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Korea - Republic of

Fresh Deciduous Fruit Annual

Pears Report Annual

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Report Highlights:

The Korean pear industry is projected to continue declining, as both supply and demand for the fruit come under pressure. Consumption in MY 2015/16 fell to 226,348 MT and is expected to continue to decline to 219,000 MT in MY 2016/17, as consumer preferences are moving away from the large-size Korean Singo pear toward other types of fruit, and farmers are reluctant to shift to smaller-sized cultivars. Challenges in production caused by an aging farming population and increased urbanization have also led to steady decreases in area under cultivation and consequently lower pear production.

Planted area

After peaking at 26,000 hectares in the year 2000, pear planted area in Korea has steadily decreased, and is expected to continue in future. Planted area is forecast to decrease sharply by 14 percent to 10,883 hectares (Ha) in Marketing Year (MY) 2016/17 (July – June) from the year earlier period. Most of the area reduction is expected to occur in the main pear regions of Jeollanam-do, Gyeonggi-do and Chungcheongnam-do provinces. Table 1 presents data from production regions showing the decline in pear area over the past three years.

Source : Korea Statistical Information

Province	MY 2013/14	MY 2014/15	MY 2015/16
	Cultivated Area (Ha)	Cultivated Area (Ha)	Cultivated Area (Ha)
Jeollanam-do	3,602	3,457	3,499
Gyeonggi-do	2,703	2,577	2,426
Chungcheongnam-do	2,382	2,389	2,334
Gyeongsangbuk-do	1,748	1,536	1,422
Other Provinces-do	3,305	3,168	2,983
Total	13,740	13,127	12,664

tion Service (KOSIS)

The decrease in planted area (synonymous with area harvested) has been mainly due to two factors: 1) rapid urbanization of rural population centers, which has included the construction of industrial complexes in farming areas surrounding cities; and 2) rapid aging of the farming population in rural communities.



In MY 2015/16, rapid urbanization of Asan, in Chungcheongnam-do province, one of Korea's main pear production areas was especially acute. At the same time, a new industrial complex in Pyeongtaek, Gyeonggi province, caused an increase in farm closures. In addition, some pear farmers changed to alternative crops or planted other deciduous fruits (e.g., blueberries, kiwifruit) because the effects of climate change on pear production.

The growing aging population has become a very serious issue on pear farms in recent years (see Table 2). Elderly pear farmers are closing their farms; some are switching to more easily handled crops because extra labor is required for individually paper-packing each fruit during the growing season. Additionally, the continual decline in demand for fresh pears has

dis-incentivized farmers from planting pears, adding to the speed of decline in planted area.

Table 2. Korea's Aging Population in Farm Area (Unit: 1,000 Person & Percentage)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Farm Population (1,000 Person)	3,304	3,274	3,187	3,117	3,063	2,962	2,912	2,847	2,752
Ratio of over 65-year-old (%)	30.8	32.1	33.3	34.2	31.8	33.7	35.6	37.3	39.1

Source: Korea Statistical Information Service (KOSIS)

Production

In MY 2016/17, Korea's pear production is forecast at 248,000 metric tons (MT), about five percent down from the previous marketing year, mainly due to a continual decrease in planted area and reduced yields resulting from poor weather during the summer season. In early 2016, the Korean pear industry estimated that production would increase, on the basis of higher fruit count during flowering season and favorable spring weather. However, actual 2016 production is expected to be five percent less than the previous year, due mainly to the damage incurred by a heat wave and drought in the summer season.

In part, Korea's pear production has declined continuously as a result of lower consumer demand for pears. In MY 2007/08, production reached a record high level of 471,000 MT, but decreased steadily to 261,000 MT in MY 2015/16. Korean pear farmers mainly produce one single cultivar known as Singo. Farmers prefer Singo because the fruits are larger and can be stored longer than other cultivars. Moreover, large pears are in high demand during Korean holidays; however, outside the holiday gift-giving season consumer preference for large pears fall off. Also, demand for pears in general has declined as an increasing number of alternative fruit have become available to consumers. An increasing number of Korean Free Trade Agreements (FTAs) implemented since 2004 (Chile) has resulted in increased fruit options for Korean consumers throughout the year.

Table 3. Korea's Pear Planted Area By Cultivars (Unit: Hectare)

	Singo	Wonhwang	Other	Total
Calendar Year				
2007	18,022	1,215	3,326	22,563
2011	12,445	907	1,729	15,081
2012	11,866	855	1,632	14,353
2013	11,396	819	1,525	13,740
2014	10,891	776	1,460	13,127
2015	10,544	732	1,388	12,664

Source: Korea Statistical Information Service (KOSIS)

Consumption

In MY 2016/17, fresh pear consumption is expected to decrease by three percent to 219,000 MT from 226,348 MT the previous year, mainly due to: 1) decreased production from lower area harvested, 2) declining demand for pears, especially the dominant Singo cultivar, and 3) increased availability of other imported fruits. Another factor is the gradual shift in some segments of the population to a more westernized diet.

Between the years 2000 to 2005, Korea’s per capita pear consumption increased from 6.7 kg to 8.7 kg, but has since gradually decreased to 4.7 kg in 2015, due to lower pear production and increased consumption of alternative imported fruits. During the same period, Korea’s per capita consumption of other fruits, including imported fruit, increased significantly by 9.8 kg to 23 kg during the same period.

Table 4. Korea: Per Capita Fruit Consumption (Unit: Kg)								
Year	Total Fruits	Pear	Apple	Grape	Citrus 1/	Persimmon	Peach	Other
2005	62.7	8.7	7.5	8.2	13.1	4.8	4.6	13.2
2010	62.4	5.8	9.3	6.9	12.5	3.6	2.8	21.5
2011	62.4	5.5	7.6	6.3	13.6	3.3	3.7	22.4
2012	61.8	3.1	7.9	6.6	13.8	3.3	4	23.1
2013	63.2	5.2	9.8	6.3	13.5	3	3.8	21.4
2014	66.5	5.5	9.4	6.5	14.3	3.7	4.2	22.9
2015	66.7	4.7	11.4	6.4	13.2	3.3	4.7	23

1/Including imported oranges

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

A single large-size pear cultivar, Singo, makes up 83 percent of the pears in the Korean market. The pear industry has focused on this cultivar because of its two big advantages: high productivity and a longer storage period. Paradoxically, the Korean pear industry has determined that the large size of the Singo has contributed to the decline in pear consumption. Many Koreans, including the growing cohort of one-person households, prefer to buy medium and small size pears for home consumption. Korean consumers also hesitate to buy fresh Singo pears because they are reportedly too big to eat at one time and are inconvenient to refrigerate half-eaten. However, because of the dominance of the Singo, in the orchard, there are not many medium and small size pears available in markets.

Despite the issues with large-size pears, there continues to be high demand for large, Singo pears during two traditional Korean holidays (“Seol Nal”: Lunar New Year’s Day and “Chusoek”: Korean Harvest Thanksgiving Day) when large pears are preferred for gifts and for ancestral rites.

During the traditional holidays, Korea’s apple industry also experiences high demand for large size fruit. The local apple industry, however, is not experiencing the same problem with declining demand. In fact, Korea’s per capita apple consumption increased 65 percent during the past decade from 7.5 kg

in 2005 to 11.4 kg in 2015. The apple industry has been helped by introduction and development of various and specialized cultivars (such as Envy and Arisoo), which meet the demands of consumers.

Year	2005	2010	2012	2013	2014	2015
Fruits						
Oranges	123,048	110,055	173,943	152,714	98,371	111,569
Grape	13,353	34,963	54,192	58,743	59,260	66,192
Banana	253,974	337,907	367,673	313,604	359,124	358,249
Pineapple	48,763	60,565	73,131	75,917	75,420	67,003
Mangoes	762	1,351	2,839	6,154	10,599	13,315
Kiwi	26,751	28,515	28,945	20,065	19,590	23,800
Cherries	987	3,800	9,454	9,088	13,359	12,451
Pomegranate	7,485	7,402	8,823	13,823	10,761	8,810
Grapefruit	1,532	7,861	10,452	11,580	19,491	25,010
Total	476,655	592,420	729,451	661,687	665,975	686,398

Source: Korea Rural Economic Institute (KREI)

In MY 2016/17, the total quantity of fresh pears used for processing (i.e., juice production) is expected to be around 7,000 MT, about 40 percent lower than the volume pressed during the previous marketing year. This expected decrease is supported by lower volumes of off-grade or disease-damaged pears available for processing. In MY 2015/16, the Korean pear industry used about five percent (11,500 MT) of total fresh pear production for processing purposes, almost double the level of the previous marketing year due to the increased number of non-marketable, disease-damaged (Pear Scab) fruit.

Trade

Export

In MY 2016/17, Korean fresh pear exports are expected to remain around 22,000 MT, about 1,000 MT lower than the previous marketing year, mainly due to decreased export availabilities. Korea typically exports around 20,000 MT to 22,000 MT of fresh pears annually, with more than 80 percent going to the United States and Taiwan, both with significant Korean communities that value the distinctive qualities of the Asian pear. Industry sources feel export volumes will not increase significantly in the foreseeable future without additional demand from new consumers.

Import

No fresh pear imports are allowed under Korea's phytosanitary regulations.

Production, Supply and Demand for Fresh Pears

Pears, Fresh Market Begin Year Korea, Republic of	2014/2015		2015/2016		2016/2017	
	Jul 2014		Jul 2015		Jul 2016	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	13100	13127	12700	12664	0	10883
Area Harvested	0	0	0	0	0	0
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0
Total Trees	0	0	0	0	0	0
Commercial Production	302700	302731	259000	260975	0	248000
Non-Comm. Production	0	0	0	0	0	0
Production	302700	302731	259000	260975	0	248000
Imports	0	0	0	0	0	0
Total Supply	302700	302731	259000	260975	0	248000
Fresh Dom. Consumption	279400	273369	236000	226348	0	219000
Exports	23300	23336	23000	23127	0	22,000
For Processing	0	6026	0	11500	0	7000
Withdrawal From Market	0	0	0	0	0	0
Total Distribution	302700	302731	259000	260975	0	248000

(HA) ,(1000 TREES) ,(MT)

Production

Korea: Pears Production Situation 1/

Year	Area (HA)	Production (MT)	Yield (Kg/10 are)
2005	21,735	443,265	2,033
2010	16,239	307,320	1,896
2011	15,081	290,494	1,926
2012	14,353	172,599	1,203
2013	13,740	282,212	2,054
2014	13,127	302,731	2,306
2015	12,664	260,975	2,061
2016 2/	10,883	248,000	N/A

1/ Calendar year basis

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

Source: Korea Statistical Information Service (KOSIS)

Korea: Pear Utilization (Unit: MT) 1/

Year	Total	Fresh	Export	Processing
2011	290,494	264,994	17,996	7,504
2012	172,599	142,695	15,677	14,227
2013	282,212	254,443	20,210	7,559
2014	302,731	273,609	23,096	6,026
2015	260,975	226,982	22,493	11,500
2016 2/	248,000	N/A	23,000	N/A

1/ Calendar year basis

2/ Preliminary forecast by KREI & FAS Seoul

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

Korea: 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 (%)
2000	2,249	324	14.4
2005	2,593	443	17.1
2011	2,458	290	11.8
2012	2,374	173	7.3
2013	2,523	282	11.2
2014	2,697	303	11.2
2015	2,697	261	9.7

Source: Korea Statistical Information Service (KOSIS)

Korea: Per Capita Fruits Consumption (Unit: Kg)

Year	Total Fruits	Pears	Apple	Grape	Citrus 1/	Persimmon	Peach	Other
2005	62.7	8.7	7.5	8.2	13.1	4.8	4.6	13.2
2011	62.4	5.5	7.6	6.3	13.6	3.3	3.7	22.4
2012	61.8	3.1	7.9	6.6	13.8	3.3	4	23.1
2013	63.2	5.2	9.8	6.3	13.5	3	3.8	21.4
2014	66.5	5.5	9.4	6.5	14.3	3.7	4.2	22.9
2015	66.7	4.7	11.4	6.4	13.2	3.3	4.7	23

1/Including imported oranges

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

Korea: Monthly Korean Pears Exports (Unit: MT)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
'16	3,167	1,180	1,225	378	493	257	1	3,854	-	-	-	-
'15	3,219	686	1,627	322	148	64	68	1,977	2,379	4,707	3,562	3,748
'14	2,693	1,322	1,333	371	87	20	2	3,359	1,719	4,608	3,514	4,068
'13	525	209	615	68	19	30	0	1,619	2,645	5,057	4,073	5,260
'12	1,125	672	1,226	359	41	25	0	1,647	1,792	3,240	3,343	2,208

Source: Korea Customs Service & Korea International Trade Association

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

Month	2014	2015	2016
Jan.	1064.75	1088.86	1201.67
Feb.	1071.30	1098.40	1217.35
Mar.	1070.89	1112.57	1188.21
Apr.	1044.55	1088.66	1147.51
May	1024.99	1091.27	1171.51
Jun.	1019.36	1112.20	1170.50
Jul.	1019.93	1143.22	1144.09
Aug.	1025.36	1179.10	1111.68
Sep.	1033.24	1184.76	1107.49
Oct.	1060.28	1148.18	-
Nov.	1095.10	1151.97	-
Dec.	1104.33	1172.24	-

Source: Industrial Bank of Korea

Trade Matrix

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 2013/14 (July 13 – June 14)		MY 2014/15 (July 14 – June 15)		MY 2015/16 (July 15 – June 16)	
Country	Volume	Value	Volume	Value	Volume	Value
U.S.	9,734	27,619	9,725	29,325	9,265	25,323
Taiwan	12,586	32,080	10,367	25,431	9,986	24,635
Hong Kong	467	921	610	1,231	465	959
Vietnam	310	473	927	1,752	1,313	2,712
All Others	1,383	3,710	1,707	4,498	2,098	5,586
Grand Total	24,480	64,802	23,336	62,236	23,127	59,215

Source: Korea Customs Service & Korea International Trade Association

Price

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

Month	High Quality		Medium Quality	
	CY 2015	CY 2016	CY 2015	CY 2016
Jan.	29,471	30,095	19,351	18,976
Feb.	31,509	30,644	21,143	20,934
Mar.	30,861	31,269	19,152	19,797
Apr.	28,838	30,588	18,790	19,770
May	29,691	31,797	18,711	20,113
Jun.	30,191	32,598	18,671	20,548
Jul.	29,428	33,170	18,166	21,656
Aug.	27,931	31,443	19,411	22,563
Sep.	27,329	30,828	19,806	20,961
Oct.	27,981	-	18,905	-
Nov.	27,371	-	17,549	-
Dec.	28,486	-	18,901	-

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

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

Month	High Quality		Medium Quality	
	CY 2015	CY 2016	CY 2015	CY 2016
Jan.	2,345	2,945	1,941	2,391
Feb.	2,413	3,053	1,958	2,512
Mar.	2,606	2,964	2,173	2,470
Apr.	2,687	2,933	2,238	2,440
May	2,727	2,952	2,248	2,459
Jun.	2,676	3,017	2,165	2,549
Jul.	2,640	3,356	2,133	2,914
Aug.	2,370	3,678	1,907	3,264
Sep.	2,463	3,082	2,024	2,690
Oct.	2,641	-	2,159	-
Nov.	2,731	-	2,206	-
Dec.	2,907	-	2,360	-

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