia	163	216	4.42	2.70	0.6	0.7	3.16	1.81
Iran	5	6	-26.88	0.69	0.1	0.1	-27.75	0.00
Japan	169	158	-0.76	-0.91	1.1	1.1	-1.27	-0.43
Kazakhstan	23	33	12.29	2.03	1.3	1.6	10.65	1.19
Korea	34	28	1.99	-0.20	0.7	0.5	1.58	-0.46
Malaysia	101	138	3.48	2.80	3.2	3.8	1.76	1.59
Pakistan	44	61	17.23	2.99	0.2	0.3	14.84	1.30
Philippines	180	267	6.30	1.71	1.7	2.2	4.60	0.32
Saudi Arabia	49	59	12.05	1.76	1.5	1.5	9.17	0.37
Thailand	52	49	-0.12	-0.12	0.7	0.7	-0.50	-0.18
Turkey	0	0	-65.43	..	0.0	0.0	-65.97	-0.05
Viet Nam	58	131	1.30	3.89	0.6	1.2	0.20	3.03
OCEANIA	116	122	2.18	1.85	2.9	2.7	0.64	0.61
Australia	79	82	3.26	3.01	3.2	3.0	1.79	1.89
New Zealand	35	35	0.00	-0.05	7.4	6.8	-1.05	-0.83
DEVELOPED COUNTRIES	1 927	1 911	0.68	-0.40	1.3	1.2	1.59	-0.56
DEVELOPING COUNTRIES	2 434	3 115	4.45	2.20	0.4	0.4	3.08	1.09
LEAST DEVELOPED COUNTRIES (LDC)	117	154	6.60	3.69	0.1	0.1	4.12	1.41
OECD³	1 976	2 000	0.70	0.05	1.4	1.3	1.43	-0.18
BRICS	858	1 018	6.34	1.46	0.3	0.3	5.69	0.92

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

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3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.34.1. Whole milk powder projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	5 317	6 107	3.25	1.20	2 472	2 841	1.92	1.08	2 458	2 841	3.63	1.08
NORTH AMERICA	49	63	1.54	0.14	13	8	3.22	0.00	29	32	9.60	0.71
Canada	8	7	-4.24	-1.90	2	2	-5.16	0.00	1	1	4.39	0.00
United States	41	56	2.77	0.44	11	6	6.53	0.00	28	32	9.73	0.72
LATIN AMERICA	1 488	1 964	2.49	2.70	336	316	-1.32	-0.53	272	359	0.35	3.47
Argentina	153	163	-5.25	0.72	0	0	-50.07	..	100	132	-6.15	1.65
Brazil	566	830	2.17	3.42	89	62	5.66	-0.93	7	9	3.07	7.16
Chile	66	68	-2.91	0.38	7	6	18.64	0.57	6	6	-10.48	-0.56
Colombia	41	42	-0.03	1.28	29	48	59.10	2.90	1	0	-34.88	..
Mexico	221	254	0.96	1.24	43	45	10.95	1.07	8	2	-0.74	-13.49
Paraguay	0	0	..	..	2	2	5.05	0.00	2	2	66.09	0.01
Peru	0	0	..	..	18	23	11.29	1.42	0	0	..	..
EUROPE	852	1 023	0.57	1.80	82	71	3.28	0.16	432	601	2.55	2.64
European Union ¹	715	851	1.33	1.83	23	19	-3.48	0.00	369	509	3.97	2.72
United Kingdom	42	50	1.47	1.38	18	21	-2.14	1.63	30	37	-2.51	0.37
Russia	33	40	-7.57	0.49	39	28	23.58	-0.54	2	2	25.67	0.00
Ukraine	5	4	-8.12	-1.39	0	1	-15.95	2.69	2	1	-8.66	-2.62
AFRICA	26	31	0.28	3.08	576	733	-0.29	2.09	19	15	4.90	0.33
Egypt	0	0	..	..	47	73	5.86	3.91	4	0	9.11	..
Ethiopia	0	0	..	..	1	2	0.21	1.58	0	1	..	0.00
Nigeria	0	0	..	..	73	104	-8.70	2.49	1	0	9.51	..
South Africa	15	21	-0.43	3.45	4	3	7.37	-2.57	5	6	8.61	2.63
ASIA	1 460	1 449	3.96	-0.03	1 436	1 686	3.86	1.06	291	284	0.34	-0.27
China ²	1 342	1 278	4.14	-0.49	470	600	8.39	1.44	3	3	-10.73	-0.27
India	5	7	83.98	3.12	0	0	-25.21	..	1	2	1.84	8.70
Indonesia	76	115	3.01	4.57	50	50	-0.93	-0.17	2	2	-27.56	0.06
Iran	1	1	-1.67	1.90	2	2	-9.63	0.01	2	1	-1.45	0.47
Japan	10	13	-3.26	2.32	0	0	..	..	0	0	..	..
Kazakhstan	15	19	0.19	3.12	4	0	3.35	-22.36	0	0	..	..
Korea	2	2	-2.78	0.00	4	4	10.99	-1.07	0	0	..	..
Malaysia	0	0	..	..	36	39	4.95	0.22	23	23	7.55	-0.22
Pakistan	0	0	..	..	3	2	-11.71	0.73	1	1	-13.31	0.00
Philippines	0	0	..	..	33	29	-4.80	0.00	20	29	-9.67	0.00
Saudi Arabia	0	0	..	..	103	94	2.12	1.94	15	2	-10.14	-1.90
Thailand	0	0	..	..	49	53	7.92	0.43	2	2	-11.18	-0.43
Turkey	0	0	..	..	0	0	-23.87	..	0	0	-7.82	..
Viet Nam	0	0	..	..	34	76	-1.03	1.95	6	0	0.11	..
OCEANIA	1 442	1 578	5.35	0.33	28	27	8.33	-0.23	1 414	1 549	5.70	0.34
Australia	70	72	-8.98	0.10	21	19	11.33	-0.58	56	55	-8.47	0.13
New Zealand	1 372	1 506	6.89	0.35	3	3	11.66	0.00	1 358	1 493	6.90	0.35
DEVELOPED COUNTRIES	2 383	2 718	3.23	0.91	133	111	4.41	-0.43	1 882	2 189	4.86	0.93
DEVELOPING COUNTRIES	2 934	3 389	3.26	1.44	2 339	2 730	1.79	1.15	576	651	0.41	1.61
LEAST DEVELOPED COUNTRIES (LDC)	3	3	4.75	3.32	207	270	0.81	2.39	9	8	3.27	-1.08
OECD³	2 562	2 895	3.18	0.85	137	130	3.75	0.53	1 858	2 136	4.90	0.83
BRICS	1 960	2 175	3.26	0.90	602	693	8.35	1.09	18	23	1.60	4.02

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.34.2. Whole milk powder projections: Consumption, food

Calendar year

	CONSUMPTION (kt)		Growth (%) ⁴		FOOD (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	5 315	6 095	2.49	1.19	0.7	0.7	1.29	0.23
NORTH AMERICA	31	39	-2.18	-0.32	0.1	0.1	-2.91	-1.02
Canada	10	9	-4.82	-1.55	0.3	0.2	-5.76	-2.34
United States	21	30	-0.62	0.07	0.1	0.1	-1.33	-0.62
LATIN AMERICA	1 559	1 908	2.11	1.98	2.4	2.7	0.99	1.15
Argentina	54	31	-5.30	-2.44	1.2	0.6	-6.25	-3.25
Brazil	648	882	2.51	3.02	3.1	3.9	1.61	2.43
Chile	68	68	-0.75	0.48	3.7	3.5	-1.61	-0.17
Colombia	69	90	6.44	2.11	1.4	1.7	5.44	1.49
Mexico	256	297	2.13	1.49	2.0	2.0	0.74	0.45
Paraguay	0	0	..	..	0.0	0.0	-71.61	-0.10
Peru	18	23	11.51	1.42	0.5	0.6	10.07	0.37
EUROPE	480	493	-0.02	0.47	0.6	0.7	-0.11	0.50
European Union ¹	347	361	0.04	0.38	0.8	0.8	-0.03	0.41
United Kingdom	30	34	3.82	2.75	0.4	0.5	3.16	2.24
Russia	70	66	0.85	0.05	0.5	0.5	0.77	0.25
Ukraine	4	4	-6.89	-0.38	0.1	0.1	-6.43	0.16
AFRICA	583	748	-0.40	2.17	0.5	0.5	-2.92	-0.20
Egypt	43	73	5.20	3.94	0.4	0.6	3.00	2.33
Ethiopia	1	1	2.07	3.39	0.0	0.0	-0.52	1.14
Nigeria	72	104	-8.78	2.50	0.4	0.4	-11.17	-0.02
South Africa	13	18	-1.76	2.31	0.2	0.3	-3.08	1.31
ASIA	2 606	2 851	4.40	0.62	0.6	0.6	3.34	-0.10
China ²	1 809	1 875	5.11	0.09	1.3	1.3	4.58	-0.07
India	4	4	25.16	0.94	0.0	0.0	23.66	0.00
Indonesia	124	163	3.70	2.91	0.5	0.6	2.45	2.02
Iran	1	2	-15.19	0.69	0.0	0.0	-16.21	0.00
Japan	10	13	-3.17	2.29	0.1	0.1	-3.06	2.67
Kazakhstan	18	19	0.32	0.61	1.0	1.0	-1.14	-0.22
Korea	6	6	3.40	-0.74	0.1	0.1	2.99	-1.00
Malaysia	13	16	1.95	0.88	0.4	0.4	0.25	-0.31
Pakistan	2	1	-11.62	1.66	0.0	0.0	-13.42	0.00
Philippines	12	0	-41.40	..	0.1	0.0	-42.33	-0.13
Saudi Arabia	87	92	4.13	2.04	2.7	2.4	1.46	0.64
Thailand	47	51	10.36	0.47	0.7	0.7	9.94	0.41
Turkey	0	0	-61.31	..	0.0	0.0	-61.91	-0.05
Viet Nam	28	75	-4.48	1.96	0.3	0.7	-5.52	1.11
OCEANIA	56	56	-1.04	-0.10	1.4	1.2	-2.62	-1.31
Australia	36	36	-3.18	-0.30	1.5	1.3	-4.56	-1.38
New Zealand	16	15	7.04	0.01	3.4	2.9	42.26	-0.77
DEVELOPED COUNTRIES	610	639	-0.40	0.45	0.4	0.4	-0.87	0.18
DEVELOPING COUNTRIES	4 705	5 455	2.96	1.28	0.8	0.8	1.58	0.16
LEAST DEVELOPED COUNTRIES (LDC)	202	266	0.80	2.53	0.2	0.2	-1.55	0.28
OECD³	818	890	0.18	0.78	0.6	0.6	-0.41	0.40
BRICS	2 543	2 846	4.25	0.93	0.8	0.8	3.39	0.39

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

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3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.35. Fresh dairy products projections: Production and food consumption

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		FOOD CONSUMPTION (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	413 766	509 466	2.08	2.00	55.0	60.9	0.94	1.05
NORTH AMERICA	26 212	24 418	-1.53	-0.47	72.6	62.6	-2.26	-1.17
Canada	2 896	2 842	-0.93	-0.13	79.1	71.0	-1.91	-0.92
United States	23 315	21 576	-1.60	-0.51	71.9	61.6	-2.30	-1.20
LATIN AMERICA	33 599	39 173	-0.07	1.63	52.0	55.1	-1.12	0.80
Argentina	1 548	1 668	-1.17	0.52	29.0	27.8	-1.70	-0.37
Brazil	14 605	19 078	0.94	2.87	70.3	85.9	0.09	2.26
Chile	492	484	-10.87	0.09	27.3	24.9	-11.64	-0.55
Colombia	6 023	6 241	1.99	0.15	122.8	118.5	1.03	-0.46
Mexico	3 545	3 336	-1.77	-0.48	27.5	23.0	-3.11	-1.49
Paraguay	536	669	1.37	2.23	78.7	86.9	0.04	1.12
Peru	1 716	2 319	1.73	2.86	53.4	64.1	0.43	1.80
EUROPE	77 503	76 776	-0.60	-0.16	102.9	102.6	-0.66	-0.08
European Union ¹	38 118	38 211	-0.16	-0.03	83.7	83.6	-0.14	-0.03
United Kingdom	7 463	6 936	0.53	-0.82	112.8	106.7	-0.12	-0.63
Russia	16 028	15 739	-1.80	-0.18	111.3	111.3	-1.87	0.01
Ukraine	7 271	6 870	-1.78	-0.43	164.4	164.7	-1.29	0.10
AFRICA	33 528	41 426	0.11	2.25	27.0	25.7	-2.43	-0.12
Egypt	1 418	1 650	0.19	1.98	14.5	14.2	-1.90	0.40
Ethiopia	3 157	3 957	-0.77	2.53	30.1	29.5	-3.28	0.30
Nigeria	253	287	2.12	0.89	1.3	1.1	-0.55	-1.60
South Africa	2 628	3 046	0.42	1.27	46.3	48.0	-0.92	0.28
ASIA	239 765	324 359	4.31	2.85	53.7	66.9	3.29	2.11
China ²	23 344	26 181	-1.53	0.97	17.0	18.8	-1.65	0.86
India	113 835	160 360	5.35	3.24	85.0	107.7	4.09	2.27
Indonesia	774	902	-2.99	1.50	2.9	3.1	-4.16	0.63
Iran	565	679	-10.11	0.17	7.0	7.7	-11.18	-0.51
Japan	4 286	4 428	-0.51	0.30	33.6	36.1	-0.39	0.67
Kazakhstan	4 653	5 208	-0.27	1.09	255.7	259.9	-1.73	0.25
Korea	1 377	1 346	-0.02	-0.24	27.0	25.6	-0.42	-0.49
Malaysia	87	113	2.04	2.55	2.8	3.1	0.34	1.34
Pakistan	45 510	64 979	7.38	3.55	231.0	273.8	5.20	1.85
Philippines	9	12	5.66	2.00	0.1	0.1	3.98	0.61
Saudi Arabia	1 132	1 296	9.87	0.59	34.4	33.5	7.05	-0.78
Thailand	1 076	1 240	2.89	1.24	15.6	17.8	2.50	1.18
Turkey	14 715	18 665	6.28	1.88	182.3	213.4	4.63	1.33
Viet Nam	640	959	9.51	3.83	6.7	9.1	8.32	2.96
OCEANIA	3 159	3 313	1.79	0.37	72.0	65.4	-0.28	-0.89
Australia	2 604	2 707	1.50	0.30	106.5	97.7	0.06	-0.79
New Zealand	535	582	3.62	0.67	50.9	49.8	-1.78	-0.27
DEVELOPED COUNTRIES	134 484	138 531	-0.22	0.27	94.2	94.3	-0.61	0.03
DEVELOPING COUNTRIES	279 282	370 935	3.35	2.73	45.9	53.8	2.01	1.60
LEAST DEVELOPED COUNTRIES (LDC)	20 882	27 595	-0.28	2.89	24.7	25.5	-2.60	0.63
OECD³	101 345	103 284	0.16	0.15	75.3	73.7	-0.37	-0.19
BRICS	170 441	224 403	2.91	2.62	54.2	67.1	2.12	2.08

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

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3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.36. Milk projections: Production, inventories, yield

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		INVENTORIES ('000 hd)		Growth (%) ⁴		YIELD (t/head)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	826 106	981 218	2.14	1.66	681 852	773 185	0.79	1.22	1.21	1.27	1.34	0.44
NORTH AMERICA	107 461	114 218	1.64	0.49	10 350	10 422	0.31	0.05	10.38	10.96	1.32	0.44
Canada	9 833	10 631	2.11	0.59	962	962	-0.07	-0.04	10.22	11.05	2.18	0.64
United States	97 628	103 587	1.60	0.47	9 387	9 460	0.35	0.06	10.40	10.95	1.24	0.42
LATIN AMERICA	81 756	98 155	1.49	1.59	41 367	44 413	-1.73	0.70	1.98	2.21	3.28	0.89
Argentina	10 314	11 616	0.02	0.97	1 738	1 699	-0.18	-0.12	5.94	6.84	0.20	1.09
Brazil	35 234	44 625	2.80	2.02	17 975	19 927	-3.29	1.03	1.97	2.24	6.30	0.99
Chile	2 030	2 111	-2.99	0.53	1 748	1 564	3.20	-0.98	1.16	1.35	-6.00	1.53
Colombia	7 101	7 307	1.69	0.18	5 097	4 556	-1.19	-1.34	1.39	1.60	2.92	1.54
Mexico	12 154	13 340	1.45	0.77	2 504	2 636	0.80	0.47	4.85	5.06	0.65	0.30
Paraguay	536	669	1.37	2.23	220	250	0.75	0.99	2.44	2.68	0.61	1.23
Peru	1 947	2 592	1.78	2.87	1 169	1 349	0.95	1.39	1.67	1.92	0.83	1.45
EUROPE	222 757	235 529	0.79	0.54	42 010	39 604	-0.67	-0.52	5.30	5.95	1.47	1.07
European Union ¹	149 218	159 384	1.30	0.57	21 139	19 957	-0.31	-0.50	6.95	7.90	1.77	1.11
United Kingdom	15 405	16 375	1.32	0.63	1 908	1 908	0.59	-0.09	8.08	8.58	0.72	0.73
Russia	30 284	30 666	-0.84	0.34	8 258	7 713	-1.14	-0.65	3.67	3.98	0.30	1.00
Ukraine	10 294	9 657	-1.43	-0.36	2 890	2 294	-3.81	-1.99	3.56	4.21	2.48	1.67
AFRICA	43 779	53 245	0.10	2.16	218 354	257 094	0.47	1.62	0.20	0.21	-0.36	0.52
Egypt	5 632	6 168	-0.24	1.28	6 843	6 680	0.90	-0.14	0.82	0.92	-1.13	1.42
Ethiopia	3 540	4 513	-0.74	2.69	16 249	20 107	2.47	1.84	0.22	0.22	-3.13	0.83
Nigeria	574	664	1.62	1.53	2 271	2 407	1.58	0.32	0.25	0.28	0.03	1.21
South Africa	3 241	3 840	0.24	1.73	1 006	1 029	0.16	0.36	3.22	3.73	0.09	1.37
ASIA	339 153	447 167	3.82	2.70	363 069	415 029	1.51	1.27	0.93	1.08	2.28	1.41
China ²	34 689	37 076	-0.21	0.58	12 189	11 457	-0.18	-0.44	2.51	2.88	0.31	1.10
India	168 894	232 835	4.77	3.12	129 704	148 086	1.20	1.47	1.30	1.57	3.53	1.63
Indonesia	1 237	1 608	-1.07	2.74	15 199	17 896	4.07	1.39	0.08	0.09	-4.94	1.33
Iran	6 502	7 827	-1.12	1.90	19 996	21 646	-1.69	0.66	0.33	0.36	0.58	1.23
Japan	7 312	7 504	-0.79	0.29	847	837	-1.57	-0.06	8.63	8.97	0.79	0.35
Kazakhstan	5 177	5 969	-0.21	1.44	4 087	4 251	4.91	0.42	1.27	1.40	-4.88	1.02
Korea	2 069	2 288	0.25	0.95	250	257	0.22	0.26	8.26	8.91	0.03	0.68
Malaysia	87	113	2.04	2.55	105	117	-5.30	0.80	0.83	0.97	7.75	1.74
Pakistan	54 004	75 012	6.25	3.34	35 075	42 595	2.93	1.52	1.54	1.76	3.23	1.80
Philippines	22	21	4.86	-0.51	5	4	-0.49	-2.06	4.02	4.86	5.37	1.59
Saudi Arabia	2 461	2 843	4.45	1.38	4 820	4 781	2.41	-0.10	0.51	0.59	1.99	1.48
Thailand	1 106	1 250	2.81	1.11	235	214	-0.93	-0.66	4.71	5.85	3.77	1.78
Turkey	20 141	25 954	5.54	2.18	26 466	30 739	6.17	0.92	0.76	0.84	-0.60	1.25
Viet Nam	640	959	9.51	3.83	319	404	11.58	2.18	2.00	2.37	-1.85	1.62
OCEANIA	31 200	32 904	1.77	0.54	6 703	6 624	1.10	0.00	4.66	4.97	0.66	0.54
Australia	9 618	9 682	0.12	0.40	1 548	1 489	-0.67	-0.02	6.21	6.50	0.79	0.41
New Zealand	21 514	23 150	2.60	0.60	5 101	5 085	1.70	0.01	4.22	4.55	0.88	0.59
DEVELOPED COUNTRIES	395 573	424 049	1.16	0.65	80 873	81 336	0.33	0.06	4.89	5.21	0.83	0.59
DEVELOPING COUNTRIES	430 534	557 169	3.11	2.51	600 979	691 849	0.85	1.37	0.72	0.81	2.24	1.12
LEAST DEVELOPED COUNTRIES (LDC)	26 738	34 313	-0.02	2.65	205 635	243 308	0.23	1.71	0.13	0.14	-0.25	0.93
OECD³	354 050	381 394	1.55	0.65	72 949	75 910	2.03	0.22	4.85	5.02	-0.47	0.43
BRICS	272 343	349 042	3.00	2.40	169 130	188 212	0.42	1.19	1.61	1.85	2.57	1.19

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3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

ANNEX C

Table C.37. Whey powder and casein projections

Calendar year

		Average 2016-18est	2028	Growth (%) ³	
				2009-18	2019-28
AUSTRALIA					
Net trade, whey	kt pw	86.1	88.1	0.44	0.02
Exports, casein	kt pw	0.5	3.1	-31.92	15.05
CANADA					
Net trade, whey	kt pw	33.8	35.9	10.37	0.50
EUROPEAN UNION					
Whey powder					
Production	kt pw	1 799.8	2 068.1	1.50	1.00
Consumption	kt pw	1 262.5	1 405.7	0.43	0.73
Net trade	kt pw	537.4	662.4	4.49	1.60
Casein					
Production	kt pw	150.8	182.1	3.32	1.50
Consumption	kt pw	124.6	153.6	4.20	3.00
Net trade	kt pw	26.2	28.4	0.63	-3.69
JAPAN					
Net trade, whey	kt pw	-58.4	-58.1	..	..
Casein imports	kt pw	13.5	13.5	-0.82	-0.27
NEW ZEALAND					
Net trade, whey	kt pw	-7.0	-5.4	..	..
Exports, casein	kt pw	180.8	165.8	2.91	0.84
UNITED STATES					
Whey					
Production	kt pw	493.3	544.2	0.37	1.07
Consumption	kt pw	259.2	274.6	-2.08	0.62
Exports	kt pw	234.2	269.6	3.84	1.55
Imports, casein	kt pw	134.3	159.2	6.40	1.38
ARGENTINA					
Net trade, whey	kt pw	70.9	92.2	1.75	2.41
BRAZIL					
Net trade, whey	kt pw	-19.8	-20.0	..	..
CHINA²					
Net trade, whey	kt pw	-414.6	-472.6	..	..
RUSSIA					
Net trade, whey	kt pw	-59.7	-64.9	..	..

.. Not available

Note: Calendar year; except year ending 30 June for Australia and 31 May for New Zealand. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Least-squares growth rate (see glossary).

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Table C.38. Main policy assumptions for dairy markets

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
CANADA												
Milk target price ¹	CADc/litre	80.9	84.3	85.9	87.3	88.7	90.2	91.7	93.1	94.5	96.0	97.5
Butter support price	CAD/t	7 862.7	8 225.6	8 385.2	8 522.8	8 655.5	8 800.0	8 945.6	9 086.3	9 222.4	9 362.8	9 512.6
Cheese tariff-quota	kt pw	25.3	33.6	38.6	43.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6
In-quota tariff	%	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Out-of-quota tariff	%	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6
EUROPEAN UNION²												
Voluntary coupled support												
Milk and milk products ³	mIn EUR	844	861	846	846	846	846	846	846	846	846	846
Butter reference price ⁴	EUR/t	2 217.5	2 217.5	2 217.5	2 217.5	2 217.5	2 217.5	2 217.5	2 217.5	2 217.5	2 217.5	2 217.5
SMP reference price	EUR/t	1 499.3	1 400.0	1 400.0	1 400.0	1 400.0	1 400.0	1 400.0	1 400.0	1 400.0	1 400.0	1 400.0
Butter tariff-quotas	kt pw	89.5	90.2	90.3	90.3	90.4	90.4	90.5	90.5	90.6	90.6	90.7
Cheese tariff-quotas	kt pw	118.6	119.2	119.5	119.9	120.2	120.5	120.8	121.2	121.5	121.8	122.1
JAPAN												
Direct payments ⁵	JPY/kg	10.5	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Cheese tariff ⁶	%	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
Tariff-quotas												
Butter	kt pw	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
In-quota tariff	%	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Out-of-quota tariff	%	279.9	287.7	284.8	278.0	272.4	267.7	263.0	257.8	253.5	248.9	245.2
SMP	kt pw	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
In-quota tariff	%	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Out-of-quota tariff	%	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0
WMP	kt pw	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
In-quota tariff	%	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Out-of-quota tariff	%	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2
KOREA												
Tariff-quotas												
Butter	kt pw	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
In-quota tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Out-of-quota tariff	%	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
SMP	kt pw	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
In-quota tariff	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Out-of-quota tariff	%	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0
WMP	kt pw	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
In-quota tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Out-of-quota tariff	%	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0
MEXICO												
Butter tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff-quotas												
Cheese	kt pw	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
In-quota tariff	%	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Out-of-quota tariff	%	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
SMP	kt pw	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
In-quota tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-quota tariff	%	46.7	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Licons social program	mIn MXN	1 202.5	1 202.5	1 202.5	1 202.5	1 202.5	1 202.5	1 202.5	1 202.5	1 202.5	1 202.5	1 202.5
RUSSIA												
Butter tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Cheese tariff	%	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
UNITED STATES⁷												
Butter tariff-quota	kt pw	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
In-quota tariff	%	2.9	3.0	2.9	2.9	2.9	2.8	2.8	2.7	2.7	2.7	2.6
Out-of-quota tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cheese tariff-quota	kt pw	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
In-quota tariff	%	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
Out-of-quota tariff	%	42.9	42.6	41.9	41.2	40.6	39.9	39.3	38.7	38.1	37.5	36.9
INDIA												
Butter tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Cheese tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Skim milk powder tariff	%	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Whole milk powder tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
SOUTH AFRICA												
Butter tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cheese tariff	%	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
Skim milk powder tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Whole milk powder tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ANNEX C

Note: Average 2016-18est: Data for 2018 are estimated.

1. For manufacturing milk.
2. Since 2015 the Basic payment scheme (BPS) holds, which shall account for 68% maximum of the national direct payment envelopes. On top of this, compulsory policy instruments have been introduced: the Green Payment (30%) and young farmer scheme (2%). The EU's milk quota system has been abolished since April 2015.
3. Implemented in 19 Member States. The maximum quantity limit is 11.695 million dairy cow heads.
4. Buying-in when market prices go below the reference price for SMP and 90% of the reference price for butter is operable automatically for a maximum quantity of 109 000 tonnes for SMP and 50 000 tonnes for butter (before 2014, this ceiling was set at 30 000 tonnes). Above that ceiling intervention can take place only via tender. For 2018 due to a temporary measure the SMP buying in quantity at fixed prices of is set to 0. Buying in via a tendering procedure may still be possible.
5. In April 2017, in addition to skim milk powder, butter and cheese, milk used for fresh cream, concentrated skim milk and concentrated whole milk production became covered by the direct payments.
6. Excludes processed cheese.
7. A milk margin (all-milk price minus the average feed margin) protection program applies, which has been updated February 2018, and provides a dairy safety net to farmers. Farmers have to decide on enrolment and coverage levels.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", *OECD Agriculture statistics* (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.39.1. Fish and seafood projections: Production and trade

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	172 268	196 324	2.37	1.09	41 524	45 759	1.45	1.06	41 237	45 769	1.86	1.06
NORTH AMERICA	6 457	6 510	0.87	0.19	5 888	6 526	1.09	1.30	2 788	2 515	0.48	-0.14
Canada	1 040	1 094	-0.71	0.63	641	641	0.23	0.13	823	827	-0.32	0.37
United States	5 417	5 416	1.21	0.10	5 247	5 885	1.20	1.44	1 965	1 688	0.85	-0.39
LATIN AMERICA	14 837	16 551	-1.19	0.37	2 433	2 910	2.55	2.36	4 481	5 275	2.72	0.94
Argentina	815	931	0.03	0.90	70	70	3.70	0.00	593	666	-1.02	0.53
Brazil	1 299	1 523	1.09	1.42	714	871	2.87	2.63	47	62	0.44	0.99
Chile	3 025	3 668	-3.21	0.82	134	135	9.66	0.00	1 483	2 095	4.37	2.33
Colombia	183	211	0.98	0.98	219	276	3.78	2.48	41	47	-9.34	-0.25
Mexico	1 840	2 024	0.96	0.39	509	684	7.85	4.85	238	184	0.80	-1.40
Paraguay	24	32	1.95	1.75	5	5	6.41	0.00	0	..	..	..
Peru	5 109	5 312	-2.55	-0.66	135	133	4.17	0.00	556	584	0.11	-1.81
EUROPE	17 741	19 220	1.30	0.56	11 421	11 994	-0.01	0.50	10 027	11 132	1.14	0.56
European Union ¹	5 859	6 376	0.54	0.55	8 090	8 348	0.94	0.65	2 570	2 809	1.41	0.69
United Kingdom	930	963	2.27	0.31	1 271	1 381	-0.39	0.87	885	825	0.60	-0.56
Norway	3 591	3 890	0.44	0.38	269	226	1.67	-1.39	2 830	3 049	-0.09	0.20
Russia	4 994	5 537	2.51	1.08	758	942	-6.73	-0.06	2 224	2 899	3.58	1.74
Ukraine	109	135	-9.43	0.81	432	459	-3.78	-0.57	16	22	-21.93	-3.23
AFRICA	11 684	13 264	3.80	1.13	4 432	5 906	1.13	2.98	2 736	2 178	4.79	-2.09
Egypt	1 807	2 504	5.44	2.90	560	503	6.27	-0.51	48	45	25.75	0.00
Ethiopia	55	80	16.05	2.95	2	2	12.22	0.00	1	1	-8.41	0.00
Nigeria	1 155	1 282	5.24	0.71	627	986	-11.96	5.87	7	4	-18.50	-5.06
South Africa	577	545	0.18	-0.13	260	336	7.03	1.65	170	163	-0.49	0.13
ASIA	119 899	138 955	3.02	1.30	16 676	17 707	2.62	0.59	20 174	23 590	1.82	1.86
China ²	62 351	71 529	3.12	1.34	4 301	4 271	4.80	-0.35	8 130	9 164	1.87	2.14
India	11 469	13 643	4.92	1.11	40	60	9.55	4.03	1 267	1 321	5.09	-0.55
Indonesia	12 462	16 253	7.30	2.09	153	203	-6.00	2.57	1 295	2 922	2.28	6.30
Iran	1 182	1 545	8.40	1.93	74	60	2.13	0.00	113	139	11.98	2.96
Japan	3 766	3 451	-3.05	-0.82	3 583	2 994	-0.33	-1.19	706	710	3.04	0.88
Kazakhstan	36	34	-1.84	0.00	60	70	-4.25	2.29	40	40	-1.93	0.00
Korea	1 901	1 865	-2.15	-0.14	1 841	2 006	3.25	0.46	590	707	-2.56	1.13
Malaysia	1 723	1 809	-0.24	0.68	523	538	0.50	-0.15	285	222	-1.62	-1.74
Pakistan	678	707	1.88	0.45	13	13	27.80	0.00	197	212	3.38	0.60
Philippines	2 727	2 755	-2.06	0.33	518	607	11.34	1.60	406	322	3.96	-0.46
Saudi Arabia	120	148	4.41	1.48	319	423	5.52	2.66	66	98	10.65	2.28
Thailand	2 376	2 613	-4.03	0.98	1 924	2 193	2.08	1.46	1 827	2 244	-4.47	1.99
Turkey	624	727	-0.44	1.12	111	132	4.11	1.36	223	268	14.01	2.42
Viet Nam	7 034	8 499	5.06	1.69	336	414	11.62	2.00	2 846	3 197	7.34	1.21
OCEANIA	1 650	1 824	2.22	1.01	675	716	1.47	0.80	1 031	1 079	3.51	0.45
Australia	274	321	0.89	2.01	469	518	0.35	1.07	78	84	3.49	1.96
New Zealand	535	563	-0.30	0.68	51	52	0.30	0.00	402	420	-0.93	0.68
DEVELOPED COUNTRIES	29 603	30 921	0.55	0.33	21 983	22 784	0.30	0.54	14 229	15 075	1.00	0.46
DEVELOPING COUNTRIES	142 666	165 403	2.78	1.24	19 556	22 975	2.88	1.60	27 013	30 693	2.34	1.36
LEAST DEVELOPED COUNTRIES (LDC)	13 119	15 356	3.83	1.34	1 308	2 098	11.22	4.36	1 594	1 158	6.25	-2.91
OECD³	28 824	30 378	-0.53	0.29	22 525	23 357	1.03	0.66	12 793	13 668	1.02	0.61
BRICS	80 689	92 777	3.26	1.28	6 073	6 480	2.52	0.18	11 838	13 609	2.45	1.74

.. Not available

Note: Fish: The term "fish" indicates fish, crustaceans, molluscs and other aquatic animals, but excludes aquatic mammals, crocodiles, caimans, alligators and aquatic plants. Imports and exports refer to trade of food fish i.e. for human consumption. All data are in live weight equivalent. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.39.2. Fish and seafood projections: Reduction, food consumption

Calendar year

	REDUCTION (kt)		Growth (%) ⁴		FOOD CONS. (kt)		Growth (%) ⁴		FOOD CONS. (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	15 226	15 194	-1.25	-0.13	152 784	177 777	2.70	1.30	20.3	21.3	1.51	0.34
NORTH AMERICA	999	1 026	1.40	0.06	8 202	9 174	1.27	1.09	22.7	23.5	0.52	0.38
Canada	17	18	-12.50	0.27	818	870	0.47	0.53	22.3	21.7	-0.52	-0.28
United States	981	1 009	1.88	0.05	7 384	8 305	1.36	1.15	22.8	23.7	0.64	0.45
LATIN AMERICA	5 599	5 762	-5.18	-0.67	6 740	8 034	2.47	1.71	10.5	11.4	1.34	0.88
Argentina	..	..	..	..	292	335	2.94	1.47	6.6	6.9	1.90	0.63
Brazil	52	44	-1.65	-1.31	1 914	2 288	1.81	1.94	9.1	10.2	0.92	1.36
Chile	1 217	1 322	-8.76	-0.76	276	331	1.73	1.81	15.3	17.0	0.85	1.16
Colombia	..	..	..	..	361	439	4.67	2.06	7.4	8.3	3.69	1.44
Mexico	183	199	-11.01	-0.11	1 927	2 325	4.85	1.78	14.9	16.0	3.42	0.75
Paraguay	..	..	..	..	29	37	2.57	1.49	4.2	4.7	1.23	0.39
Peru	3 958	4 001	-3.33	-0.71	690	801	0.94	1.17	21.4	22.1	-0.36	0.12
EUROPE	2 411	2 254	2.85	-0.59	16 228	17 392	0.36	0.70	21.8	23.4	0.27	0.73
European Union ¹	681	440	-1.92	-3.20	10 522	11 325	1.03	0.78	23.8	25.6	0.95	0.80
United Kingdom	..	..	..	..	1 316	1 520	0.57	1.36	19.9	21.7	-0.07	0.86
Norway	558	555	3.19	0.05	289	337	1.46	1.52	54.5	57.6	0.28	0.60
Russia	419	459	3.23	0.91	3 018	3 030	-1.23	0.19	21.0	21.4	-1.30	0.38
Ukraine	..	..	..	..	525	572	-4.07	-0.14	11.9	13.7	-3.59	0.40
AFRICA	816	822	0.80	0.55	12 489	16 151	2.93	2.40	10.0	10.0	0.33	0.03
Egypt	..	..	..	..	2 320	2 961	5.46	2.27	23.8	25.4	3.26	0.69
Ethiopia	..	..	..	..	57	82	17.10	2.90	0.5	0.6	14.14	0.66
Nigeria	..	..	..	..	1 775	2 264	-3.29	2.69	9.3	9.0	-5.82	0.16
South Africa	313	319	2.37	0.42	354	400	3.02	0.75	6.2	6.3	1.65	-0.23
ASIA	5 283	5 198	1.60	0.54	108 067	125 779	3.21	1.24	24.1	25.9	2.16	0.51
China ²	2 080	2 060	1.38	0.74	55 442	63 827	3.63	1.18	39.3	44.3	3.11	1.01
India	560	690	9.27	1.56	9 683	11 692	5.29	1.29	7.2	7.8	4.03	0.34
Indonesia	17	25	-6.02	0.00	9 887	12 519	6.10	1.97	37.4	43.0	4.82	1.09
Iran	76	71	2.92	-1.29	1 067	1 396	8.05	1.93	13.1	15.8	6.75	1.24
Japan	540	329	-4.84	-3.72	6 103	5 407	-1.49	-0.99	47.9	44.1	-1.37	-0.63
Kazakhstan	..	..	..	..	55	63	-4.42	2.56	3.1	3.2	-5.82	1.71
Korea	99	100	-2.20	0.00	2 907	2 964	0.39	0.06	57.0	56.4	-0.02	-0.20
Malaysia	102	65	-4.17	-3.09	1 858	2 060	1.48	0.90	58.8	57.1	-0.21	-0.29
Pakistan	132	133	2.02	-0.43	363	375	1.41	0.68	1.8	1.6	-0.65	-0.97
Philippines	..	..	..	..	2 839	3 040	-1.22	0.66	27.1	24.9	-2.80	-0.72
Saudi Arabia	..	..	..	..	373	473	4.26	2.35	11.3	12.2	1.58	0.95
Thailand	426	305	-3.26	-1.82	1 880	2 196	0.90	1.37	27.2	31.5	0.52	1.31
Turkey	104	163	-2.42	2.90	406	422	-2.89	-0.11	5.0	4.8	-4.40	-0.65
Viet Nam	802	923	12.98	2.63	3 605	4 753	2.64	2.15	37.7	45.3	1.52	1.30
OCEANIA	119	132	-1.49	0.08	1 057	1 247	1.61	1.78	26.6	27.3	0.08	0.54
Australia	29	38	-8.13	0.42	635	717	0.69	1.42	26.0	25.9	-0.75	0.31
New Zealand	51	53	-3.54	-0.11	134	141	2.78	0.74	28.5	27.4	1.70	-0.04
DEVELOPED COUNTRIES	4 379	4 056	1.13	-0.63	32 111	33 819	0.30	0.55	22.7	23.2	-0.11	0.28
DEVELOPING COUNTRIES	10 848	11 138	-2.09	0.06	120 673	143 958	3.42	1.48	19.8	20.9	2.04	0.37
LEAST DEVELOPED COUNTRIES (LDC)	484	498	6.79	0.73	12 175	15 679	3.91	2.18	14.4	14.5	1.50	-0.07
OECD³	4 460	4 226	-4.15	-0.84	33 050	35 035	0.65	0.61	24.9	25.2	0.10	0.23
BRICS	3 424	3 572	2.58	0.86	70 410	81 236	3.54	1.17	22.3	24.2	2.69	0.64

.. Not available

Note: Fish: The term "fish" indicates fish, crustaceans, molluscs and other aquatic animals, but excludes aquatic mammals, crocodiles, caimans, alligators and aquatic plants. Imports and exports refer to trade of food fish i.e. for human consumption. All data are in live weight equivalent. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.40.1. Ethanol projections: Production and use

Calendar year

	PRODUCTION (mln L)		Growth (%) ⁴	DOMESTIC USE (mln L)		Growth (%) ⁴	FUEL USE (mln L)		Growth (%) ⁴
	Average 2016-18est	2028	2019-28	Average 2016-18est	2028	2019-28	Average 2016-18est	2028	2019-28
WORLD	122 478	143 112	1.37	121 858	143 190	1.30	..	..	..
NORTH AMERICA	62 902	64 110	0.07	59 276	62 010	0.22	..	..	..
Canada	1 955	2 047	0.12	3 198	3 229	-0.38	2 983	2 962	-0.57
United States	60 947	62 062	0.07	56 078	58 781	0.25	54 377	57 177	0.26
LATIN AMERICA	33 794	44 321	2.43	34 015	44 140	2.16	..	..	..
Argentina	1 178	1 803	4.33	1 178	1 805	4.24	1 021	1 554	4.39
Brazil	29 341	37 155	2.16	28 927	36 563	1.93	27 186	34 535	1.99
Chile	8	12	4.53	37	31	1.51	..	..	..
Colombia	486	1 337	7.26	668	1 492	5.08	539	1 368	5.68
Mexico	222	275	0.97	363	411	1.05	163	215	2.29
Paraguay	353	916	6.90	335	774	6.79	317	754	7.04
Peru	200	274	2.79	264	351	2.11	186	242	2.16
EUROPE	8 700	9 738	1.06	8 908	9 834	0.86	..	..	..
European Union ¹	6 640	7 406	0.90	6 771	7 406	0.67	5 176	5 716	0.87
United Kingdom	918	1 099	2.67	1 019	1 235	2.34	755	988	3.01
Russia	621	597	-0.24	485	464	-0.49	..	..	..
Ukraine	358	467	2.18	352	459	2.23	175	244	2.74
AFRICA	1 045	1 374	2.19	1 052	1 330	2.27	..	..	..
Egypt	38	55	2.96	35	55	2.99	..	..	..
Ethiopia	104	160	3.80	104	160	3.80	..	..	..
Nigeria	29	70	3.66	178	187	1.22	..	..	..
South Africa	307	330	0.33	95	126	0.88	5	5	0.14
ASIA	15 684	23 241	3.65	18 335	25 624	2.95	..	..	..
China ²	9 633	14 774	4.25	10 167	15 528	4.05	3 600	8 829	8.42
India	2 398	3 132	1.93	2 680	3 294	1.13	1 023	1 595	2.28
Indonesia	216	272	1.96	154	212	2.58	50	62	2.38
Iran	0	0	..	0	0	..	..	..	..
Japan	77	77	0.01	1 551	1 454	-0.87	833	754	-1.61
Kazakhstan	0	0	..	0	0	..	..	..	..
Korea	153	146	0.05	512	534	-0.02	5	4	-1.76
Malaysia	0	0	..	0	0	..	..	..	..
Pakistan	608	809	2.22	21	22	0.25	2	2	1.94
Philippines	311	459	3.29	723	927	1.50	571	718	1.00
Saudi Arabia	0	6	26.35	60	58	1.12	..	..	..
Thailand	1 807	2 810	3.85	1 808	2 696	3.47	1 517	2 406	3.95
Turkey	109	114	0.33	206	214	0.17	96	89	-1.17
Viet Nam	209	407	3.52	201	387	2.77	101	280	4.00
OCEANIA	353	327	-1.18	271	251	-1.93	..	..	..
Australia	345	320	-1.23	266	245	-2.01	193	170	-2.78
New Zealand	3	1	0.00	0	0	..	..	..	..
DEVELOPED COUNTRIES	72 340	74 593	0.19	70 134	73 722	0.27	..	..	..
DEVELOPING COUNTRIES	50 138	68 518	2.83	51 725	69 468	2.53	..	..	..
LEAST DEVELOPED COUNTRIES (LDC)	369	515	2.89	381	517	2.88	..	..	..
OECD³	71 420	73 593	0.18	70 212	73 726	0.27	..	..	..
BRICS	42 299	55 987	2.62	42 353	55 974	2.40	..	..	..

.. Not available

Note: Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

ANNEX C

Table C.40.2. Ethanol projections: Share in volume terms and trade

Calendar year

	SHARE IN GASOLINE TYPE FUEL USE (%)		IMPORTS (mln L)		Growth (%) ⁴	EXPORTS (mln L)		Growth (%) ⁴
	Average 2016-18est	2028	Average 2016-18est	2028	2019-28	Average 2016-18est	2028	2019-28
WORLD	..	..	10 090	10 436	-0.51	10 486	10 436	-0.51
NORTH AMERICA	..	..	2 296	2 684	0.40	5 903	4 805	-2.35
Canada	6.0	6.2	1 306	1 262	-1.05	78	80	1.36
United States	9.7	11.2	991	1 422	1.85	5 825	4 725	-2.40
LATIN AMERICA	..	..	2 741	2 730	-1.19	2 342	2 903	1.23
Argentina	10.8	12.0	15	23	-0.36	16	21	5.46
Brazil	46.3	48.7	1 495	1 522	-1.52	1 731	2 106	1.22
Chile	..	..	29	20	0.00	0	1	0.00
Colombia	..	..	182	155	-5.08	0	0	..
Mexico	0.4	0.4	145	139	1.21	3	3	0.23
Paraguay	..	..	2	5	-0.86	21	147	7.05
Peru	..	..	184	198	0.00	120	121	0.00
EUROPE	..	..	1 281	1 138	-0.70	971	1 107	0.47
European Union ¹	5.6	7.3	534	397	-1.88	320	462	0.92
United Kingdom	4.4	7.1	578	588	0.03	477	451	0.05
Russia	..	..	2	3	-1.00	120	135	0.60
Ukraine	..	..	0	0	..	6	8	0.00
AFRICA	..	..	256	195	0.00	249	239	0.00
Egypt	..	..	1	1	0.00	5	1	0.00
Ethiopia	..	..	0	0	..	0	0	..
Nigeria	..	..	149	117	0.00	0	0	..
South Africa	..	..	14	14	0.00	226	218	0.00
ASIA	..	..	3 506	3 677	-0.59	935	1 294	3.01
China ²	2.1	3.7	522	848	0.85	86	94	0.96
India	..	..	421	354	-3.41	139	192	3.40
Indonesia	..	..	3	2	0.00	65	61	0.00
Iran	..	..	0	0	..	0	0	..
Japan	1.6	1.9	1 473	1 379	-0.91	1	2	0.02
Kazakhstan	..	..	0	0	..	0	0	..
Korea	0.0	0.0	378	388	0.21	0	0	..
Malaysia	..	..	0	0	..	0	0	..
Pakistan	..	..	0	0	..	587	787	2.28
Philippines	..	..	412	468	0.00	0	0	..
Saudi Arabia	..	..	61	52	0.00	0	0	..
Thailand	..	..	23	4	-14.03	22	118	15.40
Turkey	..	..	98	100	0.00	1	0	..
Viet Nam	..	..	21	14	-5.79	29	34	6.15
OCEANIA	..	..	9	11	-0.91	87	87	0.49
Australia	1.0	1.2	7	9	-1.01	82	84	0.51
New Zealand	..	..	1	1	0.00	5	2	0.00
DEVELOPED COUNTRIES	..	..	5 109	5 267	-0.20	7 191	6 224	-1.79
DEVELOPING COUNTRIES	..	..	4 981	5 169	-0.81	3 295	4 212	1.73
LEAST DEVELOPED COUNTRIES (LDC)	..	..	13	3	0.00	1	0	0.00
OECD³	..	..	5 711	5 859	-0.14	6 793	5 812	-1.92
BRICS	..	..	2 454	2 741	-1.13	2 301	2 745	1.21

.. Not available

Note: Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.41.1. Biodiesel projections: Production and use

Calendar year

	PRODUCTION (mln L)		Growth (%) ⁴	DOMESTIC USE (mln L)		Growth (%) ⁴
	Average 2016-18est	2028	2019-28	Average 2016-18est	2028	2019-28
WORLD	36 807	43 931	0.10	37 603	44 227	0.08
NORTH AMERICA	7 377	9 304	-1.67	8 830	9 903	-1.65
Canada	513	611	1.10	355	355	0.21
United States	6 864	8 693	-1.85	8 475	9 549	-1.71
LATIN AMERICA	7 860	9 640	1.26	6 459	8 342	1.30
Argentina	2 660	2 769	1.40	1 021	1 265	2.11
Brazil	4 520	5 916	1.10	4 489	5 898	1.09
Chile	0	0	..	0	0	..
Colombia	565	699	1.05	566	702	1.05
Mexico	0	0	..	0	0	..
Paraguay	12	37	9.64	12	37	9.64
Peru	50	140	4.13	318	360	1.42
EUROPE	13 821	13 524	-0.67	15 342	14 863	-1.00
European Union ¹	13 238	12 872	-0.73	14 541	14 009	-1.10
United Kingdom	284	352	1.74	503	554	1.63
Russia	0	0	..	0	0	..
Ukraine	0	0	..	0	0	..
AFRICA	0	0	..	0	0	..
Egypt	0	0	..	0	0	..
Ethiopia	0	0	..	0	0	..
Nigeria	0	0	..	0	0	..
South Africa	0	0	..	0	0	..
ASIA	7 690	11 418	1.82	6 911	11 074	2.73
China ²	1 031	1 279	1.13	1 020	1 270	1.16
India	165	239	2.15	153	235	2.18
Indonesia	3 748	6 052	1.22	3 173	5 888	2.84
Iran	0	0	..	0	0	..
Japan	16	18	1.61	12	14	2.38
Kazakhstan	0	0	..	0	0	..
Korea	677	678	-0.32	633	655	-0.28
Malaysia	460	545	1.53	342	447	2.01
Pakistan	0	0	..	0	0	..
Philippines	211	287	3.05	211	287	3.05
Saudi Arabia	0	0	..	0	0	..
Thailand	1 383	2 320	4.84	1 368	2 278	4.78
Turkey	0	0	..	0	0	..
Viet Nam	0	0	..	0	0	..
OCEANIA	60	44	1.58	61	45	1.60
Australia	60	44	1.58	61	45	1.60
New Zealand	0	0	..	0	0	..
DEVELOPED COUNTRIES	21 274	22 891	-1.08	24 245	24 825	-1.25
DEVELOPING COUNTRIES	15 533	21 040	1.56	13 358	19 402	2.09
LEAST DEVELOPED COUNTRIES (LDC)	0	0	..	0	0	..
OECD³	21 951	23 569	-1.06	24 877	25 481	-1.23
BRICS	5 716	7 434	1.13	5 662	7 404	1.14

.. Not available

Note: Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.41.2. Biodiesel projections: Share in volume terms and trade

Calendar year

	SHARE IN DIESEL TYPE FUEL USE (%)		IMPORTS (mln L)		Growth (%) ⁴	EXPORTS (mln L)		Growth (%) ⁴
	Average 2016-18est	2028	Average 2016-18est	2028	2019-28	Average 2016-18est	2028	2019-28
WORLD	4 505	3 738	-2.61	4 081	3 420	-2.82
NORTH AMERICA	2 204	1 390	-0.33	727	791	0.36
Canada	1.2	1.3	262	190	-2.45	422	447	0.12
United States	3.8	4.5	1 943	1 200	0.04	305	344	0.70
LATIN AMERICA	269	223	0.02	1 649	1 522	0.88
Argentina	11.5	13.1	0	0	..	1 642	1 504	0.85
Brazil	9.9	11.6	0	0	..	7	18	3.74
Chile	0	0	..	0	0	..
Colombia	1	3	1.41	0	0	..
Mexico	0	0	..	0	0	..
Paraguay	0	0	..	0	0	..
Peru	268	220	0.00	0	0	..
EUROPE	2 007	2 101	-4.15	904	740	-5.30
European Union ¹	7.1	8.1	1 727	1 816	-4.76	841	657	-5.79
United Kingdom	1.7	2.3	280	285	1.00	62	83	0.00
Russia	0	0	..	0	0	..
Ukraine	0	0	..	0	0	..
AFRICA	0	0	..	0	0	..
Egypt	0	0	..	0	0	..
Ethiopia	0	0	..	0	0	..
Nigeria	0	0	..	0	0	..
South Africa	0	0	..	0	0	..
ASIA	22	24	0.99	801	367	-10.99
China ²	0.9	1.2	9	11	3.46	20	20	0.00
India	7	7	0.15	19	11	0.19
Indonesia	0	0	..	574	164	-16.92
Iran	0	0	..	0	0	..
Japan	0.0	0.1	1	1	0.87	6	5	-0.34
Kazakhstan	0	0	..	0	0	..
Korea	0	0	..	44	23	-1.42
Malaysia	0	0	..	118	98	-0.39
Pakistan	0	0	..	0	0	..
Philippines	0	0	..	0	0	..
Saudi Arabia	0	0	..	0	0	..
Thailand	5	4	-2.63	20	46	6.83
Turkey	0	0	..	0	0	..
Viet Nam	0	0	..	0	0	..
OCEANIA	1	1	2.37	0	0	..
Australia	0.6	0.5	1	1	2.41	0	0	..
New Zealand	0	0	..	0	0	..
DEVELOPED COUNTRIES	4 214	3 493	-2.78	1 636	1 536	-2.80
DEVELOPING COUNTRIES	290	245	0.10	2 445	1 884	-2.82
LEAST DEVELOPED COUNTRIES (LDC)	0	0	..	0	0	..
OECD³	4 214	3 493	-2.78	1 681	1 559	-2.78
BRICS	16	18	1.98	46	49	1.27

.. Not available

Note: Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.42. Main policy assumptions for biofuel markets

		2018est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ARGENTINA												
Biodiesel												
Export tax	%	15.0	15.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
BRAZIL												
Ethanol												
Import tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incorporation mandate ²	%	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0
Biodiesel												
Tax concessions ³	BRL/hl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import tariff	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANADA												
Ethanol												
Incorporation mandate ²	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Biodiesel												
Incorporation mandate ²	%	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
COLOMBIA												
Ethanol												
Import tariff	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Blending target ^{1,4}	%	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Biodiesel												
Blending target ¹	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
EUROPEAN UNION												
Biofuel												
Energy share in fuel consumption ⁵	%	5.8	5.9	6.1	6.3	6.6	6.9	7.2	7.5	7.8	8.1	8.4
Ethanol												
Tax concessions ³	EUR/hl	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
Import tariff	EUR/hl	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Biodiesel												
Tax concessions ³	EUR/hl	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Import tariff	%	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
INDIA												
Ethanol												
Import tariff	%	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Share of biofuel mandates in total fuel consumption	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Biodiesel												
Import tariff	%	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Share of biofuel mandates in total fuel consumption	%	7.3	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
INDONESIA												
Biodiesel												
Blending target ¹	%	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
MALAYSIA												
Biodiesel												
Blending target ¹	%	6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
THAILAND												
Ethanol												
Blending target ¹	%	8.4	8.5	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2
Biodiesel												
Blending target ¹	%	6.0	6.2	6.6	6.7	6.9	7.0	7.2	7.5	7.7	8.0	8.2
UNITED STATES												
Renewable Fuel Standard⁶												
Total	mIn L	73 020	75 405	75 405	75 405	75 405	75 405	75 405	75 405	75 405	75 405	75 405
advanced mandate	mIn L	16 239	18 624	18 624	18 624	18 624	18 624	18 624	18 624	18 624	18 624	18 624
cellulosic ethanol	mIn L	1 090	1 582	1 693	1 812	1 938	2 074	2 219	2 375	2 541	2 719	2 909
Ethanol												
Import surcharge	USD/hl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Import tariff (undenatured)	%	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Import tariff (denatured)	%	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Blender tax credit	USD/hl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Biodiesel												
Import tariff	%	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Blender tax credit	USD/hl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ANNEX C

Note: 2018est: Data for 2018 are estimated. For many countries, shares for ethanol and biodiesel are not individually specified in the legislation. Figures are based on a combination of the EU mandate in the context of the Renewable Energy Directive and the National Renewable Energy Action Plans (NREAP) in the EU member states.

1. Expressed in volume share.
2. Share in respective fuel type, in volume.
3. Difference between tax rates applying to fossil and biogen fuels.
4. Applies to cities with more than 500 000 inhabitants.
5. According to the current Renewable energy Directive 2009/28/EC, the energy content of biofuel other than first-generation biofuels counts twice towards meeting the target. It is assumed that other sources than biofuel will help filling the 10% transport energy target.
6. The total, advanced and cellulosic mandates are not at the levels defined in EISA. Details can be found in the policy assumptions section of the biofuel chapter.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", *OECD Agriculture statistics* (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.43.1. Cotton projections: Production and trade

Marketing year

	PRODUCTION (kt)		Growth (%) ⁴		IMPORTS (kt)		Growth (%) ⁴		EXPORTS (kt)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	25 228	29 189	-0.04	1.17	8 946	11 590	0.43	1.70	8 832	11 590	0.45	1.70
NORTH AMERICA	4 100	4 271	2.80	0.50	1	1	-16.95	0.13	3 333	3 611	1.87	0.83
Canada	0	0	..	..	0	0	-19.30	..	0	0	..	..
United States	4 100	4 271	2.80	0.50	1	1	23.43	1.10	3 333	3 611	1.87	0.83
LATIN AMERICA	2 484	3 690	2.71	2.32	384	349	-4.50	0.30	1 070	2 568	7.77	3.12
Argentina	217	286	-0.71	1.53	2	2	-18.48	0.16	45	125	4.07	3.76
Brazil	1 947	2 992	2.99	2.63	26	17	-6.97	0.14	964	2 383	8.47	3.18
Chile	0	0	..	..	0	0	-33.92	..	0	0	..	..
Colombia	9	12	-15.06	2.23	23	20	-8.51	-1.21	1	1	98.18	1.22
Mexico	273	356	8.97	0.67	207	176	-3.81	0.08	56	54	5.02	-0.08
Paraguay	4	5	-12.32	1.13	2	1	141.21	-1.14	3	4	-12.64	1.15
Peru	22	26	-5.91	1.81	44	34	-5.44	-1.37	1	1	-10.45	0.48
EUROPE	290	292	1.04	0.54	268	254	-6.75	-0.04	284	277	2.36	0.08
European Union ¹	288	290	1.05	0.54	214	195	-4.63	-0.20	281	276	2.33	0.08
United Kingdom	0	0	..	..	0	0	..	..	0	0	..	..
Russia	1	1	0.21	0.26	37	39	-14.41	0.00	2	0	112.13	..
Ukraine	0	0	..	..	2	2	-11.59	2.01	0	0	..	..
AFRICA	1 726	2 300	5.97	2.10	188	304	1.86	4.11	1 430	2 046	5.59	2.34
Egypt	72	44	-7.67	-8.83	120	187	6.56	3.23	50	53	-6.14	-3.13
Ethiopia	51	57	12.71	1.49	14	46	38.30	9.73	2	1	-4.36	-7.09
Nigeria	51	56	0.43	0.82	1	19	-14.50	22.42	25	1	-3.22	-17.95
South Africa	31	42	14.95	1.48	17	11	-1.41	0.05	10	17	4.24	-0.05
ASIA	15 788	17 642	-1.48	0.90	8 105	10 680	1.12	1.74	1 906	2 111	-6.26	0.54
China ²	5 505	5 416	-3.44	-0.51	1 414	1 789	-11.52	-0.83	20	24	10.66	0.23
India	6 088	7 212	0.81	1.79	437	259	18.19	-2.21	1 029	1 321	-5.50	2.26
Indonesia	5	6	-4.29	1.45	783	1 185	5.78	3.24	1	0	-45.13	..
Iran	53	57	-2.53	1.42	71	82	1.79	1.93	0	0	..	..
Japan	0	0	..	..	56	58	-3.01	-0.43	0	0	..	..
Kazakhstan	73	83	-0.99	1.25	0	0	..	..	50	64	-4.96	0.73
Korea	0	0	..	..	202	142	-2.18	-3.30	0	0	..	..
Malaysia	0	0	..	..	137	215	4.26	2.46	30	25	-0.64	-2.40
Pakistan	1 736	2 060	-2.86	1.36	607	552	10.47	-1.14	39	48	-18.38	0.47
Philippines	0	0	..	..	14	21	1.55	4.42	0	0	..	..
Saudi Arabia	0	0	..	..	0	0	..	..	0	0	..	..
Thailand	1	1	0.26	1.29	257	228	-4.51	-1.02	0	0	..	..
Turkey	812	1 165	4.15	2.21	822	1 050	1.21	2.10	71	53	8.58	-2.05
Viet Nam	1	1	-16.14	1.45	1 472	2 297	21.52	3.59	0	0	..	..
OCEANIA	839	994	0.56	3.23	1	1	-2.36	0.00	810	977	2.18	3.74
Australia	838	993	0.56	3.23	0	0	..	..	809	976	2.18	3.74
New Zealand	1	1	0.00	0.00	1	1	0.00	0.00	1	1	0.00	0.00
DEVELOPED COUNTRIES	6 616	7 068	1.49	0.87	347	330	-5.98	-0.10	5 125	5 505	0.32	0.86
DEVELOPING COUNTRIES	18 612	22 121	-0.52	1.27	8 599	11 261	0.80	1.76	3 707	6 085	0.75	2.53
LEAST DEVELOPED COUNTRIES (LDC)	1 378	1 923	6.48	2.73	1 678	2 639	9.79	3.53	1 056	1 595	7.67	2.92
OECD³	6 325	7 090	2.73	1.12	1 504	1 625	-1.30	0.89	4 565	4 985	1.85	1.24
BRICS	13 572	15 662	-0.85	1.07	1 930	2 116	-8.97	-0.98	2 024	3 746	-0.29	2.80

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

ANNEX C

Table C.43.2. Cotton projections: Consumption

Marketing year

	CONSUMPTION (kt) ⁴		Growth (%) ⁵	
	Average 2016-18est	2028	2009-18	2019-28
WORLD	26 215	29 176	1.03	0.66
NORTH AMERICA	713	657	-1.25	-1.01
Canada	0	0	-21.54	..
United States	713	656	-1.22	-1.01
LATIN AMERICA	1 494	1 466	-3.20	-0.47
Argentina	152	156	-1.33	0.09
Brazil	725	628	-4.81	-1.68
Chile	0	0	-40.75	..
Colombia	34	30	-11.47	-0.11
Mexico	430	478	0.98	0.54
Paraguay	3	3	-12.67	-0.11
Peru	59	59	-7.45	-0.11
EUROPE	279	270	-7.36	0.84
European Union ¹	225	211	-5.27	0.90
United Kingdom	0	0	..	..
Russia	39	40	-14.93	0.19
Ukraine	2	2	-13.39	2.01
AFRICA	397	558	1.42	2.24
Egypt	144	178	-0.16	0.49
Ethiopia	62	102	9.82	4.68
Nigeria	34	74	7.19	4.26
South Africa	26	36	2.56	1.84
ASIA	23 324	26 217	1.59	0.74
China ²	8 758	7 186	-1.00	-2.15
India	5 200	6 150	2.58	1.49
Indonesia	773	1 190	5.45	3.23
Iran	114	140	-1.92	1.72
Japan	59	58	-3.80	-0.43
Kazakhstan	13	19	0.41	3.27
Korea	203	142	-1.85	-3.28
Malaysia	98	190	16.92	3.33
Pakistan	2 280	2 563	0.51	0.79
Philippines	13	21	0.76	4.42
Saudi Arabia	0	0	..	..
Thailand	253	229	-4.84	-1.01
Turkey	1 547	2 162	2.62	2.29
Viet Nam	1 429	2 298	21.01	3.59
OCEANIA	7	7	-4.04	-0.01
Australia	6	6	-4.57	-0.01
New Zealand	1	1	0.00	0.00
DEVELOPED COUNTRIES	1 661	1 879	-1.04	1.01
DEVELOPING COUNTRIES	24 555	27 297	1.19	0.63
LEAST DEVELOPED COUNTRIES (LDC)	1 928	2 968	7.89	3.34
OECD³	3 185	3 715	0.29	1.02
BRICS	14 747	14 040	-0.17	-0.67

.. Not available

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. Refers to all current European Union member States except the United Kingdom.
2. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
3. Excludes Iceland but includes all EU member countries
4. Consumption for cotton means mill consumption and not final consumer demand.
5. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.44. Main policy assumptions for cotton markets

Marketing year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ARGENTINA												
Export tax equivalent of export barriers	%	4.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff equivalent of import barriers	%	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
BRAZIL												
Producer Minimum Price, lint cotton	BRL/t	4 491.9	5 754.0	5 754.0	5 754.0	5 754.0	5 754.0	5 840.0	6 230.6	6 598.1	6 933.3	7 242.4
Tariff equivalent of import barriers	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
EUROPEAN UNION												
Area for coupled payment	kha	301.7	301.7	301.7	301.7	301.7	301.7	301.7	301.7	301.7	301.7	301.7
Coupled payment per ha ¹	EUR/ha	830.0	830.0	830.0	830.0	830.0	830.0	830.0	830.0	830.0	830.0	830.0
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAPAN												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KOREA												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEXICO												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RUSSIA												
Tariff equivalent of import barriers	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UNITED STATES												
Economic Adjustment Assistance payment level	USD/t	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
TRQ	kt	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
In-quota tariff	USD/t	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
Out-of-quota tariff	USD/t	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0
CHINA												
TRQ	kt	894.0	894.0	894.0	894.0	894.0	894.0	894.0	894.0	894.0	894.0	894.0
In-quota tariff	%	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Out-of-quota tariff	%	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0

Note: Marketing year: See Glossary of Terms for definitions. Average 2016-18est: Data for 2018 are estimated.

1. If the area is higher than the ceiling, the amount is proportionally reduced.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.45. Roots and tubers projections: Production and food consumption

Calendar year

	PRODUCTION (kt)		Growth (%) ⁴		FOOD CONSUMPTION (kg/cap)		Growth (%) ⁴	
	Average 2016-18est	2028	2009-18	2019-28	Average 2016-18est	2028	2009-18	2019-28
WORLD	221 479	261 440	2.42	1.27	15.6	16.7	0.66	0.53
NORTH AMERICA	5 432	5 649	1.06	0.32	12.4	12.1	0.31	-0.36
Canada	952	991	0.82	0.39	16.0	15.6	0.52	-0.53
United States	4 480	4 658	1.12	0.30	12.0	11.7	0.28	-0.34
LATIN AMERICA	14 014	15 652	-0.51	1.01	12.0	12.4	-0.64	0.30
Argentina	603	652	1.22	1.01	9.3	9.3	-0.51	-0.14
Brazil	6 441	6 308	-3.58	0.07	12.8	11.7	-3.61	-0.53
Chile	265	321	2.26	1.48	13.9	15.1	2.49	0.64
Colombia	1 317	1 694	2.33	1.98	21.7	24.9	1.53	1.26
Mexico	399	434	0.91	0.83	3.3	3.3	-0.03	-0.16
Paraguay	960	1 172	3.73	1.58	41.1	37.5	-0.23	-0.95
Peru	1 599	2 001	3.25	1.83	31.7	35.9	1.77	0.96
EUROPE	24 959	25 044	0.09	0.12	17.1	16.6	-0.39	-0.27
European Union ²	10 308	9 569	-1.87	-0.62	14.0	12.7	-1.40	-0.81
United Kingdom	1 226	1 262	-0.14	0.22	17.0	16.7	-0.96	-0.25
Russia	6 800	6 591	2.89	-0.01	24.2	25.0	1.28	0.16
Ukraine	5 012	5 723	2.83	1.16	27.4	30.2	1.45	0.89
AFRICA	82 742	104 433	3.83	1.74	36.3	37.1	0.73	0.15
Egypt	1 103	1 395	2.98	1.60	8.0	9.3	0.71	1.29
Ethiopia	2 343	3 016	6.01	1.92	18.7	18.9	2.59	-0.22
Nigeria	30 678	37 754	4.60	1.54	68.5	69.4	1.49	0.09
South Africa	481	591	1.83	1.76	5.9	6.4	-0.71	0.70
ASIA	93 250	109 371	2.54	1.19	10.4	10.8	0.39	0.31
China ³	42 061	45 308	1.68	0.48	15.4	15.4	0.10	-0.09
India	12 986	16 536	3.25	1.74	7.0	8.1	0.88	1.12
Indonesia	9 076	10 869	2.12	1.58	18.3	19.7	1.24	0.54
Iran	957	1 131	1.25	1.44	10.1	10.7	0.49	0.50
Japan	760	739	-1.01	-0.08	6.4	6.3	-0.55	-0.09
Kazakhstan	753	909	4.37	1.60	22.1	24.7	-0.03	1.01
Korea	197	214	-0.42	0.98	5.0	5.1	4.50	-0.01
Malaysia	37	46	7.48	1.59	3.5	3.9	2.47	1.00
Pakistan	996	1 265	4.26	1.77	3.9	4.5	1.63	1.15
Philippines	1 011	1 248	2.80	1.59	9.4	9.9	1.13	0.35
Saudi Arabia	79	130	-1.73	5.37	4.7	5.2	9.62	0.99
Thailand	10 329	13 300	4.12	2.02	5.2	5.0	-0.34	-0.39
Turkey	764	937	-2.45	1.32	7.1	6.3	-5.27	-0.96
Viet Nam	4 001	4 919	3.81	1.62	3.9	4.1	-0.20	0.87
OCEANIA	1 081	1 290	1.40	1.51	22.7	23.1	-0.32	0.11
Australia	254	273	0.08	0.84	10.6	9.4	-1.04	-1.01
New Zealand	132	148	2.60	1.06	11.9	12.4	-0.13	0.37
DEVELOPED COUNTRIES	34 365	35 364	0.44	0.30	14.0	13.7	-0.29	-0.26
DEVELOPING COUNTRIES	187 114	226 075	2.83	1.43	16.0	17.3	0.85	0.65
LEAST DEVELOPED COUNTRIES (LDC)	38 697	49 769	3.62	1.89	27.3	28.2	0.77	0.26
OECD	19 986	19 818	-0.87	-0.07	11.0	10.4	-0.89	-0.56
BRICS	68 769	75 333	1.45	0.67	11.9	12.2	-0.07	0.10

Note: Calendar year. Average 2016-18est: Data for 2018 are estimated. Production and consumption are expressed on dry weight basis.

1. Excludes Iceland but includes all EU member countries
2. Refers to all current European Union member States except the United Kingdom.
3. Refers to mainland only. The economies of Chinese Taipei, Hong Kong (China) and Macau (China) are included in the Asia aggregate.
4. Least-squares growth rate (see glossary).

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en

Table C.46. Information on food price changes

	Total inflation % change (year-on-year)		Food inflation % change (year-on-year) ²		Expenditure share of food		Food contribution to total change in inflation ³	
	2018	2019	2018	2019	2018	2019	2018	2019
OECD								
Australia ¹	1.9	..	-0.3	..	12.8	12.8	0.0	..
Austria	1.8	1.7	2.0	1.2	12.0	12.0	0.2	0.1
Belgium	1.7	2.0	2.2	1.4	17.4	17.4	0.4	0.2
Canada	1.7	1.4	1.6	2.5	11.5	11.5	0.2	0.3
Chile	2.2	2.2	3.9	1.3	18.9	18.9	0.7	0.2
Czech Republic	2.2	2.5	4.5	-0.2	17.0	17.0	0.8	0.0
Denmark	0.7	1.3	1.6	1.1	11.5	11.5	0.2	0.1
Estonia	3.4	2.7	5.7	1.7	21.7	21.7	1.2	0.4
Finland	0.8	1.1	1.5	2.1	13.4	13.4	0.2	0.3
France	1.3	1.2	1.3	2.9	14.7	14.7	0.2	0.4
Germany	1.4	1.4	2.6	0.7	10.4	10.4	0.3	0.1
Greece	-0.2	0.4	-1.2	1.9	17.1	17.1	-0.2	0.3
Hungary	2.1	2.7	4.5	3.8	19.6	19.6	0.9	0.8
Iceland	2.4	3.4	-0.1	4.8	14.9	14.9	0.0	0.7
Ireland	0.2	0.7	-1.7	-1.5	11.7	11.7	-0.2	-0.2
Israel	0.1	1.2	-1.1	4.7	14.3	14.3	-0.2	0.7
Italy	0.9	0.9	1.3	0.7	16.3	16.3	0.2	0.1
Japan	1.4	0.2	3.8	-2.2	19.0	19.0	0.7	-0.4
Korea	0.8	0.8	-1.1	2.6	14.4	14.4	-0.2	0.4
Luxembourg	1.1	1.8	1.8	2.6	11.1	11.1	0.2	0.3
Mexico	5.5	4.4	8.6	5.3	18.9	18.9	1.6	1.0
Netherlands	1.5	2.2	2.2	3.0	11.3	11.3	0.3	0.3
New Zealand ¹	1.1	..	0.0	..	17.4	17.4	0.0	..
Norway	1.6	3.1	2.6	1.2	13.3	13.3	0.3	0.2
Poland	1.9	0.7	4.8	..	24.1	24.1	1.2	..
Portugal	1.0	0.5	1.4	0.2	18.1	18.1	0.3	0.0
Slovak Republic	2.4	2.2	6.7	1.6	18.4	18.4	1.2	0.3
Slovenia	1.5	1.1	2.9	0.8	17.0	17.0	0.5	0.1
Spain	0.6	1.0	1.3	0.9	18.2	18.2	0.2	0.2
Sweden	1.6	1.9	2.3	1.6	13.9	13.9	0.3	0.2
Switzerland	0.7	0.6	1.0	0.8	10.8	10.8	0.1	0.1
Turkey	10.3	20.4	8.8	31.0	26.8	26.8	2.3	8.3
United Kingdom	2.7	1.8	3.7	0.9	11.8	11.8	0.4	0.1
United States	2.1	1.6	1.0	0.7	7.8	7.8	0.1	0.1
OECD Total	2.2	2.1	2.2	1.9	..	..	..	..
Enhanced Engagement								
Brazil	2.9	3.8	-1.5	4.2	22.5	22.5	-0.3	0.9
China	1.5	1.7	-0.5	2.0	33.6	33.6	-0.2	0.7
India	5.1	6.6	4.6	..	35.4	35.4	1.6	..
Indonesia	3.3	2.8	2.9	2.0	19.6	19.6	0.6	0.4
Russia	2.2	5.0	0.3	6.2	32.8	32.8	0.1	2.0
South Africa	4.3	3.9	3.8	2.9	18.3	18.3	0.7	0.5

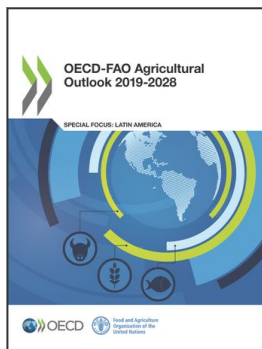
Table C.46. Information on food price changes (cont.)

	Total inflation % change (year-on-year)		Food inflation % change (year-on-year) ²		Expenditure share of food		Food contribution to total change in inflation ³	
	2018	2019	2018	2019	2018	2019	2018	2019
Non OECD								
Algeria	3.6	2.6	1.8	1.4	43.8	43.8	0.8	0.6
Bangladesh	5.4	5.4	5.3	5.3	28.6	28.6	1.5	1.5
Bolivia	2.9	1.4	3.3	1.5	27.6	27.6	0.9	0.4
Botswana	3.1	3.5	0.4	-0.2	23.7	23.7	0.1	0.0
Bulgaria	1.8	3.0	1.0	3.6	37.2	37.2	0.4	1.3
Colombia	3.7	3.2	0.4	2.1	34.7	34.7	0.1	0.7
Costa Rica	2.4	1.7	2.3	-0.7	21.4	21.4	0.5	-0.1
Dominican Republic	3.9	0.7	5.2	-0.4	29.2	29.2	1.5	-0.1
Ecuador	-0.1	0.5	-0.1	0.4	23.0	23.0	0.0	0.1
Egypt	17.0	12.5	12.9	12.5	26.3	26.3	3.4	3.3
El Salvador	1.5	0.3	2.9	0.8	26.0	26.0	0.8	0.2
Ethiopia	10.5	11.5	13.7	..	57.0	57.0	7.8	..
Ghana	10.3	9.0	6.8	8.0	37.0	37.0	2.5	3.0
Guatemala	4.7	4.1	10.5	9.8	28.6	28.6	3.0	2.8
Haiti	13.2	15.5	13.2	18.9	50.4	50.4	6.7	9.5
Honduras	4.6	4.0	1.7	1.1	31.8	31.8	0.5	0.4
Iraq	0.8	1.1	-0.2	..	35.0	35.0	-0.1	..
Jordan	3.0	3.6	-1.3	3.6	35.2	35.2	-0.5	1.3
Kenya	4.8	4.7	4.7	1.6	36.0	36.0	1.7	0.6
Madagascar	11.3	..	11.3	..	60.0	60.0	6.8	..
Malawi	4.5	8.8	8.4	10.7	50.0	50.0	4.2	5.4
Malaysia	3.5	-0.7	2.7	1.0	56.3	56.3	1.5	0.6
Moldavia	6.5	2.2	8.4	-3.0	60.0	60.0	5.0	-1.8
Morocco	1.8	-0.5	2.2	-3.1	40.4	40.4	0.9	-1.3
New Caledonia	1.4	1.0	1.4	-0.6	21.0	21.0	0.3	-0.1
Nicaragua	5.4	3.3	5.6	1.3	26.1	26.1	1.5	0.3
Niger	7.6	..	7.2	..	40.0	40.0	2.9	..
Nigeria	15.1	11.3	18.9	13.5	51.8	51.8	9.8	7.0
Pakistan	4.4	9.9	3.7	4.3	37.5	37.5	1.4	1.6
Panama	0.4	-0.3	-1.9	0.9	33.6	33.6	-0.6	0.3
Paraguay	4.7	2.4	7.7	-1.0	39.1	39.1	3.0	-0.4
Peru	1.4	2.4	0.2	1.5	25.0	25.0	0.1	0.4
Philippines	3.9	4.4	4.5	5.6	39.0	39.0	1.8	2.2
Romania	4.3	3.3	3.8	3.8	37.4	37.4	1.4	1.4
Rwanda	0.1	1.0	-2.0	-4.3	39.0	39.0	-0.8	-1.7
Senegal	-0.3	0.6	-0.3	0.7	53.4	53.4	-0.2	0.4
Singapore	0.0	0.4	1.1	1.4	21.7	21.7	0.2	0.3
Sri Lanka	5.8	3.7	10.5	-2.1	41.0	41.0	4.3	-0.9
Chinese Taipei	0.9	0.2	0.8	0.8	23.7	23.7	0.2	0.2
Tanzania	4.0	3.0	6.3	0.7	38.5	38.5	2.4	0.3
Thailand	0.7	0.3	0.1	1.3	33.0	33.0	0.0	0.4
Tunisia	6.9	7.1	7.9	7.1	28.7	28.7	2.3	2.0
Uganda	3.0	2.7	2.7	-1.5	27.2	27.2	0.7	-0.4
Zambia	6.2	7.8	4.6	7.7	52.5	52.5	2.4	4.0

.. Not available

1. No data available for January 2019 in Australia and New Zealand.
2. CPI food: definition based on national sources.
3. Contribution is food inflation multiplied by expenditure share, expressed in %.

Source: OECD and national sources.



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