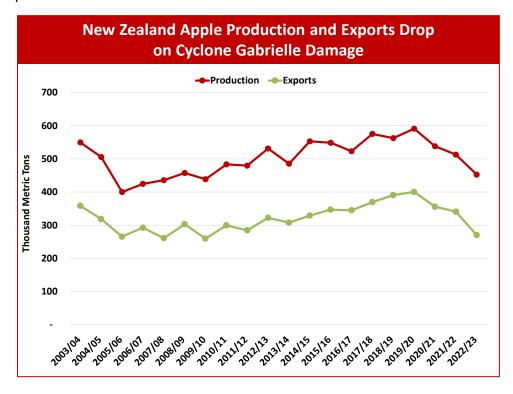


Fresh Apples, Grapes, and Pears: World Markets and Trade

New Zealand Apple Production: Years of Gains Swept Away

New Zealand's apple production has suffered 3 consecutive years of decline after peaking in 2019/20. From 2020/21 through 2021/22, losses were mostly due to a COVID-19-related labor shortage. Immigration restrictions caused a severe shortage in seasonal labor, preventing orchards from being fully harvested. Successfully navigating those trials, growers were expecting a very good season in 2022/23 when New Zealand's apple industry suffered catastrophic damage from Cyclone Gabrielle in February 2023, destroying years of investment to expand production.



Prior to 2020/21, New Zealand's apple production had been on a long-term upward trend, recovering from a two-year period of damaging weather beginning in 2004/05 during which hail, heavy frosts, and persistent wet conditions significantly impacted production. Production had slowly regained that lost output, reaching records in 2019/20 for both production (591,200 tons) and exports (400,400 tons), and accounting for 13 percent of Southern Hemisphere production. Planted area also expanded during this period, rising 9 of the last 10 years, increasing nearly 270 hectares per year on average. Major investments have been made in converting orchards to newer higher-yield varieties preferred by consumers in overseas markets. New Zealand exports two-thirds of its production and ships to over 60 countries. Shipments account for 5 percent of world exports and 20 percent of Southern Hemisphere

exports on average. The top markets in 2021/22 were China, Vietnam, European Union, Taiwan, and the United States.

Despite the COVID-19-related declines the two years following 2019/20, acreage continued to expand though at a reduced rate, and investments continued with the ongoing replacement of older blocks of trees with new varieties. The past several years also saw significant investments in packhouses to improve efficiency with increased automation, including camera technology for grading and robotics for packing and stacking. The last 2 seasons were marked by lower supplies, but producers managed to sustain output of over 500,000 tons, which have now occurred 9 out of the last 10 years, and exports averaged 350,000 tons despite COVID-19-related logistical challenges.

After weathering those difficult seasons, 2022/23 started with high expectations and anticipation of a recovery of output to pre-COVID-19 levels. With the easing of COVID-19 restrictions in New Zealand and worldwide, logistics were improving, and labor availability had improved for both orchards and pack houses. In addition, growing conditions had been ideal, and newer orchards were coming into full production.

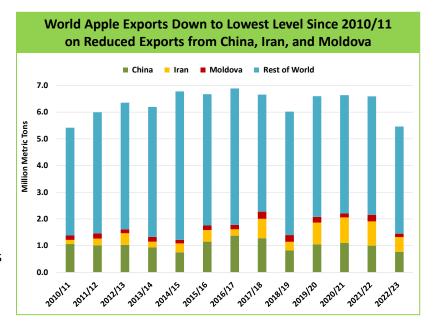
These expectations were shattered in mid-February when Cyclone Gabrielle hit New Zealand's North Island at the start of the harvest, causing widespread destruction of orchards. The hardest hit areas were Hawke's Bay and Gisborne which account for two-thirds of New Zealand's production. It is estimated that nearly half the trees have been impacted with nearly a quarter destroyed or expected to die as a result of being submerged under water or covered by deep silt. There was also substantial damage to infrastructure, including to irrigation on which most commercial orchards rely.

As a result, for marketing year 2022/23, production is forecast to fall 60,000 tons to 453,000 and exports to drop 70,000 tons to 270,000, both at their lowest levels since 2009/10. As producers restore orchards, the pace of previous years' tree replacements is expected to accelerate, increasing acreage of higher-yield varieties that generate greater returns, such as Rockit, Envy, and Pink Lady. However, it will likely take years for the apple industry to completely recover from the full extent of Gabrielle's damage.

FRESH APPLES

World apple production for 2022/23 is forecast down 4.3 million metric tons (tons) to 78.4 million on weather-induced losses in China. Exports are estimated down over 1.0 million tons to 5.5 million on significantly reduced shipments from China, Iran, and Moldova.

China production is expected to shrink nearly 5.0 million tons to 41.0 million on reduced output in the top-producing provinces of Shaanxi and



Shandong as high temperatures during bloom reduced fruit set. Low market returns are encouraging tree removals in several northern and western provinces, while an aging farmer population is also impacting management of orchards. Exports are estimated to drop over 20 percent to 770,000 tons as a result of lower supplies. Shipments to Russia have resumed after an August 2019 ban due to pests was lifted in February 2022, but these volumes are expected to only partially offset weaker sales to other markets. Imports are projected up 10,000 tons to 85,000 on greater shipments from New Zealand at the start of the marketing year (July-June).

EU production is projected up slightly to 12.8 million tons on improved output in Poland as good flowering and pollination led to abundant fruit set. Higher production in Poland is also attributed to ongoing replacement of old orchards with new higher-yield varieties. Despite greater supplies, exports are estimated down 100,000 tons to 1.1 million. Rising cold storage costs are expected to discourage storage for exports and shift greater volumes to processing, boosting consumption to 12.0 million tons. High supplies are expected to reduce import demand to 290,000 tons, down 41,000 tons from the previous year.

U.S. production is estimated to edge 75,000 tons lower to 4.3 million, its lowest level since 2012/13, as weather-related declines in Washington more than offset a record crop in Michigan. Michigan had ideal weather throughout the growing season, leading to a near doubling from the previous year's output. USDA's National Agricultural Statistics Service (NASS) surveyed industry and updated U.S. production in the May 2023 *Noncitrus Fruits and Nuts 2022 Summary* report. Exports are expected to be lower for a third straight year as reduced supplies trigger a near 20-percent drop in exports to 590,000 tons, their lowest level since 2003/04. Despite lower supplies, imports are anticipated to contract to 100,000 tons on reduced export supplies from New Zealand.

Chile production is forecast to contract slightly to 1.0 million tons as continued declines in acreage is mostly offset by higher yield from good growing conditions. Lower volumes are anticipated to reduce exports to 585,000 tons.

Mexico production is anticipated to be nearly unchanged at 640,000 tons with only slightly higher yield following last year's drought. Acreage continues to decline pressured by suburban development while some growers are diversifying into other crops with greater profitability and lower water needs than apples, such as figs. Imports are anticipated 31,000 tons lower to 235,000 as rising inflation and reduced consumer spending temper demand.

New Zealand production and exports are forecast to drop to their lowest levels since 2009/10 due to severe damage from Cyclone Gabrielle that struck the North Island in February, the location of over 65 percent of production. Higher output from the South Island on account of good growing conditions is expected to only partially offset losses from Gabrielle. Damage from the cyclone is projected to lead to a 60,000-ton drop in production to 453,000, with exports plunging over 20 percent to 270,000 tons.

South Africa production is forecast to contract 51,000 tons to 1.2 million as trees recover from 2 years of record harvests. Despite steady output, exports are projected down 90,000 tons to 535,000 due to reduced export-quality supplies and the high cost of cold storage. Hail-damaged apples in the top producing region of the Western Cape are expected to raise volumes of low-quality fruit, diverting fruit otherwise destined for exports into processing, while storage costs and electricity loadshedding are expected to steer product to more immediate sale on the domestic market.

Turkey production is estimated up 277,000 tons to 4.8 million on good growing conditions and higher yield of new variety trees. Exports are expected to edge higher to 410,000 tons on greater supplies, with shipments anticipated to rise to Saudi Arabia and Russia.

India production is anticipated up 50,000 tons to 2.4 million on sufficient rain during flower and fruit set. Despite access to higher domestic supplies being hampered by an insufficient cold chain network and limited distribution, imports are projected down by over 60,000 tons to 385,000 on reduced supplies from Iran and the European Union.

FRESH TABLE GRAPES

World table grape production for 2022/23 is forecast up 1.1 million tons to 27.3 million for a fourth straight year of growth as favorable growing conditions in China and Turkey more than offset losses in Chile and India. Exports are expected to remain unchanged at 3.7 million tons as greater export supplies in China and Peru offset reduced output in Chile and South Africa.

China production is estimated to rise 620,000 tons to 12.6 million as good growing conditions and continued improvements in farming techniques raise yield. Higher supplies are expected to boost exports to 390,000 tons on greater shipments to Asia markets, especially Thailand and Vietnam. Imports are anticipated to remain unchanged at 180,000 tons on steady counterseasonal trade.

Turkey production is expected to rebound 380,000 tons to 2.2 million as vineyards recover from last year's frost damage and good growing conditions improve yield. After 3 years of rising exports, shipments are projected down 39,000 tons to 225,000 despite higher supplies as weaker demand from Ukraine more than offsets rising trade with Russia and Saudi Arabia. Higher output and reduced exports are expected to lift consumption once again to over 2.0 million tons.

India production is projected to be nearly unchanged at 2.9 million tons as heavy and unseasonal rains hamper output for a second straight year and reduce volumes of export-quality grapes. Rising domestic demand for raisins is also diverting grapes to raisin production, further shrinking export supplies. Exports are expected to contract 20,000 tons to 255,000 on the reduced availability of fresh grapes, with lower shipments particularly to top market Bangladesh.

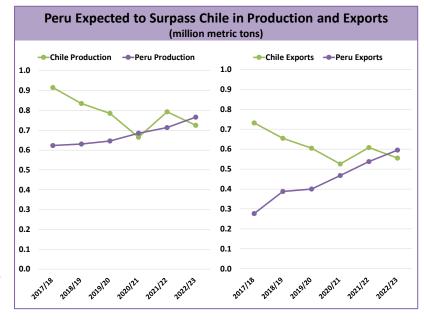
EU production is anticipated to rebound following 2 years of losses as new seedless varieties in Italy, Spain, and Portugal come into production, lifting output 161,000 tons to 1.6 million. Consumption is estimated to rise over 2.0 million tons on greater supplies and reduced shipments as high freight and transportation costs hold exports nearly unchanged at 170,000 tons. Imports are also nearly flat at 590,000 as gains from Chile are offset by losses from South Africa and Brazil.

U.S. production is estimated to contract slightly to 811,000 tons, a fourth straight year of declines, as reduced water availability continued to affect output and frost impacted yield. USDA's National Agricultural Statistics Service (NASS) surveyed industry and updated U.S. production in the May 2023 *Noncitrus Fruits and Nuts 2022 Summary* report. Reduced supplies are expected to pressure exports slightly lower to 247,000 tons, including to top markets Canada and Mexico. Imports are projected up to a record 746,000 tons boosted by greater output in Peru and elevated shipments from Chile at the beginning of the May-April marketing year. U.S. export share of production declined to 30 percent (from an average of 35 percent between 2017/18 and 2021/22), combining with higher imports to boost consumption to a record 1.3 million tons.

Peru production is anticipated to rise for the eighth consecutive year as good growing conditions and greater output from new plantings boost supplies over 50,000 tons to 766,000. In line with production, exports are estimated up nearly 60,000 tons to 595,000 on surging

exports to North America, especially the United States. If realized, Peru would unseat Chile as the world's top exporter and also surpass Chile to become the world's ninth largest producer.

Chile production is forecast to drop nearly 70,000 tons to 725,000 on adverse growing conditions and lower acreage. Some growers are replacing older varieties with new higher-yield varieties, but other regions are seeing acreage converted to more profitable



crops including cherries and walnuts, more than offsetting gains from higher-yield plantings. Reduced supplies are expected to pressure exports 53,000 tons lower to 555,000 tons.

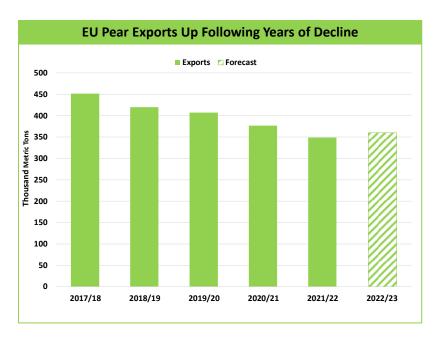
Australia production is anticipated up slightly to 200,000 tons as heavy spring rains created challenges in managing disease for some growers. Exports are projected to rebound from 2 years of COVID-19-related declines, rising 20,000 tons to 130,000 as improved shipping logistics rejuvenate shipments especially to China. However, the late start to the season from cooler and wet weather is expected to limit fully-ripe volumes at the end of the season, preventing a stronger recovery.

FRESH PEARS

World pear production for 2022/23 is forecast to slip 740,000 tons to 23.7 million as a recovering EU crop is more than offset by weather-damaged supplies in China. Exports are expected to ease down to 1.7 million tons on reduced shipments from China.

China production is expected to contract 1.0 million tons to 17.9 million due to a severe frost which limited fruit set in top producer Hebei province. Acreage is also declining for a second straight year as lower returns prompt tree removal; local governments are also encouraging a shift to grain crops. Exports are estimated down 72,000 tons to 410,000 on reduced supplies, while imports are up to 12,000 tons augmented by new-to-market supplies from South Africa.

EU production is projected up 240,000 tons to 2.1 million on good growing conditions in the Netherlands and as orchards in Italy recover from last year's snow, frost, and cold temperatures. Exports are estimated up 11,000 tons to 360,000 on resurgent shipments to Belarus following a temporary ban on EU apples and pears that ended April 26, 2022. Recovering domestic supplies are expected to reduce demand, lowering imports 22,000 tons to 165,000.



U.S. production is estimated to remain flat at 583,000 tons as gains in California from good weather are offset by cold weather reducing sizing and volume in Washington and Oregon. USDA's National Agricultural Statistics Service (NASS) surveyed industry and updated U.S. production in the May 2023 *Noncitrus Fruits and Nuts 2022 Summary* report. Exports are expected to contract 11,000 tons to 100,000 as high prices and inflation temper demand in top market Mexico. Imports are expected to remain flat at 70,000 tons as higher early-season shipments from China and South Korea offset reduced supplies from Chile.

Argentina production is forecast up 33,000 tons to 590,000 though high temperatures reduced sizing and caused quicker maturation, hindering stronger volumes and affecting fruit quality. Greater supplies are expected to boost exports 30,000 tons to 305,000, with higher volumes of lower quality fruit expected to be directed to closer Latin American markets.

Chile production is expected to continue its downward trend, contracting 11,000 tons to 212,000 on declining acreage. Planted area has decreased nearly 20 percent since 2019/20 as growers struggle to diversify markets for lesser-known varieties such as *Abate Fetel*. Exports are forecast down 6,000 tons lower to 110,000 on shrinking supplies.

South Africa production is forecast down 36,000 tons to 470,000 due to hailstorms and yields returning to normal following last year's record crop. Despite lower output, exports are projected down only 12,000 tons to 275,000 as losses from supplies are tempered by new market access to China and approval of in-transit cold treatment for shipments to India.

Future Releases and Contact Information

For additional information, please contact Elaine Protzman at (202) 720-5588 or elaine.protzman@fas.usda.gov

The next release of this circular is scheduled for December 12, 2023. To receive the circular via email, go to https://public.govdelivery.com/accounts/USDAFAS/subscriber/new. Please visit https://www.fas.usda.gov/data/fresh-apples-grapes-and-pears-world-markets-and-trade to view archived reports.

The Fresh Apples, Grapes, and Pears: World Markets and Trade circular is based on reports from FAS Overseas Posts and on available secondary information. The individual country reports can be obtained on FAS Online at: https://gain.fas.usda.gov/Pages/Default.aspx.

PSD Online

The entire USDA PSD database is available online at: https://www.fas.usda.gov/psdonline

Additional Resources

For additional data and analysis, please refer to the USDA-FAS website: https://www.fas.usda.gov/data/commodities/fresh-fruit

NOTES TO USERS:

European Union definition: includes 27 countries in the customs union (Austria, Belgium/Luxembourg, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden).

Marketing Years:

 Apples - The United States and Mexico are on an August-July marketing year. All other Northern Hemisphere countries are on a July-June marketing year. Southern Hemisphere countries are on a calendar year indicated as the second year of the split year.

- Table Grapes The United States and Mexico are on a May-April marketing year. All other Northern Hemisphere countries are on a June-May marketing year. Southern Hemisphere producer countries of Argentina, Australia, Chile, Peru, and South Africa are on an October-September marketing year; Brazil remains on a calendar year basis indicated as the second year of the split year.
- Pears Northern Hemisphere countries are on a July-June marketing year. Southern Hemisphere countries are on a calendar year indicated as the second year of the split year.

Apples, Fresh: Production, Supply and Distribution in Selected Countries (1,000 Metric Tons)

	2018/19	2019/20	2020/21	2021/22	Dec 2022/23	Jun 2022/23
Production	-	-	-	-	_	
China	33,000	42,425	44,066	45,973	41,000	41,000
European Union	14,810	11,480	11,935	12,277	12,772	12,772
Turkey	3,600	3,620	4,300	4,493	4,770	4,770
United States	4,479	4,852	4,505	4,375	4,494	4,300
India	2,371	2,370	2,300	2,300	2,350	2,350
Iran	2,241	2,207	2,207	2,207	2,207	2,207
Russia	1,611	1,779	1,540	1,540	1,540	1,540
South Africa	894	991	1,164	1,201	1,100	1,150
Ukraine	1,154	1,115	1,115	1,115	1,115	1,115
Chile	1,210	1,124	1,099	1,040	1,040	1,010
Other	6,480	6,619	6,453	6,213	6,373	6,200
Total	71,849	78,581	80,683	82,734	78,760	78,413
Domestic Consumption	71,015	70,301	00,003	02,731	70,700	70,115
China	32,275	41,487	43,033	45,051	40,300	40,315
European Union	13,839	10,659	11,175	11,460	11,842	12,012
Turkey	3,324	3,412	4,013	4,096	4,351	4,361
United States	3,884	4,098	3,838	3,757	3,939	3,810
India	2,384	2,250	2,400	2,577	2,600	2,550
Russia	2,323	2,455	2,259	2,116	2,080	1,910
Iran	1,916	1,389	1,251	1,300	1,457	1,657
Ukraine	1,110	1,114	1,109	1,066	1,086	1,081
Brazil	1,246	1,028	936	1,078	1,043	1,053
Mexico	794	1,017	973	899	904	874
Other	8,520	9,130	9,126	9,102	8,880	8,615
Total	71,615	78,040	80,114	82,503	78,482	78,236
Imports	71,013	70,010	00/111	02,303	70,102	70,230
India	277	194	377	448	430	385
Russia	795	763	796	587	550	380
Iraq	321	405	406	452	375	340
United Kingdom	343	320	330	328	330	300
Vietnam	158	233	278	300	280	300
European Union	389	378	325	331	320	290
Mexico	247	257	260	266	265	235
Bangladesh	188	271	266	252	215	195
Canada	203	205	190	206	215	195
Saudi Arabia	182	195	174	179	185	190
Other	2,991	3,196	2,973	3,147	2,980	2,609
Total	6,094	6,416	6,374	6,496	6,145	5,419
Exports	-,	-,	-,	5,155	-,	-,
European Union	1,359	1,199	1,084	1,149	1,250	1,050
China	818	1,042	1,102	997	800	770
United States	741	861	, 775	723	670	590
Chile	674	660	644	603	605	585
Iran	325	818	956	907	750	550
South Africa	469	509	589	625	560	535
Turkey	278	209	288	398	420	410
New Zealand	391	400	356	341	385	270
Moldova	251	217	150	253	220	130
Serbia	184	206	185	165	160	115
Other	530	476	506	428	468	456
Total	6,020	6,596	6,634	6,588	6,288	5,461

Note: The United States and Mexico are on an August-July marketing year. All other Northern Hemisphere countries are on a July-June marketing year. Southern Hemisphere countries are on a calendar year indicated as the second year of the split year.

Grapes, Fresh Table: Production, Supply and Distribution in Selected Countries (1,000 Metric Tons)

	2018/19	2019/20	2020/21	2021/22	Dec 2022/23	Jun 2022/23
Production						
China	9,900	10,800	11,450	11,980	12,600	12,600
India	2,900	2,280	2,300	2,900	2,850	2,850
Turkey	1,950	2,050	2,220	1,857	2,236	2,236
Uzbekistan	1,603	1,607	1,607	1,607	1,607	1,607
European Union	1,589	1,548	1,374	1,420	1,581	1,581
Egypt	1,350	1,385	1,170	1,435	1,480	1,480
Brazil	1,485	1,436	1,436	1,436	1,436	1,436
United States	997	905	871	826	850	811
Peru	630	645	685	713	766	766
Chile	835	785	665	793	737	725
Other	1,147	1,316	1,311	1,298	1,274	1,254
Total –	24,386	24,757	25,089	26,264	27,417	27,346
Fresh Dom. Consumption	21,500	21,737	23,003	20,201	27,117	27,510
China	9,873	10,677	11,215	11,810	12,395	12,390
India	2,356	1,803	1,830	2,285	2,270	2,288
Turkey	1,771	1,845	2,006	1,595	1,966	2,013
European Union	1,916	1,872	1,766	1,851	1,941	2,001
Brazil	1,455	1,394	1,364	1,391	1,409	1,393
Uzbekistan	1,485	1,487	1,478	1,383	1,402	1,367
Egypt	1,235	1,248	1,027	1,273	1,307	1,317
United States	1,199	1,252	1,227	1,281	1,340	1,310
Russia	307	308	369	399	362	432
Mexico	236	273	272	266	262	275
Other	2,115	2,171	2,229	2,212	2,231	2,094
	23,948	24,329	24,782	25,747	26,884	26,880
Imports	25/5 .0	2.,323	2.,, 02	25/	20,00	20,000
United States	571	672	670	713	745	746
European Union	520	501	572	604	520	590
Russia	290	288	351	380	340	410
United Kingdom	268	275	269	271	280	260
Canada	179	189	191	184	190	185
China	262	239	194	181	170	180
Vietnam	100	113	147	99	135	135
Mexico	102	91	98	103	115	130
Thailand	124	131	140	103	135	130
Hong Kong	259	238	201	119	110	120
Other	682	680	742	833	751	696
	3,355	3,415	3,575	3,590	3,491	3,582
Exports	, , , , , ,	-,	-,-	,	-, -	, , , ,
Peru	388	400	468	537	585	595
Chile	655	605	526	608	555	555
China	289	362	428	351	375	390
South Africa	276	284	322	336	310	300
India	250	185	267	275	270	255
United States	368	325	314	258	255	247
Uzbekistan	118	120	129	224	205	240
Turkey	179	205	215	264	270	225
Mexico	147	224	207	196	200	202
European Union	193	177	180	173	160	170
Other	627	653	614	537	519	550
	3,490	3,540	3,669	3,758	3,704	3,729

Note: The United States and Mexico are on a May-April marketing year. All other Northern Hemisphere countries are on a June-May marketing year. Southern Hemisphere producer countries of Argentina, Australia, Chile, Peru, and South Africa are on an October-September marketing year, and Brazil is on a calendar year indicated as the second year of the split year. Some countries may include raisin-type and/or table-type grapes.

Pears, Fresh: Production, Supply and Distribution in Selected Countries (1,000 Metric Tons)

	2018/19	2019/20	2020/21	2021/22	Dec 2022/23	Jun 2022/23
Production	2020, 22					
China	14,000	17,314	17,815	18,876	17,850	17,850
European Union	2,568	2,059	2,373	1,843	2,083	2,083
Argentina	600	640	615	557	700	590
United States	726	645	593	589	613	583
Turkey	520	530	550	530	560	560
South Africa	413	438	461	506	450	470
India	300	310	308	310	312	312
Russia	242	290	247	247	247	247
Korea, South	203	201	133	210	244	244
Chile	252	222	233	223	217	212
Other	585	577	579	578	581	577
Total	20,410	23,226	23,907	24,469	23,857	23,728
Domestic Consumption	10.615	46 707	47.045		.=	47.45
China	13,645	16,707	17,345	18,404	17,442	17,452
European Union	2,305	1,823	2,172	1,681	1,888	1,888
United States	654	586	560	547	593	553
Turkey	478	479	477	436	463	475
Russia	461	436	446	429	441	421
India	288	327	330	338	342	347
Argentina	291	300	301	283	375	285
Korea, South	176	170	113	186	214	214
Japan	237	197	197	197	197	196
South Africa	188	212	214	219	200	195
Other	1,542	1,799	1,620	1,666	1,645	1,638
Total	20,265	23,037	23,775	24,387	23,800	23,665
Imports						
Russia	261	194	241	183	195	175
European Union	157	172	175	187	165	165
Indonesia	145	236	196	215	180	160
Brazil	154	138	121	133	135	155
United Kingdom	118	100	105	103	110	115
Belarus	118	119	112	78	115	110
Vietnam	63	133	97	101	95	100
Hong Kong	85	76	81	77	80	75
Mexico	92	84	73	72	70	75
United States	73	72	75	69	80	70
Other	426	495	454	485	484	479
Total	1,691	1,818	1,729	1,702	1,709	1,679
Exports						
China	366	619	480	482	420	410
European Union	420	407	377	349	360	360
Argentina	310	340	315	275	325	305
South Africa	226	227	247	287	250	275
Chile	132	114	127	116	110	110
United States	144	130	109	111	100	100
Turkey	42	51	73	94	97	85
Belarus	70	16	54	27	55	45
Korea, South	27	31	19	24	30	30
Australia	9	9	9	8	7	10
Other	15	15	11	11	12	12
Total	1,760	1,959	1,821	1,784	1,766	1,742

Note: Northern Hemisphere countries are on a July-June marketing year. Southern Hemisphere countries are on a calendar year indicated as the second year of the split year.