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Report Name: 2019 Apple Update
Country: Korea - Republic of
Post: Seoul
Report Category: Fresh Deciduous Fruit

Prepared By: Sunyoung Choi

Approved By: Tymothy Mcguire

## 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 $32,954 \mathrm{Ha}$ from the previous marketing year.

| Korea's Apple Planted Area by Province (Unit: Hectare) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Province | MY 2017/18 | MY 2018/19 | MY 2019/20 |  |  |
|  | Cultivated Area <br> (ha) | Cultivated Area <br> (ha) | Cultivated Area <br> (ha) | Change <br> $(\%)$ |  |
|  | 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 | $\mathbf{3 3 , 6 0 1}$ | $\mathbf{3 3 , 2 3 4}$ | $\mathbf{3 2 , 9 5 4}$ | $\mathbf{- 0 . 8}$ |

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 | 5,506 |  |

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 ( $582,846 \mathrm{MT}$ ) 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 <br> Fruits | Apple | Pear | Peach | Grape | Persimmon | 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)

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 ( $40,000-50,000 \mathrm{MT}$ ) 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 $28^{\text {th }}$ to December $31^{\text {st }}$ 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 <br> 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 ( $475,300 \mathrm{MT}$ ). 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/

| Year | Area (HA) | Production (MT) | Yield for Bearing Tree <br> (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 | 1,430 |
| 2018 | 32,954 | 508,000 | 1,541 |
| $20192 /$ |  |  |  |

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)

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 |
| 2011 | 2,102 | 380 | 18.1 |
| 2012 | 2,027 | 395 | 19.5 |
| 2013 | 2,207 | 494 | 22.4 |
| 2014 | 2,364 | 583 | 20.2 |
| 2015 | 2,387 | 576 | 24.7 |
| 2016 | 2,358 | 545 | 24.1 |
| 2017 | 2,160 | 475 | 23.1 |
| 2018 | 20.0 |  |  |

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 |
| Fruits |  |  |  |  |  |  |  |  |
| 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 |
| May | 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

| Export Trade Matrix |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country: Korea |  |  |  |  |  |  |
| Commodity: Commodity: Fresh Apple (HS 0808.10) |  |  | Unit: MT \& US\$1,000 |  |  |  |
| Exports to | MY 2016/17 <br> (July 16 - June 17) |  | MY 2017/18(July 17 - June 18) |  | MY 2018/19 <br> (July 18 - June 19) |  |
|  | 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 | 3,127 |
| Hong Kong | 346 | 837 | 242 | 792 | 305 | 853 |
| Singapore | 289 | 564 | 279 | 665 | 348 | 847 |
| Vietnam | 324 | 923 | 418 | 1,221 | 343 | 1,116 |
| 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

## Price

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

| Month | High Quality |  | Medium 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 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.

