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Report Name: Fresh Deciduous Fruit Annual

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Report Highlights:

Korean fresh pear production is expected to decrease 20 percent in Marketing Year (MY) 2023/24 as adverse weather events struck orchards throughout spring flowering and into the summer. Supplies of high-quality pears are expected to be below average because of high rates of damaged fruit. Prices for pears are expected to be higher in MY 23/24, but increases will not be as dramatic as for other fresh fruits. With changing consumption patterns, aging farm population, and increasing threats from climate change, the Korean pear sector is expected to continue facing a downward trend in acreage and production.

Production

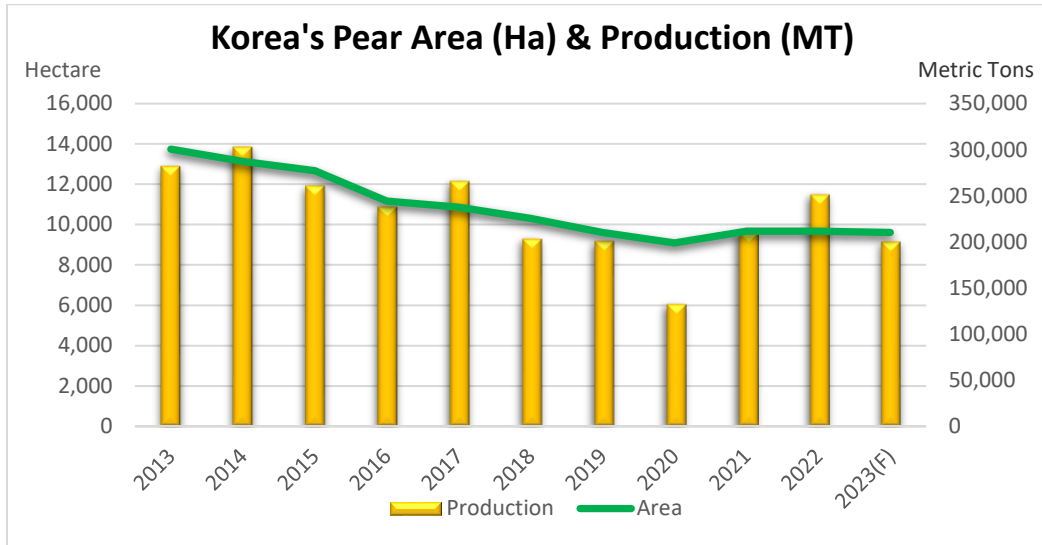
In marketing year (MY) 2023/24 (July – June), Korea's fresh pear production is forecast at 200,000 metric tons (MT), down about 20 percent from the previous year (251,093 MT). The main reason for the year-on-year decline in pear production is a 19 percent decrease in yield (reduced number of pear bags per tree) due to premature flowering in late March followed by frost damage during the early spring flowering season, which reduced fruit set. Subsequently, the pear crop endured an onslaught of adverse weather conditions during the fruit growing season, including frequent heavy rainfall, hail, and extreme heatwaves. The adverse weather conditions in 2023 are also expected to negatively affect other major domestic fruit crops such as apple, peach, and persimmon, resulting in an overall decrease in Korea's total fruit production of about 10 to 20 percent. Deciduous fruit production in Korea is particularly vulnerable to climate change, as extreme weather events like those seen in 2023 become increasingly frequent. The last time similar weather occurred in MY 2020/21, it resulted in record low production of 132,580 MT.

Mild winter temperatures in early 2023 caused premature flowering of pear trees in late March instead of early-mid April. Low temperatures in early April caused blackening and death of pear flower buds, and poor fertilization of flower buds led to a decreased fruiting rate, resulting in more fallen flowers and fallen fruits. Some growers were able to avoid frost damage by using fans to blow away cold air or distribute heated air through their orchards. Increasingly, grower cooperatives have invested in fan installations to mitigate the risks of premature flowering, which is now a common occurrence as climate change has shortened winter dormancy periods.

Korea's MY 2023/24 production of the "Shingo" pear, a major Asian pear variety that accounts for 85 percent of total production, is expected to decrease due to reduced yield following low-temperature damage during the flowering season in early April 2023, which reduced fruit set. Additionally, frequent rains and high temperatures during the summer in July and August 2023 led to an increase in malformed fruits with physiological defects such as heat stress and pericarp contamination. As a result, the Korean pear industry forecasts an above average percentage of low-quality fruits, resulting in a decrease in overall marketable fruit production.

In MY 2022/23, Korea's pear production increased by about 20 percent to 251,000 tons from the previous year (210,293 MT) due to favorable weather conditions with less low-temperature damage during the flowering season in the Spring season (April). The main reason for the increase in pear production in 2022 was a 19 percent increased yield (production per unit area: Kilogram per 0.1 Hectare) compared to MY 2021/22 due to higher fruit set per tree.

Graph 1
Korea's Pear Production and Planted Area



Source: Korea Statistical Information Service (KOSIS) & Korea Rural Economic Institute (KREI)

Planted Area

In MY 2023/24, Korea's pear planted area is expected to decrease by about one percent to 9,607 hectares (Ha) due to ongoing demographic trends and lower farm profits due to rising labor costs. As the average age of Korean farmers ticks upward, and rural populations decline, farmers continue to shift away from labor-intensive crops like pear to more profitable other crops, such as Shine Muscat grapes. Korean pear production requires artificial pollination of individual pear flowers, which is often done by hand. Additionally, pear fruit is often individually wrapped in paper bags during the early stages of growth to achieve the desired light golden color or to meet phytosanitary protocols, in the case of exporting farms.

In 2023/24, South Jeolla Province and South Chungcheong Province will be the main pear production regions in Korea, with 2,710 Ha and 2,127 Ha, respectively, accounting for 50 percent of the total planted area. The remaining 50 percent is dispersed throughout the rest of the country. Although Korea's pear cultivation has remained at an average level of 9,600-9,700 hectares for the past three years, it has been gradually decreasing due to urban development in the surrounding areas, aging farmers, rising operation costs, and conversion to more profitable crops.

Korean pear cultivars are dominated by the "Shingo" variety, which is a mid- and late-maturing variety and accounts for 85 percent (8,258 Ha) of the total planted area in MY 2022/23, followed by Wonhwang, an early-maturing variety, which accounts for 4.5 percent of planted area (438 Ha). The reason why "Shingo" pears have remained as the main pear cultivar in Korea for so long is that they are popular with many consumers due to their high quality and longer storing period compared to other varieties. Mature trees remain productive for decades (upwards of 30 years) and relative to apple trees it is uncommon for farms to replant new pear trees.

Table 1
Korea's Pear Planted Area by Province (Unit: Hectare)

Korea's Pear Planted Area by Province (Unit: Hectare)				
Province	MY 2021/22	MY 2022/23	MY 2023/24	Change (%)
	Cultivated Area (ha)	Cultivated Area (ha)	Cultivated Area (ha)	
Gyeonggi	1,597	1,530	1,488	-2.7
North Chungcheong	246	232	187	-19.4
South Chungcheong	2,108	1,991	2,127	6.8
North Gyeongsang	1,106	1,005	986	-1.9
South Gyeongsang	423	492	475	-3.5
South Jeolla	2,552	2,729	2,710	-0.7
North Jeolla	730	819	788	-3.8
Other Provinces	913	884	846	-4.3
Total	9,675	9,680	9,607	-0.8

Source: Korea Statistics

Table 2
Korea's Pear Planted Area by Cultivars (Unit: Hectare)

Korea's Pear Planted Area by Cultivars (Unit: Hectare)				
Calendar Year	Singo	Wonhwang	Other	Total
2014	10,891	776	1,460	13,127
2015	10,544	732	1,388	12,664
2016	9,429	646	1,269	11,164
2017	9,426	525	949	10,861
2018	8,902	484	917	10,303
2019	8,250	461	904	9,615
2020	7,733	436	922	9,091
2021	8,282	445	948	9,675
2021	8,282	445	948	9,675
2022	8,258	438	984	9,680

Source: Statistics Korea

Consumption

Korea's pear consumption in MY 2023/24 is forecast to decrease by 21 percent to 176,000 tons from the previous year. Because Korea does not allow imports of fresh pears, reduced production of quality pears in MY 2023/24 from adverse weather conditions will correspond to a similar reduction in overall pear supply, and thus higher retail prices. Consumer demand for pears has decreased in recent years as consumers shy away from fruits that need to be peeled before consumption, and because of competition with high-quality fruits in domestic and imported fruits. As a result, Korea's per capita pear consumption is also expected to decrease by 0.9 kilograms to 3.5 kilograms from the previous year (4.4 kilograms).

The fresh pear market in Korea is characterized by the consumption of stored pears produced in the previous year and stored and marketed until late September of the following year when the new crop is available in the market.

Due to the large size of Korean pears compared to other fruits, most of the demand for pears in Korea is for gifts and ritual use during traditional Korean holidays, and not for dessert consumption, which is the main use of other fresh fruits. For this reason, there is not much demand for pears outside of the two major holidays, Lunar New Year and Chuseok. In addition, the large size of the fruit makes it difficult for one person to eat it all, and it is perceived as a fruit that is not suitable for consumption by the younger generation due to the inconvenience of peeling. In the future, Korean pears are expected to continue to decline in consumption unless more appealing varieties are developed and high-quality small and medium-sized pears that are easy to eat are produced to become a daily fruit like apples.

In MY 2023/24, pear prices are expected to remain higher than in the previous year due to lower supply as a result of lower production of quality pears. According to Korea Statistics Information Service (KOSIS), pear prices through August 2023 were at similar levels to 2020, when prices peaked because of record low production. However, moving into MY 23/24 price increases are not expected to be significant due to overall availability of high-quality fruit in the market. Additionally, prices for other domestic fruits are also expected to remain high through the first half of 2024 due to the low quantity of fruits available in the market due to reduced domestic production caused by adverse weather conditions. As of August 2023, the consumer price index for fruit in Korea increased to over 39 percent above 2020 levels (KOSIS).

Table 3
Korea's Average Annual Market Prices (Consumer & Wholesale) for Fresh Pears

Korea's Average Annual Market Prices (Consumer & Wholesale) for Fresh Pears (Unit: KRW, Percent)				
Marketing Year (July – June)	Average Annual Consumer Price (KRW/10 fruits)	Change (%)	Average Annual Wholesale Price (KRW/15 kg)	Change (%)
MY 2016/17	31,703	-	43,125	-
MY 2017/18	29,889	-6	40,848	-5
MY 2018/19	35,539	19	46,714	14
MY 2019/20	34,695	-2.4	49,341	5.6
MY 2020/21	41,331	19.1	71,419	44.7
MY 2021/22	38,964	-5.7	62,101	-13
MY 2022/23	30,500	-21.7	48,309	-22.2

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

Fresh Pears for Processing

The Korean pear industry utilizes about 4,000 to 5,000 MT of excess, non-marketable, or damaged fruits annually for processing, mainly for juice production. In the MY 2023/24 season, pear production is expected to decline, but the volume of pears used for processing is expected to increase slightly to around 6,000 MT due to an increase in low-quality pear production due to adverse weather conditions.

Trade

Exports

Korea's pear exports in MY 2023/24 are forecast to decline by 19 percent year-on-year to 24,000 MT due to lower fresh pear production and increased proportions of low-quality pears due to adverse weather conditions. The main export markets are the United States and Taiwan, which together accounted for 75.5 percent of total exports in MY 2022/23, followed by Vietnam with 15.3 percent.

In MY 2022/23, Korea's pear exports to the United States increased 23 percent year-on-year to 11,161 MT, accounting for 38 percent of total exports, due to eased export regulations since September 2022. The new policy, which allows export of Korean pears into the United States outside of the APHIS preclearance program, has given producers greater flexibility to export pears beyond their initial contracted amounts after the close of the seasonal preclearance program. After the United States Taiwan accounted for 37.6 percent (11,082 MT) of Korean pear exports. Over the past three marketing years, Vietnam's imports of Korean pears increased by 83.4 percent to 4,514 MT in MY 2022/23 from 2,461 MT in MY 2020/21. Vietnam's imports of Korean pears increased by 55.4 percent year-on-year from MY 2021/22 to MY 2022/23 due to the recent popularity of Korean culture, including Korean food products. Vietnamese consumer demand for Korean fruits has increased, as high-end fruits such as Korean pears, strawberries, and Shine Muscat grapes have become popular as gifts.

Imports

Korea does not allow imports of fresh pears due to phytosanitary concerns.

TABLES

Table 4: PSD for Fresh Pears

Pears, Fresh Market Year Begins Korea, Republic of	2021/2022		2022/2023		2023/2024	
	Jul 2021		Jul 2022		Jul 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (HA)	9675	9675	9687	9680	0	9607
Area Harvested (HA)	0	0	0	0	0	0
Bearing Trees (1000 TREES)	0	0	0	0	0	0
Non-Bearing Trees (1000 TREES)	0	0	0	0	0	0
Total Trees (1000 TREES)	0	0	0	0	0	0
Commercial Production (MT)	210293	210293	244000	251093	0	200100
Non-Comm. Production (MT)	0	0	0	0	0	0
Production (MT)	210293	210293	244000	251093	0	200100
Imports (MT)	0	0	0	0	0	0
Total Supply (MT)	210293	210293	244000	251093	0	200100
Domestic Consumption (MT)	186293	186247	214000	221632	0	176100
Exports (MT)	24000	24046	30000	29461	0	24000
Withdrawal From Market (MT)	0	0	0	0	0	0
Total Distribution (MT)	210293	210293	244000	251093	0	200100
(HA) ,(1000 TREES) ,(MT)						

Table 5
Korea's Pear Production Situation 1/

Year	Area (Ha)	Production (MT)	Yield (Kg/0.1 Hectare)
2015	12,664	260,975	2,061
2016	11,164	238,014	2,132
2017	10,861	265,757	2,447
2018	10,303	203,166	1,972
2019	9,615	200,732	2,088
2020	9,091	132,580	1,458
2021	9,675	210,293	2,174
2022	9,680	251,093	2,594
2023 2/	9,607	200,100	2,083

1/ Calendar year basis

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

Source: Korea Statistical Information Service (KOSIS)

Table 6
Korea's Pear Utilization 1/
(Unit: MT)

Year	Total	Fresh	Export	Processing
2017	265,757	234,200	27,157	4,400
2018	203,166	166,141	32,925	4,100
2019	200,732	164,522	30,710	5,500
2020	132,580	100,624	23,556	8,400
2021	210,293	180,052	21,841	8,400
2022 2/	251,093	N/A	26,274	N/A

1/ Calendar year basis

2/ Preliminary forecast by KREI & FAS Seoul

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

Table 7
Korea's Pear Production as Ratio to Total Fruit Production
(Unit: 1,000 MT, Ratio: Percent)

Year	Total Fruits (1,000 MT)	Pear (1,000 MT)	Ratio (%)
2015	2,364	261	11.0
2016	2,387	239	10.0
2017	2,358	266	11.3
2018	2,160	203	9.4
2019	2,206	201	9.1
2020	1,976	133	6.7
2021	2,109	210	10.0
2022	N/A	251	N/A

Source: Korea Statistical Information Service (KOSIS)

Table 8
Korea's Per Capita Fruits Consumption

Korea: Per Capita Fruit Consumption (Unit: Kg)								
Year	Total Fruits	Apple	Pear	Peach	Grape	Persimmon	Citrus	Others
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	51.5	8.1	2.1	3.6	4.3	1.6	12.6	19.1
2021	54.4	9.9	3.6	3.8	4.5	1.3	11.8	19.5
2022 1/	N/A	10.9	4.4	4.0	4.5	2.2	11.9	N/A

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

1/ Preliminary forecast by KREI & FAS Seoul

Table 9
Monthly Korean Pears Exports
(Unit: MT)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	2,980	1,964	1,450	537	317	13	0	3,127	4,675	3,742	4,583	3,769
2018	5,110	2,029	2,533	1,411	543	118	17	2,991	2,719	5,532	5,673	4,250
2019	3,119	878	1,062	485	276	27	2	4,658	3,251	5,720	5,873	5,359
2020	2,626	1,525	1,231	567	195	12	28	1,230	4,359	4,393	4,486	2,904
2021	1,109	333	236	35	10	6	3	2,746	3,091	4,946	5,095	4,231
2022	1,787	635	913	352	103	61	21	4,119	2,890	4,786	5,087	5,439
2023	1,450	2,206	2,212	662	397	193	77	2,805	-	-	-	-

Source: Korea Customs Service & Korea International Trade Association

Trade Matrix

Table 10
Export Matrix for Korean Pears (Sand Pears)

Export Trade Matrix						
Country: Korea						
Commodity: Commodity: Fresh Pears (HS 0808.30) Unit: MT & US\$1,000						
Exports to	MY 2020/21 (July 2020 – June 2021)		MY 2021/22 (July 2021 – June 2022)		MY 2022/23 (July 2022 – June 2023)	
Country	Volume	Value	Volume	Value	Volume	Value
U.S.	8,436	28,189	9,076	33,666	11,161	38,472
Taiwan	6,530	21,589	9,798	28,474	11,082	24,277
Hong Kong	443	1,457	564	1,843	641	1,692
Vietnam	2,461	6,627	2,905	7,639	4,514	9,240
All Others	1,259	4,237	1,703	5,551	2,063	6,440
Grand Total	19,129	62,099	24,046	77,173	29,461	80,121

Source: Korea Customs Service & Korea International Trade Association

Prices

Table 11
Average Retail Prices for Korean “Singo” Pear (Sand pear), Nationwide
(Unit: Korean Won per 10 Fruits)

Month	High Quality		Medium Quality	
	CY 2022	CY 2023	CY 2022	CY 2023
Jan.	34,963	28,361	28,404	22,714
Feb.	38,492	30,206	27,084	22,594
Mar.	39,505	27,847	26,860	21,441
Apr.	38,443	27,265	27,664	22,722
May	38,162	28,007	30,499	22,374
Jun.	39,919	27,935	30,786	21,098
Jul.	40,074	28,531	33,675	19,903
Aug.	40,100	30,824	33,162	20,257
Sep.	36,971	31,380	28,678	23,239
Oct.	27,672	-	22,575	-
Nov.	25,435	-	21,441	-
Dec.	26,121	-	21,583	-

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

Table 12**Average Wholesale Prices for Korean “Singo” Pear (Sand pear), Nationwide**
(Unit: Korean Won per Kilogram)

Month	High Quality		Medium Quality	
	CY 2022	CY 2023	CY 2022	CY 2023
Jan.	3,783	2,981	3,379	2,636
Feb.	3,498	2,999	3,123	2,679
Mar.	3,544	2,902	3,194	2,583
Apr.	3,763	2,815	3,414	2,509
May	3,934	3,023	3,570	2,709
Jun.	4,859	3,342	4,447	2,969
Jul.	5,007	3,804	4,595	3,330
Aug.	4,647	3,654	4,231	3,172
Sep.	3,063	4,152	2,710	3,722
Oct.	2,567	-	2,237	-
Nov.	2,633	-	2,309	-
Dec.	2,668	-	2,348	-

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

Table 13**Monthly Average Foreign Exchange Rate**
(Unit: Korean Won / 1US\$)

Month	2021	2022	2023
Jan.	1097.49	1194.01	1247.25
Feb.	1111.72	1198.34	1270.74
Mar.	1131.02	1221.03	1305.73
Apr.	1119.40	1232.34	1320.01
May	1123.28	1269.88	1328.21
Jun.	1121.30	1277.35	1296.71
Jul.	1143.98	1307.40	1286.30
Aug.	1160.34	1318.44	1318.47
Sep.	1169.54	1391.59	-
Oct.	1182.82	1426.66	-
Nov.	1182.91	1364.66	-
Dec.	1183.70	1296.22	-

Source: Industrial Bank of Korea

Attachments:

No Attachments