



Voluntary Report – Voluntary - Public Distribution

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## Report Name: 2019 Apple Update

Country: Korea - Republic of

Post: Seoul

Report Category: Fresh Deciduous Fruit

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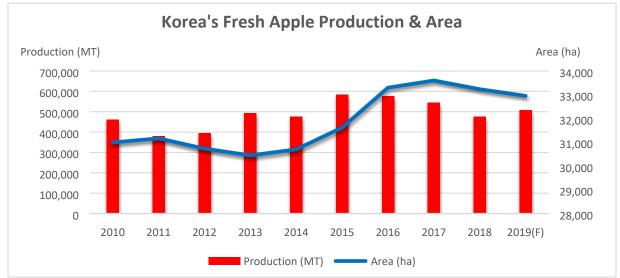
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#### **Report Highlights:**

In Marketing Year (MY) 2019/20 (July – June), Korea's fresh apple production is projected to increase seven percent to 508,000 metric tons (MT), mainly due to favorable weather during the flowering and fruit growing seasons. Although total apple planted area has decreased gradually in recent years, planted area in Gangwondo province is increasing as a warming trend in Korea pushes apple production into colder and higher elevation regions.

## Production

In MY 2019/20 (July – June), Korea's fresh apple production will increase seven percent to 508,000 MT. Although total apple planted area is expected to slightly decrease from 33,234 Ha in MY 2018/19 to 32,954 hectares this year, fresh apple production will increase because of expected eight percent higher yields (more fruit per tree) helped by ample rain during the fruit growing period (May – August). Production of the late maturing "Fuji" apple, the main apple variety in Korea, is forecast to increase by seven percent from the previous marketing year, driving overall production growth.



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

Despite the increase in production, the quality of apples for MY2019/20 is expected to be lower than the previous year due to an increased incidence of fruit damage caused by three separate typhoons and frequent rain during the main fruit maturing and harvest periods between September and October. As result, the Korean apple industry predicts the average quality of apples will be lower with a higher ratio of damage such as scratching and bruising on fruit skins, and a related reduction in fruit firmness.

Korean apples are generally produced from early August (early maturing varieties) until late November for late maturing varieties. Korea has sufficient cold storage facilities to allow consumption of apples until late July of the following year. Korean apple farmers produce mainly "Fuji" apples (covering more than 70 percent of total apple planted area) due to strong consumer demand for Fuji's high Brix level, juiciness, firmness, and relatively long shelf life. However, Korean producers are increasingly planting alternative apple varieties, such as early or medium maturing varieties, to satisfy diversifying consumer demand. Two new early varieties ("Summer King" and "Ruby S") are becoming popular in the summer, and smaller sized apples for daily consumption are gaining popularity with consumers. Additionally, production of the "Hongro" apple (medium maturing) has increased steadily for the past decade to meet the extra demand during the "Chuseok" (Korean Thanksgiving) holiday in early fall. Apple market prices have decreased gradually in recent years as a result of increased apple production and shifting consumer demand. Therefore, the Korean apple industry continues to introduce many new apple varieties helped by government research centers (run by the Rural Development Administration) to meet diversified consumer demand and to overcome increased market competition.



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

In MY 2018/19, Korean apple production decreased by 13 percent to 475,000 MT from the previous marketing year. MY 2018/19 production suffered from cold weather during the flowering season in April, and a heat wave and drought damage during the summer fruit growing season.

## **Planted Area**

Koreas' apple planted area had been increasing about one percent annually since MY 2000/01 due to the relatively higher farm income from apples compared to other available crops. However, Korea's apple planted area started to decrease gradually from MY 2016/17 as overproduction caused market prices to drop, as well increased market competition with imported fruits reducing domestic apple demand. In MY 2019/20, Korea's apple planted area is projected to decrease by 0.8 percent (280 hectares) to 32,954 Ha from the previous marketing year.

	Korea's Apple Planted Area by Province (Unit: Hectare)							
	MY 2017/18	017/18 MY 2018/19 MY 2019/20						
Province	Cultivated Area	Cultivated Area	Cultivated Area	Change				
	(ha)	(ha)	(ha)	(%)				
Gangwon-do	930	947	1,092	15.3				
Chungcheongbuk-do	4,024	4,056	3,929	-3.1				
Chungcheongnam-do	1,574	1,437	1,436	-0.1				
Gyeongsangbuk-do	20,178	19,780	19,462	-1.6				

Gyeongsangnam-do	3,387	3,374	3,313	-1.8
Jeollabuk-do	2,525	2,643	2,698	2.1
Other Provinces-do	982	997	1,024	2.7
Total	33,601	33,234	32,954	-0.8

Source: Korea Statistics

Although total apple planted area decreased gradually in recent years, apple planted area in Gangwondo province increased notably due to a distinct climate shift in the Korean peninsula pushing apple production area into colder regions. Furthermore, many apple farms located in lower elevations within the main apple production regions are moving to highland regions (more than 600 meters above sea level) to meet the changing weather conditions. As result of these changing climate conditions, the main apple production area in Gyeongsangbukdo and Chungcheongbukdo provinces will gradually decrease or will be shifted to other agricultural crops (grape, peach or plum).

Annual Apple Production in Gangwon-do Province						
2014/15 2015/16 2016/17 2017/18 2018/19						
Area (ha)	522	721	831	930	947	
Production (MT) 225 4,472 5,778 5,550						

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

#### Consumption

Korea's per capita apple consumption increased to 11.4 kilograms in 2015 from 7.5 Kilograms in 2005 caused by abundant apple production (582,846 MT) and a positive public awareness about apples as a healthy and nutritional fruit. Since 2015, however, per capita apple consumption has gradually decreased to 9.2 kilograms due to increased competition with imported fruits. Accordingly, Korea's fruit imports during the past decade (2005 – 2015) increased substantially by 49 percent to 720,000 MT from 482,000 MT in 2005 as Korea signed new FTAs with major fruit exporting countries such as Chile, U.S., Australia, and New Zealand.

	Korea: Per Capita Fruit Consumption (Unit: Kg)								
Year	Total	Apple	Pear	Peach	Grape	Persimmon	Citrus	Others	
	Fruits		1 641	1 cuon	Crupe	1 cronnon	entrus	others	
2014	61.8	9.3	5.5	4.1	6.5	3.0	14.2	19.2	
2015	59.8	11.4	4.7	3.0	5.7	2.9	12.5	19.6	
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	

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

As the ratio of small family (single or two family member households) increased steadily in recent years, food consumption trend also changed toward demand for more convenient and smaller packages of healthy and nutritional food products. Although fresh apple demand increased for the past several years supported by the perception of apples as a healthy food, demand for other local fruits decreased gradually due to increased demand for various imported fruits. With the trend towards convenience over bulk purchase, consumer demand for small packs of apples are expected to increase in coming years via online or mobile shopping channels used by millennial consumers.

## **Processed Apple**

Generally, the Korean apple industry uses non-marketable apples to make apple juice, drinks, and other processed food products. Normally, Korea's apple industry uses about seven to ten percent (40,000 – 50,000 MT) of total apple production for processing, varying based on yearly production and market dynamics. In MY 2019/2020, fresh apple for processing will be increased to 60,000 MT due to the higher quantity of damaged fruits caused several typhoons and frequent rain during the September and October periods. As result, the Ministry of Agriculture, Food and Rural Affairs (MAFRA) announced a government purchase program for 35,000 MT of inferior grade of fresh apples (mainly later maturing varieties) for processing during the period from October 28<sup>th</sup> to December 31<sup>st</sup> to maintain the optimal market prices.

Korea's Apple Volume for Processing (MT, %)							
Year 2012 2013 2014 2015 2016 2017							
Volume (MT)	38,566	35,559	40,151	57,439	23,200	50,800	
Production to Processing Ratio (%)	9.8	7.2	8.5	9.9	4.0	9.3	

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

## Trade

## Exports

Korea's domestic apple prices are more attractive to apple growers and domestic apple demand remains strong (despite a downward demand trend), so not many Korean apple growers are interested in the export market. As result, Korea exported just 2,560 MT of fresh apples in MY 2018/19, which is only 0.54 percent of total apple production (475,300 MT). Among total apple exports, Taiwan is the top importer of Korean apples with 53 percent share (1,361 MT) followed by Singapore (13.4 percent) and Vietnam (13.2 percent), respectively. As a result of the free trade agreement with Vietnam in 2015 and the popularity of Korean culture there, the demand for Korean apples increased rapidly for gift giving purposes in recent years.

#### Imports

Currently Korean phytosanitary regulations do not allow fresh apple imports.

#### Production

Korea: Apple Production	Situation 1/
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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
2011	31,167	379,541	1,218
2012	30,734	394,596	1,284
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	475,300	1,430
2019 2/	32,954	508,000	1,541

1/ Calendar year basis

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

Source: Korea Statistical Information Service (KOSIS)

### Korea: Apple Utilization (Unit: MT) 1/

Year	Total	Fresh	Export	Processing
2011	379,541	339,815	3,132	36,594
2012	394,596	354,336	1,694	38,566
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	494,475	3,947	23,200

2017	545,349	491,706	2,843	50,800
2018	475,300	N/A	2,639	N/A

1/ Calendar year basis

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

Year	Total Fruits (1,000 MT)	Apple (1,000 MT)	Ratio (%)
2000	2,429	489	20.1
2005	2,611	368	14.1
2011	2,102	380	18.1
2012	2,027	395	19.5
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

Source: Korea Statistical Information Service (KOSIS)

Korea: Per Capita Fruits Consumption (Unit: Kg)

	Korea: Per Capita Fruit Consumption (Unit: Kg)								
Year	Total	Apple	Pear	Peach	Grape	Persimmon	Citrus	Others	
Tear	Fruits	дрре	i cai	1 each	Grape		Citrus	others	
2014	61.8	9.3	5.5	4.1	6.5	3.0	14.2	19.2	
2015	59.8	11.4	4.7	3.0	5.7	2.9	12.5	19.6	
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

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
'19	451	194	107	53	53	9	4	13	-	-	-	-
'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
'14	252	319	222	113	75	31	3	14	192	324	317	354
'13	166	69	61	38	56	4	4	2	135	413	867	973

Source: Korea Customs Service & Korea International Trade Association

#### Korea: Monthly Average Foreign Exchange Rate

(Unit: Korean Won / 1U\$)

Month	2017	2018	2019
Jan.	1134.40	1066.70	1175.31
Feb.	1144.92	1079.58	1122.45
Mar.	1134.77	1071.89	1130.72
Apr.	1132.73	1067.76	1140.95
Мау	1125.28	1076.39	1183.29
Jun.	1130.04	1092.80	1175.62
Jul.	1134.40	1122.80	1175.31
Aug.	1130.79	1121.15	1208.98
Sep.	1131.59	1120.60	1197.55

Oct.	1131.57	1130.81	-
Nov.	1105.04	1128.58	-
Dec.	1085.78	1122.90	-

Source: Industrial Bank of Korea

#### Trade Matrix

#### Export Matrix for Korean Apple

		E	xport Trade Mati	ix			
ountry: Korea							
Commodity: Commo	odity: Fresh App	ole (HS 0808.10	D) Unit: MT	& US\$1,000			
Exports to	MY 2016/17 (July 16 – June 17)		MY 20	17/18	MY 2018/19		
			(July 17 –	June 18)	(July 18 – June 19)		
Country							
	Volume	Value	Volume	Value	Volume	Value	
U.S.	22	62	36	139	30	129	
Taiwan	1,852	4,245	1,639	3,793	1,361	3,12	
Hong Kong	346	837	242	792	305	853	
Singapore	289	564	279	665	348	84	
Vietnam	324	923	418	1,221	343	1,110	
All Others	265	661	287	855	203	628	
Grand Total	3,098	7,292	2,901	7,465	2,590	6,700	

Source: Korea Customs Service & Korea International Trade Association

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

Month	High (	Quality	Mediun	n Quality
	CY 2018	CY 2019	CY 2018	CY 2019
Jan.	20,467	23,897	15,018	16,172
Feb.	21,201	24,799	15,494	17,185
Mar.	20,930	24,486	15,401	16,189
Apr.	19,130	24,700	15,645	16,709
May	18,877	24,723	15,412	16,688
Jun.	19,431	25,197	15,408	16,928
Jul.	19,558	25,461	15,306	17,362
Aug.	21,061	26,008	15,827	18,158
Sep.	21,299	25,700	15,580	19,625
Oct.	22,336	18,986-	14,407	14,099-
Nov.	22,582	-	15,181	-
Dec.	22,292	-	16,492	-

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 C	Quality	Medium Quality		
	CY 2018	CY 2019	CY 2018	CY 2019	
Jan.	36,436	44,400	31,618	39,900	
Feb.	41,611	38,741	36,689	34,176	
Mar.	42,067	38,940	36,819	33,550	
Apr.	40,771	38,400	35,324	33,200	
May	38,350	40,733	32,730	35,362	

Jun.	38,989	42,147	33,263	37,326
Jul.	37,855	40,991	32,091	36,191
Aug.	36,873	34,762	31,145	28,857
Sep.	38,720	34,246	32,920	28,123
Oct.	36,550	34,500-	32,150	28,850-
Nov.	38,282	-	33,736	-
Dec.	41,505	-	36,716	-

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

## Attachments:

No Attachments.