



USDA Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Template Version 2.09

Voluntary Report - Public distribution

Date: 2/1/2008

GAIN Report Number: KS8005

Korea, Republic of

Product Brief

Fresh Carrots

2008

Approved by:

Stan Phillips
U.S. Embassy

Prepared by:

Susan Phillips/Young Sook Oh/Seung Ah Chung

Report Highlights:

Although U.S. fresh carrots started to gain some market share in 2005 and 2006, imports were banned in May 2006 for phytosanitary reasons. Currently Korea is importing fresh carrots only from China. After the FTA is implemented, the 30 percent tariff duty will be removed in five equal annual stages becoming duty free in year five. If the phytosanitary issues can be addressed, U.S. carrots may find an opportunity in the market.

Includes PSD Changes: No
Includes Trade Matrix: No
Annual Report
Seoul [KS1]
[KS]

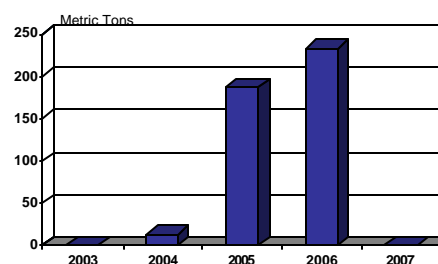
Table of Contents

SECTION I. MARKET OVERVIEW	3
SECTION II. MARKET SECTOR OPPORTUNITIES AND THREATS	3
1. Entry Strategy.....	4
2. Market Size, Structure and Trends.....	4
3. Company Profiles	5
SECTION III. COSTS AND PRICES.....	5
SECTION IV. MARKET ACCESS	6
1. Labeling Requirements.....	6
2. Grading or Quality Standards	6
3. Import Procedures and Testing Requirements.....	6
4. MRL Standards	7
SECTION V. KEY CONTACTS AND FURTHER INFORMATION	8

SECTION I. MARKET OVERVIEW

Currently there are no opportunities for fresh U.S. carrots in Korea due to the phytosanitary ban put in place in 2006. Prior to the implementation of the ban, imports of U.S. carrots were increasing. If the U.S. industry puts a priority on resolving the phytosanitary issues, the market may be open within four to five years, at which time the current tariff will be zero. The elimination of the 30 percent tariff will make U.S. fresh carrots competitive with Chinese carrots. Given the chance to export to this market, U.S. carrots may satisfy Korean consumers' desires for healthier snack foods.

Korean Imports of U.S. Fresh Carrots



Advantages	Disadvantages
The demand for healthy food has led to an increase in carrot consumption.	Phytosanitary issues need to be addressed before imports can resume.
U.S. carrots are crispier and juicier than domestically grown carrots, which are too hard to consume raw.	Imported carrots are currently only consumed in the food service sector or for processing.
Under the KORUS FTA, the 30 percent tariff will be eliminated within five years making U.S. carrots more price competitive.	Korean consumers are not used to eating raw carrots.

SECTION II. MARKET SECTOR OPPORTUNITIES AND THREATS

Fresh carrots are consumed in the retail, HRI and processing sectors; however, currently imported carrots tend to be used only in the food service sectors. In general, the consumption of carrots has been increasing due to the demand for healthier foods and the well-being trend. Per capita consumption of carrots remained fairly stable at 3 kilograms up until 1998; however, after that time it began to steadily increase each year. In 2006, per capita consumption reached 4.1 kilograms.

Currently, 80 percent of domestic carrots are sold in the retail sector for home use, 10 percent are sold for juice production and the remaining 10 percent is used in processed foods. In the retail sector, Korean consumers prefer to purchase unwashed carrots. Consumers believe that unwashed carrots are fresher and safer than those that have been washed. In a recent survey, 88 percent of those surveyed stated that they preferred to purchase unwashed carrots. However, all imported carrots consumed in restaurants and in the food service sector are washed.

Korean carrots are much harder and less juicy than U.S. carrots. As a result, Korean consumers do not tend to eat raw carrots. Most carrots purchased for home use are cooked in stews or fried rice or used as a garnish to add color. Korean buyers would be interested in purchasing U.S. carrots for use as a snack food or in salads. Organic baby carrots would also likely be popular here.

1. Entry Strategy

Since U.S. carrots are currently prohibited due to phytosanitary reasons, the first step would be for U.S. suppliers interested in exporting fresh carrots to Korea to contact the Animal and Plant Health Inspection Service (APHIS). The Phytosanitary Issues Management (PIM) unit will be the primary point of contact for all technical plant health communications with the Korean government. PIM takes the lead in developing plant health policies and strategies and will work directly with the Korean government to find technical solutions to phytosanitary trade barriers. Please contact the PIM Trade Manager for Korean issues by calling (301) 734-8262, faxing (301) 734-7639 or by e-mailing PPQExportServices@aphis.usda.gov.

It is likely that Korea will require a pest risk assessment (PRA) to reopen the market. PIM will require a significant investment of time and will need to work with an industry association and the State Department of Agriculture in order to prepare a data package for NPQS. It is likely to take four to five years.

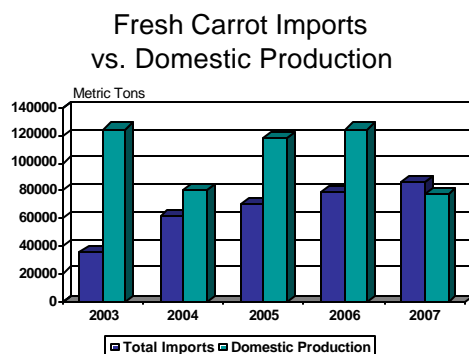
2. Market Size, Structure and Trends

The Korean import market for fresh carrots is valued at \$30 million and it is expected to continue to grow. In 2007, China was the only supplier exporting 86,545 metric tons. It is expected that imports of fresh carrots from China will increase by about 20 percent in 2008, up to 89,000 metric tons.

**Korean Imports of Fresh Carrots
(HS 0706.10.1000)**

	2003		2004		2005		2006		2007	
	1,000 USD	MT	1,000 USD	MT	1,000 USD	MT	1,000 USD	MT	1,000 USD	MT
China	\$11,824	35,216	\$19,995	60,982	\$24,987	70,462	\$32,970	78,819	\$33,831	86,545
U.S.			\$41	14	\$501	188	\$472	233		
Australia	\$186	446					\$79	120		
NZ			\$31	6	\$9	2	\$26	39		
Japan					\$4	12				
Canada					\$3	1				
TOTAL	\$12,011	35,663	\$20,026	61,002	\$25,505	70,665	\$33,546	79,210	\$33,831	86,545

Source: Korea Trade Information Service (KOTIS)

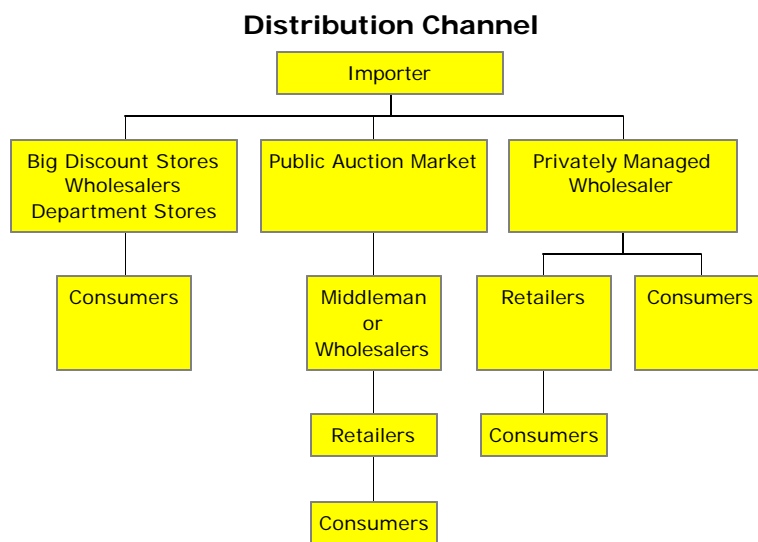


Local buyers state that Chinese carrots are produced from a higher quality Japanese variety which seems to have improved its competitiveness. Korea grows mostly Japanese varieties, such as Benitop and Superbet and some of the European Sigma variety. Consumers may not be able to tell the difference between imported Chinese and local produced varieties.

Domestic production has been somewhat unstable in recent years due periods of bad weather. In 2007, there was substantial damage from typhoons to domestic horticultural crops including carrots; as a result, production declined

by 36 percent. Local sources estimate that domestic carrot production will recover only slightly in 2008. Most carrots are grown in the southern regions of the country, such as in Busan, Kyungnam province and Jeju Island as they need a more temperate climate. Carrots

grown on Jeju Island, the warmest region in Korea, are available through the winter months from December to March.



3. Company Profiles

There are several importers of fresh carrots, but all are very small, importing around \$1-5 million of various fruits, vegetables, nuts and beans. Contact the ATO for more specific information about Korean buyers.

SECTION III. COSTS AND PRICES

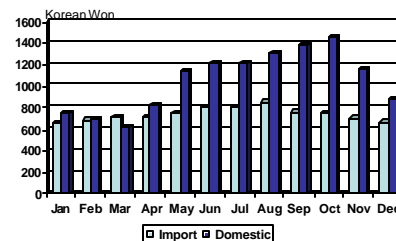
Chinese carrots sold through the local wholesale markets generally sell for 50-60 percent less than domestic carrots and are imported mostly from September through November. Overall, imported carrots have a 43 percent market share. Domestic carrots are the most competitive during the winter months. At that time, domestic carrots tend to hold an 80 percent market share.

Domestic unwashed carrots are sold at a slightly higher price than domestic washed carrots as consumers believe they are fresher and safer.

The current tariff on imported fresh carrots (HS 0706.10.1000) is 30 percent or 134 Korean won per kilogram whichever is higher. The WTO bound rate is 40.5 percent which means that, absent any other agreement, the tariff could be raised to 40.5 percent. Under the Korea-U.S. FTA, the 30 percent tariff will be phased out in five years.

Korea has negotiated two free trade agreements (FTA) with third countries that will lower the tariff on carrots despite the fact that none of these countries currently export carrots. Under the Korea-Chile FTA, tariffs for fresh carrots from Chile are 16.4 percent or 73 Korean won per kilogram (but not to exceed 22.3 percent). Under the ASEAN FTA, tariffs for fresh

Price Comparison of Imported Chinese Carrots vs. Domestic



carrots from the ten ASEAN member nations is 10 percent or 45 Korean won whichever is higher. Although there has been some mention of an FTA with China, the sheer volume of agricultural imports would significantly impact the Korean horticultural sector and for that reason, negotiations are not likely to begin any time soon.

SECTION IV. MARKET ACCESS

The Ministry of Agriculture and Forestry's (MAF) National Plant Quarantine Service (NPQS) is responsible for preventing the introduction of harmful weeds, pests and diseases originating from imported plants, fruits and vegetables. NPQS conducts pest risk analysis and determines the appropriate eradication methods for detected pests. In January 2006, MAF notified WTO (G/SPS/N/KOR/199) that enforcement ordinance of the Plant Protection Act would be modified as follows:

Living and fresh underground parts of betel nut palm, coconut, *Curcuma longa*, carrot, *Salanum nigrum*, *Dioscorea* spp. And *Pyrus* spp. will be added to the list of prohibited plants or plant products of Article 12 because of *Radopholus similis*.

Radopholus similis is the scientific name for the burrowing nematode. In the United States, this nematode tends to occur in Florida (banana and citrus), Hawaii and in Puerto Rico; however, carrots are considered a major host for this pest. According to the European and Mediterranean Plant Protection Organization (EPPO 2006), *radopholus similis* was eradicated in the California. I

1. Labeling Requirements

Packaged carrots will be subject to Korea's country of origin labeling laws. Carrots packed in a container, bag or box must have a country of origin label on the container, bag, or box with the appropriate Korean language label. All imported agricultural products are required to include the product name, producer name, manufacture date (packing date or packing year), net quantity of contents, and storage and handling instructions on the Korean language label.

2. Grading or Quality Standards

No grading or quality standards have been set for fresh carrots with the exception of organic carrots. For organic carrots, they must be certified by the National Agricultural Product Quality Management Service (NAQS) or its accredited certifying agents. USDA/NOP organic certification is not accepted by Korea for fresh produce.

3. Import Procedures and Testing Requirements

The Korea Customs Service (KCS), the Korea Food and Drug Administration (KFDA), and the National Plant Quarantine Service (NPQS) are the agencies involved in the import clearance process for fresh carrots. KCS is responsible for ensuring that all the necessary documentation is in place before the product is released from the bonded area. KCS and KFDA work within the same Electronic Data Interchange (EDI) system, which allows KFDA inspection results to be transmitted to KCS quickly, shortening the KCS clearance time. NPQS must clear fresh carrots before KCS will clear them.

The first shipment of fresh carrots by each U.S. supplier will be subject to a mandatory inspection including pesticide residue testing by the Korea Food and Drug Administration (KFDA). Once it passes the KFDA inspection, subsequent shipments from the same supplier will not be subject to mandatory laboratory inspections. In addition to KFDA's inspection,

fresh carrots are also subject to phytosanitary quarantine inspection by NPQS. NPQS will check for the presence of quarantine pests and if detected, take the necessary measures.

4. MRL Standards

KFDA establishes and enforces MRLs standards. CODEX values are the principal default levels when no KFDA MRLs have been established. This means that other tolerance levels, such as CODEX, etc., are not accepted when an MRL is established for a given pesticide in the Korean Food Code. In the absence of CODEX standards, then MRLs set for a similar crop group shall apply.

Korean MRL Standards for Fresh Carrots

Pesticide	PPM	Pesticide	PPM	Pesticide	PPM
2,4-Dichlorophenoxyacetic acid	0.1	EPN	0.1	Oxadixyl	0.1
Aldrin & Dieldrin	0.01	Ethalfuralin	0.05	Oxamyl	0.2
Azinphos-methyl	0.5	Ethionfencarb	5.0	Parathion	0.3
Bentazone	0.2	Etrimfos	0.2	Parathion-methyl	1.0
BHC	0.2	Fenamiphos	0.2	Pendimethalin	0.2
Cadusafos	0.05	Fenbutatin-oxide	2.0	Permethrin	0.1
Captan	2.0	Fenitrothion	0.2	Pirimicarb	2.0
Carbaryl(NAC)	0.5	Fenvalerate	0.05	Pirimiphos-methyl	0.5
Carbendazim	1.0	Fluazifop-butyl	2.0	Prometryn	0.5
Chinomethionat	0.5	Flucythrinate	0.5	Propineb	0.2
Chlorfenvinphos	0.4	Glufosinate-ammonium	0.2	Pyrazophos	0.2
Chlorothalonil	1.0	Glyphosate	0.2	Pyrethrins	1.0
Chlorpropham	0.1	Heptachlor	0.2	Sethoxydim	10.0
Chlorpyrifos	0.5	Linuron	1.0	Thiobencarb	0.2
Cyhalothrin	0.5	Malathion	0.5	Thiometon	0.05
Cypermethrin	0.05	Maleic hydrazide	25.0	Tralomethrin	0.5
DDT	0.2	Metalaxyl	0.05	Triazophos	0.5
Deltamethrin	0.01	Methomyl	0.2	Trichlorfon	0.05
Diazinon	0.5	Methoxychlor	14.0	Triflumizole	1.0
Dichlofluanid	15.0	Metribuzin	0.5	Trifluralin	1.0
Dichlorvos(DDVP)	0.3	Mevinphos	0.1		
Dicloran	10.0	Monocrotophos	0.05		
Dicofol	1.0	Myclobutanil	1.0		
Dimethoate	1.0	O-phenylphenol	10.0		
Endrin	0.01	Omethoate	0.01		

Source: Korea Food and Drug Administration (KFDA)

Korean MRL Standards for Dried Carrots

Pesticide	PPM
Azinphos-methyl	3.0
Captan	3.0

Source: Korea Food and Drug Administration (KFDA)

SECTION V. KEY CONTACTS AND FURTHER INFORMATION**U.S. Agricultural Trade Office**

Korean Address: Room 303, Leema Building
146-1, Susong-dong, Chongro-ku, Seoul, Korea
U.S. Mailing Address: U.S. Embassy Seoul, Unit 15550-ATO
APO, AP 96205-5550
Telephone: 822 397-4188 Fax: 822 720-7921
E-mail: atoseoul@fas.usda.gov Website: www.atoseoul.com

Agricultural Affairs Office

Korean Address: U.S. Embassy, 32, Sejong-ro
Chongro-ku, Seoul, Korea
U.S. Mailing Address: U.S. Embassy Seoul, Unit 15550-AGAFF
APO, AP 96205-5550
Telephone: 82-2 397-4297 Fax: 82-2 738-7147
E-mail: agseoul@fas.usda.gov

For further information about sanitary and phytosanitary requirements, please contact:

USDA, Animal Plant and Health Inspection Service (APHIS)

Korean Address: Room 303, Leema Building
146-1, Susong-dong, Chongro-ku, Seoul, Korea
U.S. Mailing Address: U.S. Embassy Seoul, Unit 15550-APHIS
APO, AP 96205-5550
Telephone: 82-2 725-5495 Fax: 82-2 725-5496
E-mail: george.a.ball@aphis.usda.gov
Website: www.aphis.usda.gov

U.S. Address: USDA, APHIS, PPO
4700 River Road, Unit 140
Riverdale, MD 20737
Telephone: 301-734-8262 Fax: 301-734-7639

For more information about the Korean market, please review the Exporter's Guide (KS7063) at <http://www.fas.usda.gov/gainfiles/200710/146292610.pdf> and the FAIRS Country Report (7053) at <http://www.fas.usda.gov/gainfiles/200708/146291900.pdf>. More Korea specific reports can be found at <http://www.fas.usda.gov/scriptsw/AttacheRep/default.asp>.

Additional information about fresh vegetables can be found at the Foreign Agricultural Service's Horticultural and Tropical Products Division homepage <http://www.fas.usda.gov/http/2007%20Fresh%20Vegetables.pdf>

General information about the Korean Market can be found on the Agricultural Trade Office Website at <http://www.atoseoul.com/> or about the Foreign Agricultural Service at <http://www.fas.usda.gov/>