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2012 Potato Update

Report Categories:
Potatoes and Potato Products

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Report Highlights:
Domestic harvested area for potatoes in 2011 increased to 26,804 hectares, more than 1,890 hectares or 7.5 percent above the year earlier level reflecting increased planting due to higher prices. However, production fell to an estimated 600,000 MT (2.7 percent) due to poor weather. Imports of potatoes recorded a sharp increase from 79,704 tons in 2010 to 96,628 tons in 2011 due to increasing imports of both fresh and frozen potatoes.

Production:

Korea has a well developed potato-cropping pattern, producing spring, autumn, and highland potatoes. Production quantity varies from high to low in the same order.

Cropping Pattern	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Spring		Seeding		Harvest & Shipment								
Highland				Seeding			Harvest & Shipment					
Autumn							Seeding					
	Harvest & Shipment											

Source: Rural Development Administration (RDA), Korea Rural Economic Research Institute (KREI)

Korea has three major potato varieties in production. The Sumi (Superior) potato is the most popular variety and makes up about 71 percent of annual production. This variety is used for spring and highland potato production. It has a high starch content and is used as a table stock. The Daeji (Daejima) potato is the second most popular, making up almost 19 percent of yearly production. It is primarily used for autumn production in the southern parts of the peninsula. It is often served in restaurants as a side dish. Lastly, the Daeso (Atlantic) variety accounts for only around 5 percent (25,000 – 30,000 MT) of annual potato production. Daeso are mainly used for potato chip processing and are only grown when farmers contract with a potato chip manufacturer.

Variety	Rate	Maturity	Use
Superior	71.0%	Medium	Table stock
Daejima	18.5%	Late	Table stock
Atlantic	5.1%	Medium	Chip stock
Other	5.4%	Medium & Late	Table stock

Source: National Institute of Highland Agriculture (NIHA), Rural Development Administration (RDA)

Potato acreage in Korea has fluctuated between 20,000 and 27,000 ha from 2006 to 2011. In 2010, cultivated area of potatoes increased 4.3 percent over 2009 due to higher prices. Due to the higher retail price of domestic potatoes in 2010, more farmers switched their field crop to potatoes in 2011, resulting in a 7.6 percent increase in area planted over 2010. However, the production in 2011 was below the 616,707 MT produced in 2010.

Due to the unfavorable weather during the growing season (colder weather) and harvest season (frequent rain), 2011 production is estimated at 600,000 MT, which is 2.7 percent (16,707 MT) lower than the 616,707 MT in 2010. As a result, throughout 2011 the Korean government opened a 3,000 MT of tariff-rate quota (TRQ) for table potatoes and about 8,000 MT TRQ for chip potatoes in addition to the existing 18,810 MT WTO TRQ for fresh potatoes to cope with the expected price hike in the

domestic potato market.

Korea: Potato Supply & Demand (Ha/MT) 1/						
	2006	2007	2008	2009	2010	2011
Cultivated area (Ha)	23,957	20,421	20,540	21,396	24,913	26,804
Production (MT)	631,086	574,396	604,592	591,053	616,707	600,000 2/
Import	57,374	59,114	60,893	60,005	79,704	96,628
Export	103	77	455	710	570	439
Total supply	688,357	633,433	665,030	650,348	695,841	696,189 2/

Source: Korean Statistical Information Service (KOSIS), Korea Agro-Fisheries Trade Corporation (aT)
1/ Includes fresh and frozen potatoes
2/ Estimated production by FAS Seoul

Consumption:

The per capita consumption of potato in Korea has been steadily declining since its peak in 2006. In 2011, domestic consumption of potato per person is expected to be maintained at close to 13.5kg, which is the five-year historical average.

Korea: Per Capita Potato Consumption 1/						
Year	2006	2007	2008	2009	2010	2011
Per Capita Consumption (kg)	14.4	13	13.2	13.6	13.4	N/A

Source: Korea Rural Economic Institute (KREI)
1/ Includes fresh and frozen potatoes

In 2011, the retail price for a kilogram of fresh potatoes was about 3,100 won ($2.85), while the wholesale price was approximately 1,500 won ($1.4). The rise in prices was mainly due to the drop-off in domestic production resulting from adverse weather conditions. Additionally, insufficient domestic supply of potatoes played a major role in increasing imports.

Fresh Potato Price & Import Price (Unit: KRW, USD)				
Year	Retail Price (KRW) per kg 1/	Wholesale Price (KRW) 1/	Import Price (USD) 2/	Exchange Rate (KRW/USD)
2006	2,229	878	0.46	955.34
2007	2,430	984	0.50	929.38
2008	2,618	1,085	0.49	1,102.6
2009	2,411	1,274	0.50	1,276.4
2010	2,711	1,498	0.61	1,156.3
2011	3,151	1,486	0.63	1,108.8

Source: The Korea International Trade Association (KITA), aT, The Bank of Korea
1/ Price for 1st Grade Sumi Variety
2/ CIF Price

Trade

In 2011, Korea imported roughly 90,000 tons of fresh and frozen potato products. Frozen potato products account for roughly 70 percent of total imports, while fresh potatoes makeup only 30 percent. Imported fresh potatoes are primarily used in snack food manufacturing, and frozen potato product imports are mainly French fries.

Korea mostly imports potatoes from the United States, Australia and Canada. Currently, the United States is the largest potato and potato product supplier to Korea, with total market share ranging between 60 to 70 percent over the last five years. From 2006 to 2010, U.S. fresh potato exports steadily increased from roughly 3,700 tons to 17,000 tons respectively. Imports of U.S. frozen potatoes over the same period increased from 28,970 MT to 54,714 MT.

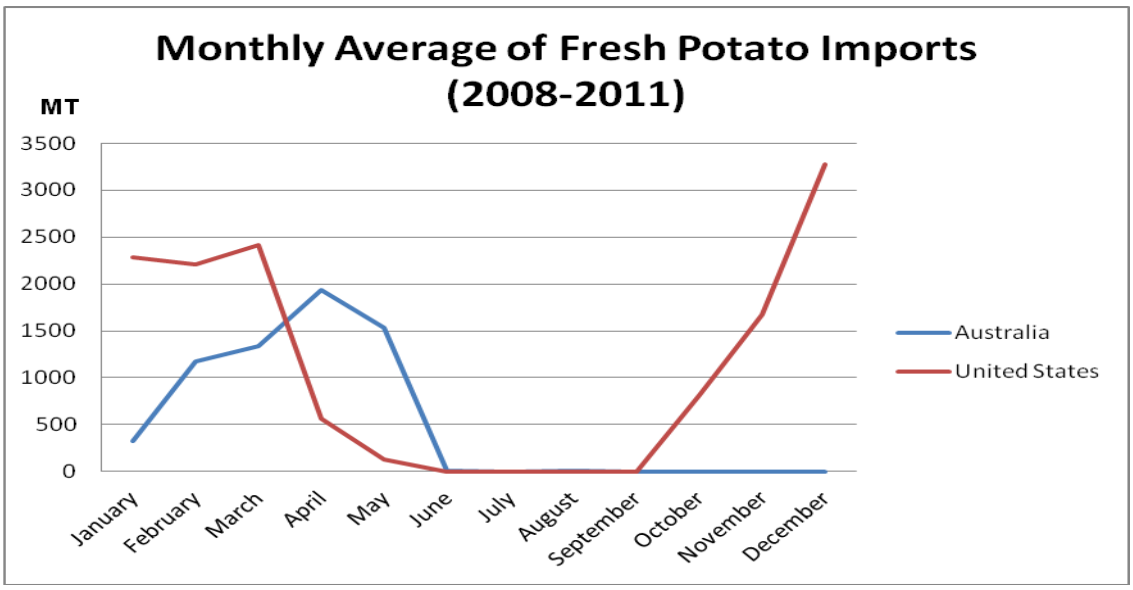
Korea: **Fresh** Potato Imports by Country (Unit: tons)			
Year	Australia	U.S.	Total
2006	14,202	3,643	17,845
2007	7,934	10,980	18,914
2008	3,044	13,782	16,826
2009	3,599	8,063	11,662
2010	6,705	14,994	21,699
2011	11,936	16,645	28,581

Source: The Korea International Trade Association (KITA)

Korea: **Frozen** Potato Imports by Country (Unit: tons)				
Year	U.S.	Canada	Other	Total
2006	28,970	6,684	738	36,392
2007	29,961	5,998	737	36,686
2008	31,024	8,971	1,028	41,023
2009	35,191	7,555	1,540	44,286
2010	47,916	3,704	1,901	53,521
2011	54,714	5,855	1,658	62,227

Source: The Korea International Trade Association (KITA)

Fresh potatoes are subject to a global WTO tariff-rate quota (TRQ) of 18,810 metric tons, with an in-quota tariff of 30 percent. This TRQ is generally filled each year and is usually allocated for chipping potatoes. The out-of-quota tariff, a prohibitive 304 percent, discourages any additional amount. However, the Korean government has increased the WTO TRQ several times in 2007, 2010 and again in 2011 when there was damage in domestic fresh potato production to reduce the impact in the retail market.



Source: FAS Seoul & KITA

Under the Korea-United States Free Trade Agreement (KORUS FTA) there are separate duties for chip and table potatoes. Upon implementation of the KORUS FTA on March 15, 2012, chip stock will be imported with zero duty from December 1 through April 30, while a 304 percent duty will be imposed during May 1 to November 30 through 2018. That seasonal duty will be eliminated in equal stages from 2019 through 2026. For table stock, 3,000 MT will be imported with zero duty under a TRQ in 2012. The duty-free volume will increase 3 percent annually, while a 304 percent will be imposed for the volume exceeding the quota. Current tariff rates are summarized below.

Korea: Current Tariff Rates for Potato & Potato Products			
Description	TRQ	Current Tariff (%)	
	Quota (MT)	In-quota	Out-quota
Seed potatoes (0701100000)	1,898	0%	304%
Fresh potatoes (0701900000)	18,810	30%	304%
Frozen potatoes (0710100000)	-	27%	
Dried potatoes (0712902093)	-	27%	
Potato flour (1105100000) Potato (flakes) (1105200000)	60	5.4%	304%
Potato starch (1108130000)	45,692 a/	8%	455%
Prepared frozen potatoes (2004100000)	-	18%	
Prepared or preserved vegetables, potatoes (form of powder or flakes) (2005209000)	-	20%	

a/ : The Quota reflects the total amount of Starch and seven other products

Market Trends:

Fresh Potatoes

Korea is an important market for U.S. fresh and frozen potatoes, importing roughly 71,400 metric tons of potatoes and products in 2011. Historically, the United States, Australia, and limited regions of Japan have been permitted to export fresh potatoes to Korea. As of February 15, 2011, New Zealand's fresh potatoes were permitted to import into Korea. Fresh potatoes are divided into chip and table stocks.

The Republic of Korea Government has historically permitted a limited quantity of chip stock potato to be imported under a WTO TRQ. The demand for chip stock potato is high because major Korean snack manufacturers are in need of good quality chipping potatoes.

Inspection and Quarantine

Korea enforces strict food safety and phytosanitary requirements for imported potatoes.

Due to quarantine regulations (pest control), 27 U.S. states (Maryland, Pennsylvania, West Virginia, New York, Utah, Nebraska, California, Montana, Arizona, Colorado, New Mexico, North Dakota, Kansas, Wyoming, Delaware, Oklahoma, South Dakota, Nevada, Maine, Michigan, Minnesota, Mississippi, New Hampshire, Ohio, Wisconsin, Texas, Idaho: Bingham and Bonneville county) are not allowed to export fresh potatoes to Korea. Victoria and West Australia state in Australia are also not allowed to export fresh potatoes to Korea.

Potato spindle tuber viroid, Synchytrium endobioticum (potato wart), Globodera rostochiensis (golden nematode), Globodera pallida, Zebra chip and etc are the quarantine pests in Korea. Accordingly, shipments from all origins are subject to quarantine inspection for the related pest list. Imported fresh potatoes must be washed and be reasonably free of soil and free of any foreign materials including dirt from the shipment.

Dehydrated Potatoes

Food processors use potato powder for processing varied snack products. Additionally, dehydrated potatoes are also used in soups and potato noodles.

Frozen Potatoes

The United States has dominated the market for frozen potato products, and currently has over 80 percent share. The demand for frozen potatoes in Korea is highest in fast food restaurants, where French fries are often sold. However, new franchises specializing in French fries with exotic toppings

have contributed to the increase demand for frozen potato.

Korea's school meal processing industry is a new market opportunity for U.S. frozen products. Many imported food items, which are not easy to source domestically, are consumed for school lunch program these days. For example, fruit, imported meat (pork, beef and chicken) and frozen vegetables and various sauces are used for the school menus. Korean schools are increasing offerings of potato products. For example, mashed potato salad is a popular school lunch item.

Additionally, shopping marts are now selling several American potato products. Korean consumers are showing an increasing interest in fresh produce imports including high-quality U.S. potato and potato products. In 2011, E-Mart, the top discount store chain in Korea introduced U.S. Russets potatoes for baked potatoes with successful results. In addition, more Korean consumers are looking for various types of frozen French fries products in these days.

KORUS FTA:

The implementation of the KORUS FTA on March 15, 2012, will provide additional opportunities for U.S. potato products.

Fresh Chip Stock (HSK 0701900000)
From December 1 through April 30 the tariff will be immediately eliminated from the current 304 percent. (Currently, access is limited to the tariff-rate quota amount with an in-quota rate of 30 percent.)

From May 1 to November 30, the tariff will remain at 304 percent for the first 7 years (2012-2018) and will be eliminated in eight equal stations beginning January 1, 2019. The duty will be eliminated beginning January 1, 2026.

Fresh Table Stock (HSK 0701900000)
The current tariff of 304% will be exempted within a duty-free tariff-rate quota, initially set at 3,000 MT. This in-quota amount will increase by 3 percent annually:

Year	2012	2013	2014	2015	2016	From 2017, quota increases 3 percent every year
TRQ (MT)	3,000	3,090	3,183	3,278	3,377	

Frozen Potatoes (HSK 2004100000)
Tariff will be immediately eliminated from the current 18%.

Dehydrated Potatoes
Annual reduction in tariffs will provide incremental additional market access.

HS Code	Current	Reduction

	tariff	Schedule
HSK 0712902093 (dehydrated pieces: Other Dried vegetables, potatoes)	27%	5 years
HSK 2005209000 (blended) Prepared or preserved vegetables, potatoes (form of powder or flakes)	20%	5 years

The table below shows the trigger level and safeguard duty for *HS Code 1105100000* items (flour, meal, powder) and *HS Code 1105200000* items (flakes, granules, pellets). The duty-free amount for 2012 equals 5,000 tons for the first year. On imports above this amount, the safeguard duty of 294.3 percent will be applied. This trigger level will gradually increase over 11 years, while the safeguard duty will be phased out by January 1, 2022.

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Trigger Level (MT)	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	N/A
Safeguard Duty (%)	294.3	284.5	274.8	265.1	255.4	214.6	199.7	184.8	169.9	155.0	0