

Voluntary Report – Voluntary - Public Distribution

Date: November 29, 2021

Report Number: KS2021-0029

Report Name: 2021 Korea Apple Update

Country: Korea - Republic of

Post: Seoul

Report Category: Fresh Deciduous Fruit

Prepared By: Sunyoung Choi

Approved By: Tymothy Mcguire

Report Highlights:

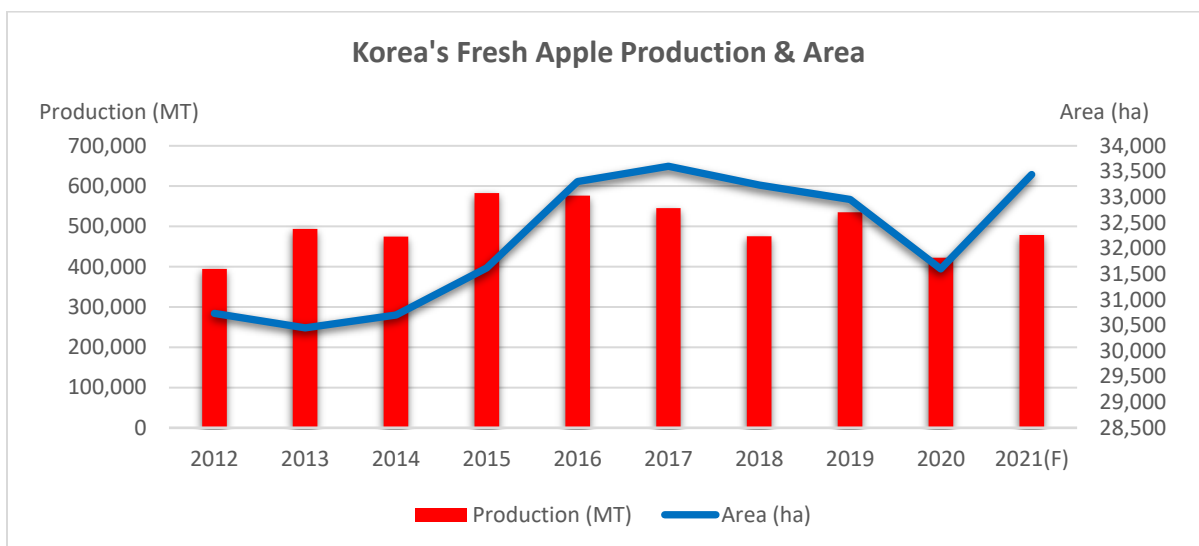
In the current marketing year running from July 2021 to June 2022, Korea's fresh apple production and consumption are projected to rise by 13 percent after several years of gradual decline. Korea's apple production areas continue to shift further north and to higher elevations due to changing climate conditions. Korean phytosanitary regulations do not allow fresh apple imports, so the market is dominated by relatively high-cost domestic production and limited varieties.

Apple Production

In marketing year (MY) 2021/22 (July – June), Korea’s fresh apple production is projected to increase by 13 percent to 477,200 MT mainly due to increased yield and planted area. As a result of favorable weather conditions during the flowering and fruit growing seasons, the average apple yield is expected to increase by 6.8 percent to 1,427 kilograms per 0.1 hectares. Other contributing factors to higher yields were reduced outbreaks of plant disease and less pest damage in apple production regions. In addition, a 49-percent market price increase during the first eight months of 2021 caused by reduced apple production in the previous year will motivate some growers to expand apple production this year.

Korea’s apple planted area is also projected to increase by 5.8 percent to 33,439 ha, driven by higher prices in the previous year (MY 2020/21) following the overall reduction of major fruit (apple, pear, peach, grape, and persimmons) production last year.

Figure 1. Korea’s Fresh Apple Production and Area



Source:

Ministry of Agriculture, Food, and Rural Affairs (MAFRA) & Korea Rural Economic Institute (KREI)

Prior to 2021, Korea’s fresh apple production had gradually declined from a peak of 583,000 MT in 2015/16 due to stiff competition with other high-quality domestic fruits and imported fruits. Additionally, on and off unfavorable weather conditions also caused a gradual decrease in apple production in recent years.

In 2020/21, Korea’s apple production decreased substantially by 21 percent to 422,115 MT due to a four percent reduction in apple planted area and a combination of cold damage during the spring season and excess rain during the summer season. As result, the annual average retail price increased by 31 percent to KRW 5,801 (USD 4.92)/Kg in 2020/21 compared to the previous marketing year.

Korean apple growers primarily plant “Fuji” apple cultivars covering 67 percent of total apple production area in 2020/21 due to strong consumer preference and familiarity. Other cultivars include “Hongro” (16.3 percent) grown for the Chuseok holidays (the Korean Thanksgiving Day) and “Tsugaru” (4 percent) during the July - early September season. However, new apple varieties are also being introduced steadily to the market as more consumers are demanding fresher apples rather than apples from cold storage that were produced the previous year.

Apple Planted Area

Korea’s apple production area is gradually moving to higher elevations or up to the northern part of the Korean peninsula (Gangwon-do, Gyeonggi-do, and Gyeongsangbuk-do provinces) due to climate change. Korea’s apple planted area is projected to decrease gradually over the next decade due to changing consumer fruit demand and increased competition from other high-quality fruits including imported fruits. However, 2021/22 should see a temporary expansion in apple planting due to higher market prices following the sharp reduction of apple production in the 2020/21 season.

In 2021/22, Korea’s apple planted area is projected to increase by 5.8 percent to 33,439 hectares mainly due to increased market prices during the previous marketing year.

Table 1. Korea’s Apple Planted Area By Province (Unit: Hectare)

Korea’s Apple Planted Area by Province (Unit: Hectare)				
Province	MY 2019/20	MY 2020/21	MY 2021/22	
	Cultivated Area (ha)	Cultivated Area (ha)	Cultivated Area (ha)	Change (%)
Gangwon-do	1,092	1,124	1,610	43.2
Chungcheongbuk-do	3,929	3,645	3,662	0.5
Chungcheongnam-do	1,436	1,297	1,569	21
Gyeongsangbuk-do	19,462	18,705	20,057	7.2
Gyeongsangnam-do	3,313	3,340	3,591	7.5
Jeollabuk-do	2,698	2,449	2,051	-16.3
Other Provinces-do	1,024	1,038	899	-13.4
Total	32,954	31,598	33,439	5.8

Source: Statistics Korea

Gyeongsangbuk-do province is still the main apple production area in Korea with 20,057 hectares covering 60 percent of the total apple planted area, followed by Chungcheongbuk-do province (3,662 Ha), Gyeongsangnam-do province (3,591 Ha), and Jeollabuk-do province (2,051 Ha) province. Notably, the apple planted area in Gangwon-do province is projected to increase sharply by 43.2 percent to 1,610 Ha in 2021/22 in response to ongoing climate change as apples become more profitable in highland regions compared to leafy vegetables.

Figure 2. Korea's Apple Production Region By Province

In 2010/11, apple planted area in Gangwon province was only 216 hectares, but it increased rapidly by 645 percent (1,394 hectares) to 1,610 hectares during the past decade due to accelerating climate change and support from the provincial government's farmer's support program to find more profitable crops. The local apple industry also forecasts that more apple production in this region is expected in the coming years, while the apple production region in the southern part of the Korean peninsula will continue to gradually decrease.

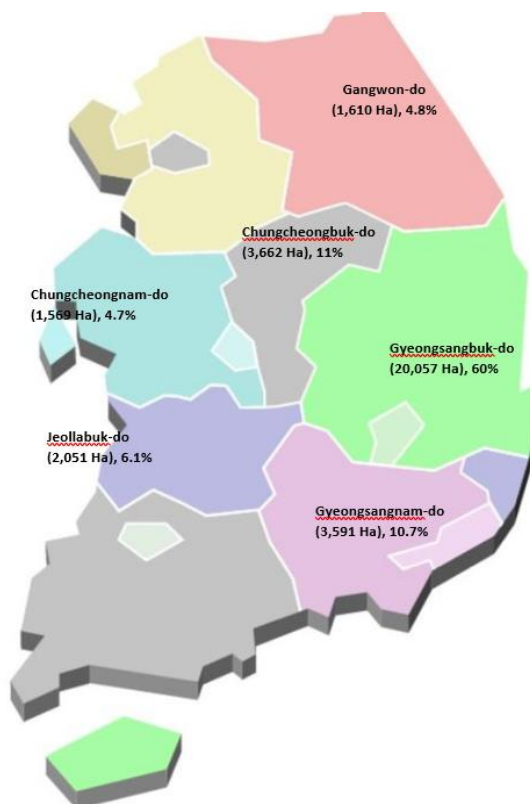


Table 2. Annual Apple Production in Gangwon-do Province

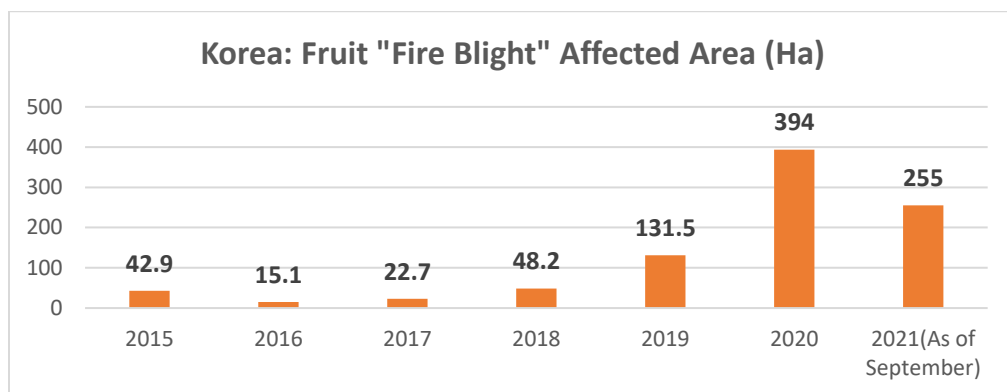
Annual Apple Production in Gangwon-do Province					
	2017/18	2018/19	2019/20	2020/21	2021/22
Area (ha)	930	947	1,092	1,124	1,610
Production (MT)	5,550	5,506	10,486	8,215	N/A

Source: Ministry of Food, Agriculture and Rural Affairs (MAFRA)

Fruit “Fire Blight” Disease

Fruit “Fire Blight” has been a growing concern for the Korean apple and pear industry since the first outbreak in 2015. The Korea Rural Development Administration (KRDA) confirmed that a total of 394 hectares of apple and pear farms (mostly apple farms in north Chungcheong province) were infected by this disease in 2020, about 198 percent higher than 2019. In 2021, the KRDA confirmed that about 255 hectares were infected as of September.

Figure 3. Korea: Fruit "Fire Blight" Affected Area (Ha)



Source: Korea Rural Development Administration (KRDA)

Apple Consumption

In 2021/22, Korea's apple consumption is projected to increase by 13 percent to 427,000 MT mainly due to increased apple supply and apple quality. As a result of increased apple supply, market prices are also expected to drop by 15 to 20 percent to around KRW 27,000 (USD 23) per 10 fresh apples.

Fresh apples have shifted to more of a daily dessert fruit (away from being primarily a holiday fruit) for many Korean consumers in recent years as consumers become more health conscious. A recent consumer survey confirmed that most Korean consumers purchase fresh apples as a dessert fruit (70 percent), followed by eating for health purposes (12 percent). The survey also shows that daily consumption (82 percent) is much higher than holiday consumption (14 percent) in recent years due to increased demand for daily fruits and changed family composition to a more nuclear family format with an increasing ratio of single-member and double-member households.

In 2021, Korea's per capita apple consumption is projected to rebound to around 9 kilograms due to increased apple supply and quality.

Table 3. Korea: Per Capita Fruit Consumption (Unit: Kg)

Korea: Per Capita Fruit Consumption (Unit: Kg)								
Year	Total Fruits	Apple	Pear	Peach	Grape	Persimmon	Citrus	Others
2016	60.6	11.2	4.1	4.0	5.4	2.3	11.9	21.7
2017	61.2	10.5	4.6	4.3	4.7	2.1	11.6	23.4
2018	57.5	9.2	3.3	4.0	4.5	1.9	12.0	22.6
2019	56.6	10.3	3.3	4.1	4.5	1.8	12.1	20.6
2020 a/	N/A	8.1	2.1	3.3	3.7	1.6	12.8	N/A

a/ Preliminary estimate in January 2021 by Korea Rural Economic Institute (KREI)

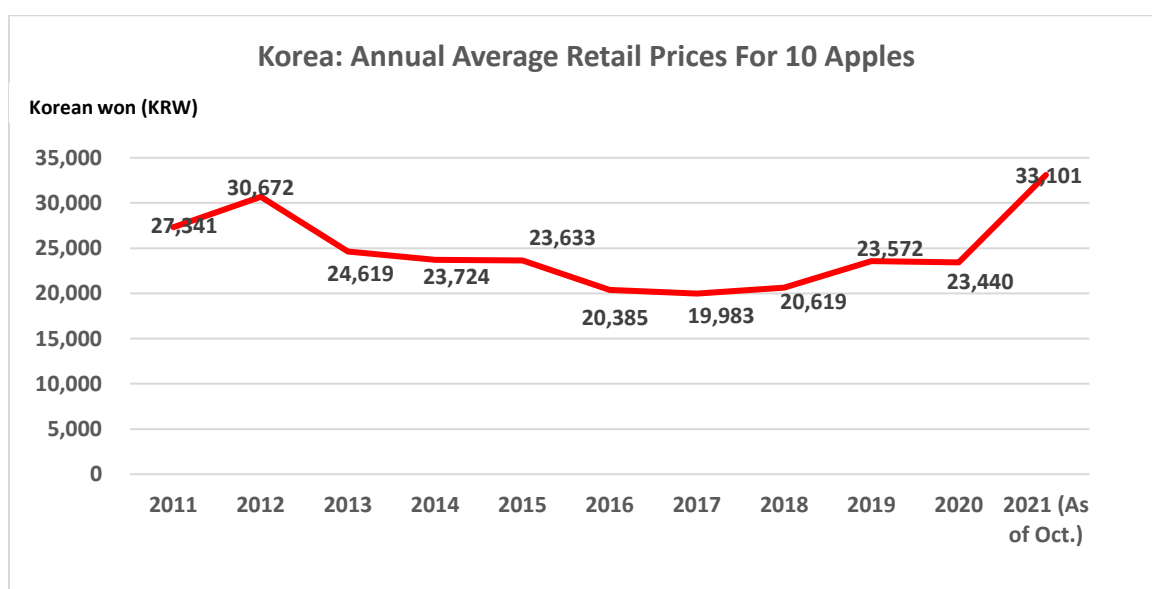
Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

Price

Abundant local apple (and pears and late-maturing citrus) production in the 2021/22 season will drive market prices down by around 15 to 20 percent. In September 2021, the average consumer price for apples decreased by 33 percent compared to the price of the same month in 2020.

As a result of increased apple production, the market price of fresh apples for storage (for spring and summer seasons of the following year) will stay around 15 to 20 percent lower than the previous year. Korea's apple supply in October 2021 increased by 14.5 percent from the previous year.

Figure 4. Korea: Annual Average Retail Prices For 10 Apples



Source: Korea Agro-Fisheries & Food Trade Corporation (aT)

The average market price (high quality apples) during the first eight months of 2021 increased by 49 percent from the previous year due to reduced 2020 domestic production. The average wholesale annual price for fresh apples also surged by 18.6 percent during the same period (January – August 2021).

Apples for Processing

Korea's volume of fresh apples for processing depends on annual production levels and the level of damaged fruit. An average of 35,000 MT of fresh apples have been used for processing annually since 2010, but the volume has increased above 50,000 MT since 2017 due to increased volumes of non-marketable fruits caused by natural disasters such as cold, typhoons, and heat damage during the flowering and fruit growing seasons.

Table 4. Korea's Apple Volume for Processing (Unit: MT, %)

Korea's Apple Volume for Processing (MT, %)						
Year	2014	2015	2016	2017	2018	2019
Volume (MT)	40,151	57,439	23,200	50,800	50,999	52,147
Production to Processing Ratio (%)	8.5	9.9	4.0	9.3	10.7	9.7

Source: Ministry of Agriculture, Food, and Rural Affairs (MAFRA)

In 2021/22, fresh apples for processing volume are projected at 45,000 MT, about nine percent of total production, to maintain the optimal market price. In 2020/21, processing volume for fresh apples is estimated at around 30,000 MT due to significantly reduced apple production and reduced apple supply in the market throughout the year. Non-marketable apples (including inferior quality apples) are mostly used for juice and drink production, while smaller quantities are also used for other processed products such as jams and cosmetics.

Trade - Exports

In 2021/22, Korea's fresh apple exports are projected to rebound by 75 percent to around 2,400 MT due to increased domestic apple production and lower prices. The main importing countries will be Taiwan and several southeast Asian countries (Vietnam, Singapore, and Hong Kong) supported by the growing popularity of Korean culture and products. However, increased transportation costs caused by the COVID-19 pandemic will be an obstacle to increasing export volume.

As apples are widely produced in many other countries with both more diverse varieties and lower prices than in Korea's protected domestic market, exports are a low priority for local apple growers.

In 2020/21, Korea's apple exports decreased sharply by 42.6 percent to 1,392 MT mainly due to reduced domestic apple production.

Imports

Currently, Korean phytosanitary regulations do not allow fresh apple imports.

Production

Korea: Apple Production Situation 1/

Year	Area (HA)	Production (MT)	Yield for Bearing Tree (Kg/10 are)
2000	29,063	488,960	1,682
2005	26,907	367,517	1,366
2013	30,449	493,701	1,621
2014	30,702	474,712	1,546
2015	31,620	582,846	1,843
2016	33,300	576,369	1,731
2017	33,601	545,349	1,623
2018	33,234	475,303	1,430
2019	32,954	535,324	1,624
2020	31,598	422,115	1,336
2021 2/	33,439	478,800	1,432

1/ Calendar year basis

2/ Preliminary forecast in September 2021 by Korea Rural Economic Institute (KREI)

Source: Korea Statistical Information Service (KOSIS)

Korea: Apple Utilization (Unit: MT) 1/

Year	Total	Fresh	Export	Processing
2013	493,701	455,354	2,788	35,559
2014	474,712	432,344	2,217	40,151
2015	582,846	521,905	3,502	57,439
2016	521,622	494,450	3,947	23,225
2017	545,349	491,704	2,843	50,802
2018	475,303	421,665	2,639	50,999
2019	535,424	480,633	2,644	52,147
2020	422,155	N/A	1,737	N/A

1/ Calendar year basis

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

Korea: Apple Production as Ratio to Total Fruit Production (Unit: 1,000 MT, Ratio: Percent)

Year	Total Fruits (1,000 MT)	Apple (1,000 MT)	Ratio (%)
2000	2,429	489	20.1
2005	2,611	368	14.1
2013	2,207	494	22.4
2014	2,347	475	20.2
2015	2,364	583	24.7

2016	2,387	576	24.1
2017	2,358	545	23.1
2018	2,160	475	22.0
2019	2,206	535	24.2
2020	1,976	422	21.4

Source: Korea Statistical Information Service (KOSIS)

Korea: Per Capita Fruits Consumption (Unit: Kg)

Korea: Per Capita Fruit Consumption (Unit: Kg)								
Year	Total Fruits	Apple	Pear	Peach	Grape	Persimmon	Citrus	Others
2016	60.6	11.2	4.1	4.0	5.4	2.3	11.9	21.7
2017	61.2	10.5	4.6	4.3	4.7	2.1	11.6	23.4
2018	57.5	9.2	3.3	4.0	4.5	1.9	12.0	22.6
2019	56.6	10.3	3.3	4.1	4.5	1.8	12.1	20.6
2020	N/A	8.1	2.1	N/A	N/A	N/A	N/A	N/A

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

Korea: Monthly Korean Fresh Apple Exports (Unit: MT)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
'21	147	43	47	25	6	36	5	30	-	-	-	-
'20	224	172	103	106	30	14	6	4	35	96	303	645
'19	451	194	107	53	53	9	4	13	74	270	701	714
'18	481	157	133	71	42	31	7	15	46	177	686	811
'17	311	215	136	78	95	23	14	20	154	140	848	808
'16	365	314	502	261	185	80	29	10	59	238	1,067	837
'15	181	52	82	23	50	27	1	2	117	285	1,371	1,313

Source: Korea Customs Service & Korea International Trade Association

Korea: Monthly Average Foreign Exchange Rate

(Unit: Korean Won / 1US\$)

Month	2019	2020	2021
Jan.	1122.00	1164.28	1097.49
Feb.	1122.45	1193.79	1111.72
Mar.	1130.72	1220.09	1131.02

Apr.	1140.95	1225.23	1119.40
May	1183.29	1228.67	1123.28
Jun.	1175.62	1210.01	1121.30
Jul.	1175.31	1198.90	1143.98
Aug.	1208.98	1186.85	1160.34
Sep.	1197.55	1178.80	-
Oct.	1184.13	1144.68	-
Nov.	1167.45	1116.76	-
Dec.	1175.84	1095.13	-

Source: Industrial Bank of Korea

Trade Matrix

Export Matrix for Korean Apple

Export Trade Matrix						
Country: Korea						
Commodity: Commodity: Fresh Apple (HS 0808.10) Unit: MT & US\$1,000						
Exports to	MY 2018/19 (July 18 – June 19)		MY 2019/20 (July 19 – June 20)		MY 2020/21 (July 20 – June 21)	
Country	Volume	Value	Volume	Value	Volume	Value
U.S.	30	129	34	143	30	129
Taiwan	1,361	3,127	827	2,010	621	1,791
Hong Kong	305	853	234	700	131	489
Singapore	348	847	291	611	148	393
Vietnam	343	1,116	650	1,535	249	950
All Others	203	628	389	740	213	653
Grand Total	2,590	6,700	2,425	5,739	1,392	4,405

Source: Korea Customs Service & Korea International Trade Association

Price

Korea: Average Retail Prices for Korean Fresh Apple (Fuji), Nationwide
(Unit: Korean Won per 10 Fruits)

Month	High Quality		Medium Quality	
	CY 2020	CY 2021	CY 2020	CY 2021
Jan.	19,173	30,411	13,660	21,541
Feb.	20,177	34,595	14,345	25,069
Mar.	19,818	33,237	14,393	23,906
Apr.	20,403	34,302	14,968	25,254
May	21,497	33,778	17,055	25,502
Jun.	22,988	33,485	18,066	24,781
Jul.	26,010	33,331	19,536	24,839
Aug.	27,374	31,496	21,944	21,982
Sep.	-	-	-	-
Oct.	29,715	-	21,984	-
Nov.	27,743	-	20,248	-
Dec.	27,242	-	18,986	-

Source: Korea Agro-Fisheries & Food Trade Corporation (aT)

Korea: Average Wholesale Prices for Korean Fresh Apple (Fuji), Nationwide
(Unit: Korean Won per 10 Kg)

Month	High Quality		Medium Quality	
	CY 2020	CY 2021	CY 2020	CY 2021
Jan.	38,815	63,080	32,778	56,450
Feb.	36,335	65,854	30,483	59,679
Mar.	37,820	62,559	30,889	56,757
Apr.	40,420	63,547	32,690	57,676
May	55,979	65,422	46,937	59,103
Jun.	61,462	64,704	51,655	58,522
Jul.	68,068	56,981	56,408	51,090
Aug.	71,972	45,192	63,592	39,392
Sep.	-	-	-	-
Oct.	58,036	-	50,797	-
Nov.	52,028	-	44,951	-
Dec.	60,957	-	53,808	-

Source: Korea Agro-Fisheries & Food Trade Corporation (aT)

Attachments:

No Attachments.