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Two Years since the Effectuation of the Korea-US FTA: Impact and Challenges in the Agricultural Sector

Jeong Min-kook, Moon Han-pil, Ji Seong-tae,
Lee Hyun-keun, Nam Kyung-soo

1. Implementation of the Korea-US FTA and the Trade Trend
of Agricultural and Livestock Products 3
2. Changes in the Import of Key Items and Impact on the
Korean Domestic Market 15
3. Prospects and Challenges 26

KREI

Supervisor: Research Director, Park Seong-jae 02-3299-4238 seongjae@krei.re.kr
Contents enquiries: Research Fellow, Moon Han-pil 02-3299-4259 hanpil@krei.re.kr
Data enquiries: Won Dong-hwan 02-3299-4274 wondh@krei.re.kr

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◇ Abstract ◇

- **In the second year of the implementation of the Korea-US Free Trade Agreement (FTA) (from March 2013 to February 2014), the amount of imports of agricultural and livestock products was reduced by 20.2 percent (USD 7.51 billion → USD 5.99 billion) compared to the figure before the effectuation of the agreement, while the amount of exports of the products grew by 21.4 percent (USD 0.44 billion → USD 0.53 billion).**
 - The decrease in the imports of agricultural and livestock products from the US is attributed to the decline of production and export of corn in the US due to widespread drought in North America, which led Korea to import the products from the EU countries and Brazil instead.
 - In the second year of the implementation of the FTA, the imports of agricultural and livestock products, with the exception of grain, increased by 5.9 percent (USD 4.28 billion → USD 4.53 billion) compared to the figure before the effectuation.
 - The exports of agricultural and livestock products to the US grew, mostly focusing on fruit, vegetables and processed food including cigarettes, beverages, ramen, biscuits, bread and red pepper paste.
- **In the second year of the implementation of the FTA, the number of new items of the trade of agricultural and livestock products with the US increased slightly. In 2013, the import utilization rate and export utilization rate increased by 24 percent point (to 74%) and 11 percent point (to 46%), respectively.**
- **In the second year of the implementation, the amount of imports of fresh fruit including oranges, cherries, pomegranates and grapes from the US, to which highly reduced tariffs were applied in the early stage of the implementation of the FTA, increased by 38.5 percent, along with the rise of the domestic market share of these products.**
 - In spring and summer season, in which fresh fruit is intensively imported from the US, the domestic market share of American fresh fruit rose from 6 percent to 7.1 percent during the two years of the implementation of the FTA.
 - The increase of imports of American fresh fruit affected the pattern of the domestic consumption and production structure.
- **The amount of imports of American livestock products decreased by 12 percent, and the domestic market share of American meat also dropped from 10.4 percent to 7.2 percent due to the increase of the supply of domestic beef and pork and the import diversion effect (chicken).**
 - The import volume of American beef was reduced along with the decrease of its import proportion (37.3% → 33.7%), due to the rise of the import unit price of American beef.
 - The import volume of American pork declined due to the increase of the production of domestic pork, while its import proportion increased (31.4% → 34.7%).
 - The import proportion of American chicken decreased (66.1% → 35.8%) due to the increase of Brazilian chicken with stronger price competitiveness.
 - The amount of imports of American dairy products grew along with their import proportion (23.7% → 33.3%) due to the increase of the Tariff Rate Quotas (TRQ) amount of American products.
- **As the tariffs on American products were not highly reduced in the early stage of the FTA, the implementation of the agreement seemed to have limited effect on the increase of imports. The FTA rather affected the conditions of the Korean and American markets in the short term, leading to the decrease of imports of American agricultural and livestock products.**
 - However, as domestic and foreign conditions will be stabilized and tariffs will be gradually reduced year by year, the effect of the FTA on the domestic agricultural and livestock markets will emerge.
 - In order to minimize the damage to the agricultural and livestock sector, the authorities should continue to revise and complement the current countermeasures, promote differentiation strategies for domestic markets, strengthen food safety management, establish the support framework for exports, and enhance the export utilization rate, based on communication with all stakeholders including farmers.

1. Implementation of the Korea-US FTA and the Trade Trend of Agricultural and Livestock Products¹⁾

1.1. Import of Agricultural and Livestock Products from the US

□ **Since the effectuation of the Korea-US FTA, the imports of grain from the US have been significantly reduced, leading to the decrease of the entire imports of agricultural and livestock products for the two consecutive years.**

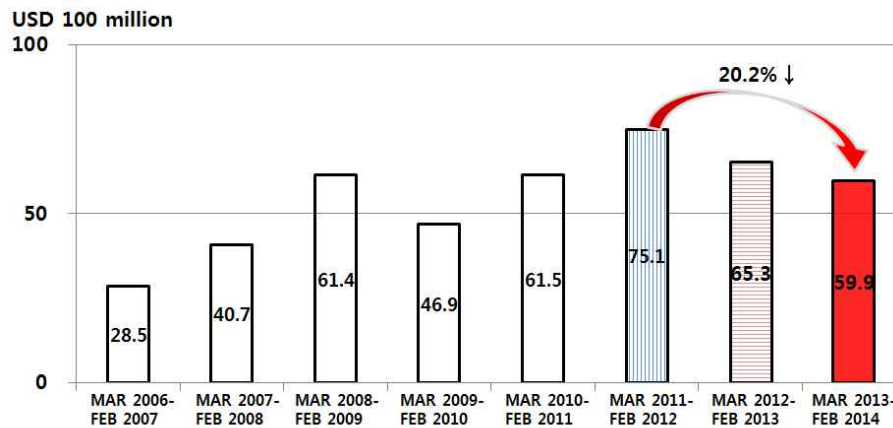
- In the second year of the implementation of the FTA (from March 2013 to February 2014), the imports of American agricultural and livestock products²⁾ declined by 20.2 percent compared to the figure before the effectuation and by 8.2 percent compared to the figure in the first year (from March 2011 to February 2012).
 - USD 7.51 billion (before the effectuation) → USD 6.53 billion (in the first year) → USD 5.99 billion (in the second year)
- The import volume of American agricultural and livestock products has been on the decline each year, and accordingly, the proportion of American products in the entire imports of agricultural and livestock products³⁾ has also dropped from 25.9 percent in 2011 to 19.6 percent in 2013.
 - The import proportion of American products: 25.9% (2011) → 22.4% (2012) → 19.6% (2013)

1) “Agricultural and livestock products” in this report include all kinds of agricultural, livestock and forest products. Although the Korea-US FTA entered into force on March 15, 2012, the trade statistics are aggregated by annual data from each March 1 to February 28 of the following year based on the standards of AG Code (2,208 HS codes). Also, “before the effectuation” indicates the period from March 2011 to February 2012 before the FTA took effect.

2) “American agricultural and livestock products” in this report indicate agricultural and livestock products imported from the US.

3) The proportion of American products in the entire imports of agricultural and livestock products is calculated based on the amount of imports from January 1 to December 31 each year.

Figure 1. Changes in the Imports of Agricultural and Livestock Products from the US



Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

- **Despite the implementation of the FTA, the imports of American grain decreased due to the poor harvest of corn caused by the draught in the North American region.**
 - Because of an unusual weather phenomenon (draught) in North America in 2012, the corn output in the US declined by 14.5 percent from the figure in a normal year and by 12.8 percent from the previous year, leading to the decrease of the export volume by 61.6 percent from that of normal year and by 52.4 percent from the previous year.
 - Corn output in the US: 310 million tons (2011-2012) → 270 million tons (2012-2013)
 - Export volume of corn in the US: 38.43 million tons (2011-2012) → 18.23 million tons (2012-2013)
 - In 2013, the imports of American products were reduced as the import source changed to EU countries and Brazil due to the weakened price competitiveness of American corn and the dispute over GMO crops.
 - In the second year of the implementation of the FTA, as a result, the imports of American grain were reduced by 54.7 percent from the figure before the effectuation and by 33.3 percent from that of the previous year.

- r.⁴⁾ The amount of imports of American corn, which used to be imported in the largest volume, significantly decreased by 89 percent from two years ago and by 65.2 percent from the first year of the effectuation.⁵⁾
- Imports of American grain: USD 3.23 billion (before the effectuation) → USD 2.19 billion (in the first year) → USD 1.46 billion (in the second year)
 - Imports of American corn: USD 1.94 billion (before the effectuation) → USD 0.61 billion (in the first year) → USD 0.21 billion (in the second year)

Table 1. Changes in the Imports of American Agricultural and Livestock Products by Item

Unit: a million USD, %

Classification	Before the effectuation of the FTA (MAR 2011-FEB 2012) (A)	Implementation after the effectuation of the FTA		Increase/Decrease rate	
		First year (MAR 2012-FEB 2013) (B)	Second year (MAR 2013-FEB 2014) (C)	Second year/ Before the effectuation (C/A)	Second year/ First year (C/B)
Total	7,507	6,527	5,989	-20.2	-8.2
Agricultural products	5,149	4,276	3,654	-29.0	-14.5
- Grain	3,231	2,192	1,462	-54.7	-33.3
- Fruit/Vegetables	454	596	614	35.2	3.1
- Processed food	1,463	1,488	1,577	7.8	6.0
Livestock products	1,709	1,428	1,504	-12.0	5.4
Forest products	649	823	831	28.0	1.0

Note: "Grain" is a subtotal of cereal, pulses, root and tuber crops, starch, bottle gourds and oil seeds; "Fruit/Vegetables" is a subtotal of fruit, vegetables, flowers, mushrooms (agricultural products) and other live plants; and "Processed food" is a subtotal of agricultural products with the exception of grain, fruit and vegetables.

Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

- 4) As a result, the proportion of grains in the entire amount of imports of American agricultural and livestock products decreased from 43% to 33.6% in the first year and to 24.4% in the second year.
- 5) In case of corns that are imported from the US in the largest volume, 328% of the current tariff will be eliminated by stage for seven years and a non-tariff quota is applied within the safeguard system. In the second year of the implementation, less than 3,994 tons were granted non-tariff; and 40% of tariff and 572% of tariff were imposed on the volume less than 6,390 tons and more than 6,390 tons, respectively. In 2013, 74% of other corn imports (8,636 tons in total) were granted generally low tariff. Meanwhile, the decrease of corn production in the US led to the increase of import unit price of corn. Accordingly, the import source was changed to Brazil and EU countries, and the proportion of American corn in the entire import amount also dropped from 77.1% in 2011 to 35.6% in 2012 and to 2.5% in 2013.

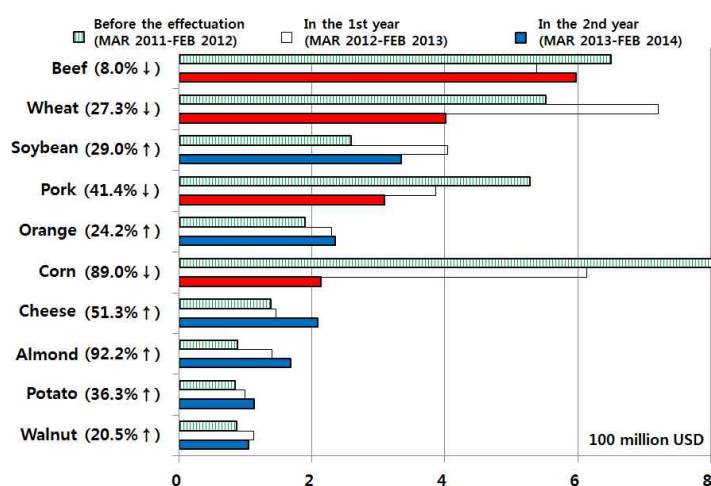
□ The imports of grain and livestock products decreased while the imports of fruit and processed food increased.

- In the second year, the imports of agricultural and livestock products except grain grew by 5.9 percent from the figure before the effectuation and 4.4 percent from the previous year.
 - The imports of American fruit and vegetables including oranges, cherries, grapes and lemons, to which relatively low tariffs were applied in the early stage of the implementation of the FTA, increased by 35.2 percent.
 - The imports of processed food and forest products increased by 7.8 percent and 28 percent, respectively.⁶⁾
 - On the contrary, the imports of American livestock products fell by 12 percent due to the reduced production of beef in the US, change of import source of chicken and the increase of supply of domestic meat.

- The agricultural and livestock product items, which were imported in an increased volume in the second year of the implementation, include almonds, soybeans, cheese, oranges, cherries, potatoes and walnuts.
 - Soybeans are used largely for feed and processed food, and under the Uruguay Round Agreements, low tariff or a TRQ with consideration for domestic demand has already been applied to this item.
 - The demand for the imports of oranges and potatoes for chips with seasonal duties or a TRQ grew in the season in which domestic products are not produced.
 - Cherries, pomegranates, almonds, walnuts, potatoes for fast food, and cheese are the items that are not produced within Korea or lack domestic supply.
 - In contrast, the imports of the items (beef, pork, chicken, etc.), which are in a fierce competition in the domestic market or now imported from different countries other than the US, decreased after the effectuation of the FTA.

6) The amount of imports of processed food and forest products increased, focusing on composite food preparations (28.0%), feed roots (26.4%), formula feed (69.2%), ethyl alcohol (208.8%), cardboard (451.4%), almond (92.2%), walnut (20.5%) and other forest products (82.9%).

Figure 2. Changes in the Imports of Major Agricultural and Livestock Products from the US⁷⁾



Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

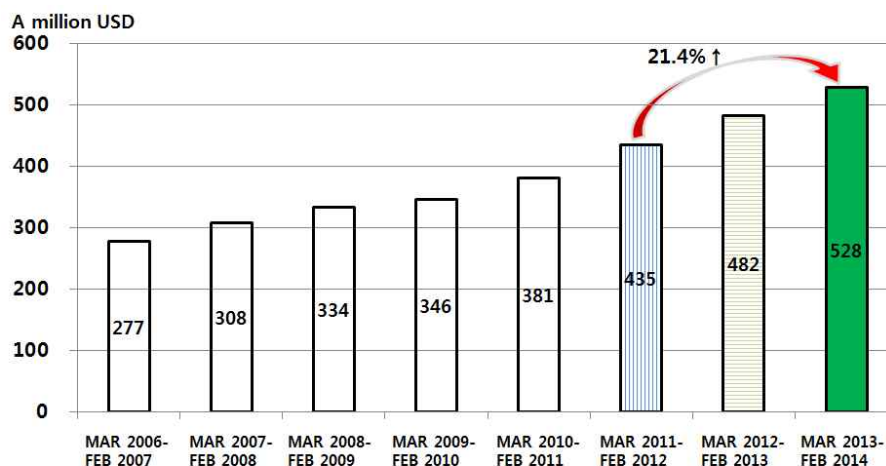
1.2. Export of Agricultural and Livestock Products to the US

□ Since the effectuation of the Korea-US FTA, the export of agricultural and livestock products has grown for the two consecutive years.

- In the second year of the implementation of the FTA (from March 2013 to February 2014), the exports of agricultural and livestock products to the US increased by 21.4 percent from the figure before the effectuation and by 9.5 percent from the first year.
 - USD 0.44 billion (before the effectuation) → USD 0.48 billion (in the first year) → USD 0.53 billion (in the second year)
- The proportion of the exports to the US in the entire exports of agricultural and livestock products also increased from 7.6 percent in 2011 to 8.8 percent in 2013.
 - The proportion of the exports to the US: 7.6% (2011) → 8.2% (2012) → 8.8% (2013)

7) See Appendix 1 for the changes in the amount and volume of imports of the top 36 items before and after the effectuation of the FTA.

Figure 3. Changes in the Exports of Agricultural and Livestock Products to the US



Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

- In the second year of the FTA implementation, the export volume of processed food to the US increased by 15.2 percent from the figure before the effectuation, along with the increase of the export volume of fruit and vegetables by 13 percent.
 - Exports of processed food: USD 0.34 billion (before the effectuation) → USD 0.36 billion (in the first year) → USD 0.39 billion (in the second year)
 - Exports of fruit and vegetables: USD 64 million (before the effectuation) → USD 70 million (in the first year) → USD 72 million (in the second year)
 - The exports of livestock and forest products to the US, which are traded in a relatively small volume, recorded a high growth rate of 113.2 percent and 131.3 percent, respectively, compared to the figures before the effectuation.

Table 2. Changes in the Exports of Agricultural and Livestock Products to the US by Item

Unit: a million USD, %

Classification	Before the effectuation of the FTA (MAR 2011-FEB 2012) (A)	Implementation after the effectuation of the FTA		Increase/Decrease rate	
		First year (MAR 2012-FEB 2013) (B)	Second year (MAR 2013-FEB 2014) (C)	Second year/ Before the effectuation (C/A)	Second year/ First year (C/B)
Agricultural products	408	437	469	14.8	7.3
- Grain	9	9	10	12.9	4.9
- Fruit/Vegetables	64	70	72	13.0	3.6
- Processed food	336	358	387	15.2	8.1
Livestock products	16	29	34	113.2	18.9
Forest products	11	17	25	131.3	51.0
Total	435	482	528	21.4	9.5

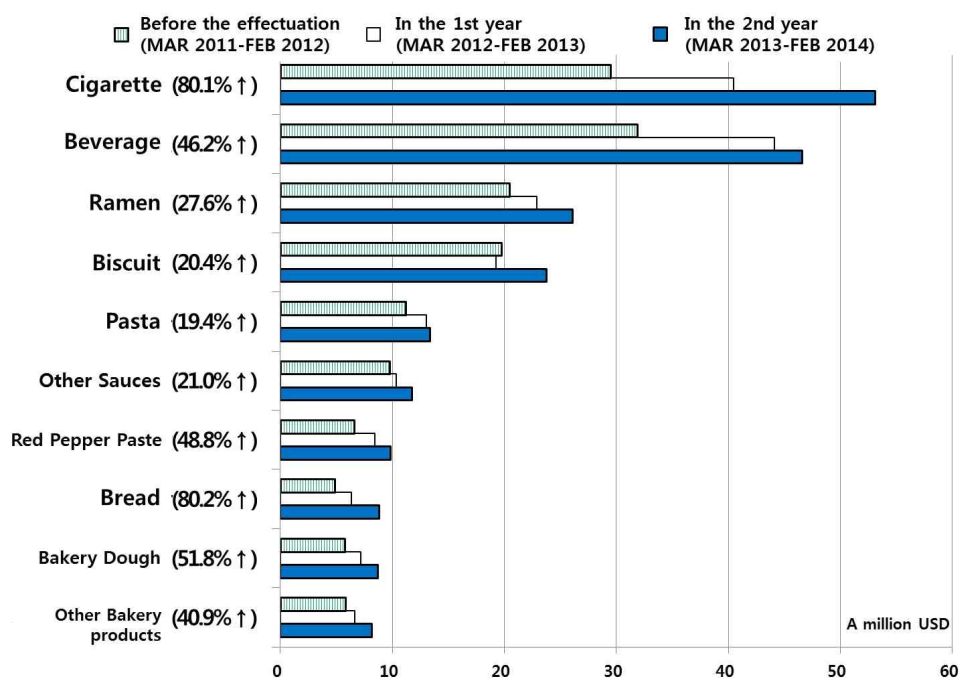
Note: "Grain" is a subtotal of cereal, pulses, root and tuber crops, starch, bottle gourds and oil seeds; "Fruit/Vegetables" is a subtotal of fruit, vegetables, flowers, mushrooms (agricultural products) and other live plants; and "Processed food" is a subtotal of agricultural products with the exception of grain, fruit and vegetables.

Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

- The exports of agricultural and livestock products to the US grew, mostly focusing on cigarettes, beverages, ramen, biscuits, bread and red pepper paste.
 - These items are mostly processed food which has already been included in the major export item list even before the effectuation of the FTA, and the exports of these items have been on the steady increase.

- On the contrary, the amount of imports of fresh agri-food including honey, red ginseng, orchid, walnuts, apples and daikon slightly decreased after the effectuation of the FTA.

Figure 4. Changes in the Exports of Major Agricultural and Livestock Products to the US⁸⁾



Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

1.3. Degrees of Intensity and Diversity of the Trade of Agricultural and Livestock Products with the US⁹⁾

□ The import volume of existing items significantly decreased while the number of import items slightly increased.

- The amount of imports of 403 existing items, which had been imported from the US before the effectuation of the FTA, decreased by 20.4 percent in the second year of the implementation (due to the rapid

8) See Appendix 2 for the changes in the amount and volume of exports of the top 36 items before and after the effectuation of the FTA.

9) In this report, “Intensity” indicates the expansion of trade volume of the existing items, and “Diversity” indicates the emergence level of new trade items.

decline of the imports of corn), while 43 items (worth USD 15 million) have been added to the imported item list.

- Existing import items: USD 7.51 billion (before the effectuation)
→ USD 5.97 billion (in the second year, decreased by 20.4%)
- The new items include tapioca, adzuki bean, cranberries, roses, raw silk, palm wax, jujubes, rawhide of alligators, and parent stock (duck).

Table 3. The Implementation of the Korea-US FTA and Changes in the Degrees of Intensity and Diversity of the Trade of Agricultural and Livestock Products with the US

Unit: numbers, a million USD

Classification	Import						Export					
	Degree of intensity (existing items)			Degree of diversity (new items)			Degree of intensity (existing items)			Degree of diversity (new items)		
	No. of items	Amount		No. of items	Amount		No. of items	Amount		No. of items	Amount	
		Before the effectuation	Second year		Before the effectuation	Second year		Before the effectuation	Second year		Before the effectuation	Second year
Grain	55	3,231	1,458	7	0	4	25	8.6	8.9	8	0	0.8
Fruit/Vegetables	54	454	606	9	0	8	47	64	72	14	0	0.2
Processed food	168	1,462	1,577	9	0	0.1	132	332	382	20	0	0.3
Livestock products	62	1,709	1,502	10	0	2	24	19	37	4	0	0.9
Forest products	64	649	831	8	0	0.2	43	11	25	9	0	0.3
Total	403	7,507	5,974	43	0	15	271	435	526	55	0	2

Note 1) The changes in the trade diversity and intensity are presented based on the standard of AG Code.

Note 2) “Grain” is a subtotal of cereal, pulses, root and tuber crops, starch, bottle gourds and oil seeds; “Fruit/Vegetables” is a subtotal of fruit, vegetables, flowers, mushrooms (agricultural products) and other live plants; and “Processed food” is a subtotal of agricultural products with the exception of grain, fruit and vegetables.

Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

□ The exports of existing items increased substantially and new items that are traded in a small volume have actively stepped into the US market.

- The amount of exports of 271 existing items, which had been exported to the US before the effectuation of the FTA, increased by 20.9 percent in the second year of the implementation, and 55 items (worth USD 2 million) have been newly exported.
 - Existing export items: USD 0.44 billion (before the effectuation)
→ USD 0.53 billion (in the second year, increased by 20.9%)
 - The new items include button mushroom, spring onion, horseradish, aloe juice, fresh ginseng, camellia oil and codonopsis lanceolata.

1.4. Implementation of the Korea-US FTA and the Import and Export Utilization Rates under the FTA¹⁰⁾

□ The import utilization rate of American agricultural and livestock products under the FTA rose from 50 percent in 2012 to 74 percent in 2013.

- The amount of imports of the FTA items in the entire imports of American agricultural and livestock products reached USD 5.35 billion, and in particular, the amount of imports earned by utilizing the FTA was USD 3.95 billion.
 - Among the top 35 items on the list of imports from the US, 22 items recorded over 80 percent of the FTA import utilization rate in 2013, up from 8 items in 2012.
 - Among the items with an import volume worth over USD 100 million, those with 90 percent of the FTA import utilization rate in 2013 include beef, wheat, pork, cheese, almond and walnut.

□ The FTA utilization rate of exports of American agricultural and livestock products to the US increased from 35 percent in 2012 to 46 percent in 2013.¹¹⁾

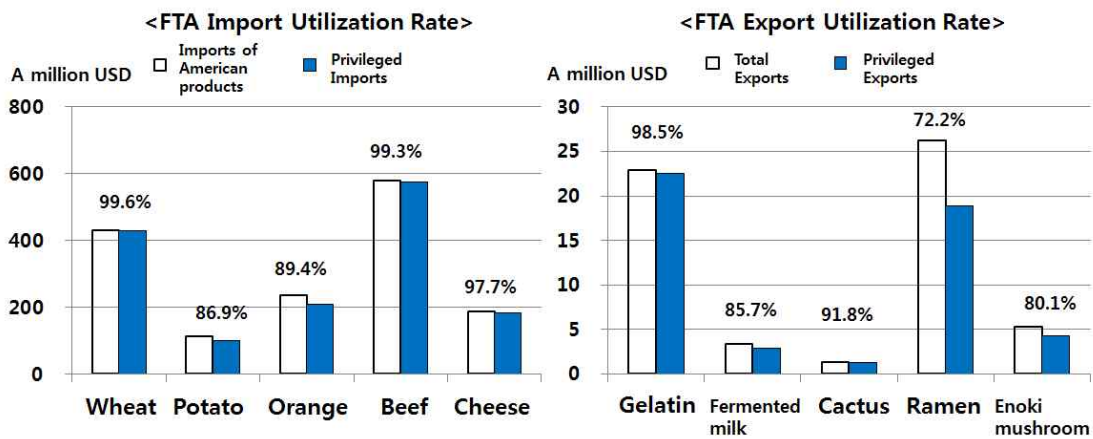
- The amount of exports of the FTA items in the entire exports of agricultural and livestock products to the US reached USD 0.52 billion, and in particular, the amount of exports earned by utilizing the FTA was USD 0.24 billion.

10) The import/export utilization rate indicates the amount of imports/exports of the FTA items which are imported or exported with privileged tariff under the agreement by attaching certificates of origin. See Appendix 1 or 2 for details.

11) In the agricultural and livestock product trade with the US, the FTA import utilization rate is higher than the export utilization rate because American products are granted more tariff benefits while the proportion of foreign raw materials for processing trade-oriented domestic products is very high. Moreover, it is challenging for small domestic exporters to respond efficiently to non-tariff barriers in the process of customs clearance including the certification of origin.

- Among the top 35 items on the list of exports to the US, 7 items recorded over 70 percent of the FTA export utilization rate in 2013, up from 3 items in 2012.
- Among the items with an export volume worth over USD 10 million, those with 70 percent of the FTA export utilization rate in 2013 include ramen, gelatin, other types of sauce and grain products.

Figure 5. The Korea-US FTA Utilization Rate of Major Agricultural and Livestock Products in 2013



2. Changes in the Import of Key Items and Impact on the Korean Domestic Market

2.1. Increase in the Imports of American Fruit and its Impact

The implementation of the Korea-US FTA boosted the imports of American fresh fruit.

- In the second year of the implementation of the FTA, the amount of imports of oranges, cherries and grapes, to which highly reduced tariffs were applied in the early stage of the implementation (oranges: 50% → 25%; cherries: 24% → 0%; grapes: 45% → 18%), increased by 7.7 percent, 92.4 percent and 93 percent, respectively.
 - Fresh oranges: USD 170 million (before the effectuation) → USD 190 million (in the second year)
 - Fresh cherries: USD 50 million (before the effectuation) → USD 90 million (in the second year)
 - Fresh grapes: USD 18.15 million (before the effectuation) → USD 35.02 million (in the second year)
- The imports of lemons, pomegranates and grapefruits, which have no alternatives in the domestic market, have been on the rise since the effectuation of the FTA due to the tariff reduction and the increase of domestic demand.
 - In particular, the amount of imports of lemons and pomegranates increased by 59.8 percent and 151 percent, respectively, compared to the amount before the effectuation, as the awareness of these fruit has increased as health functional food and favorite food.

Table 4. Trend of Imports of American Fresh Fruit

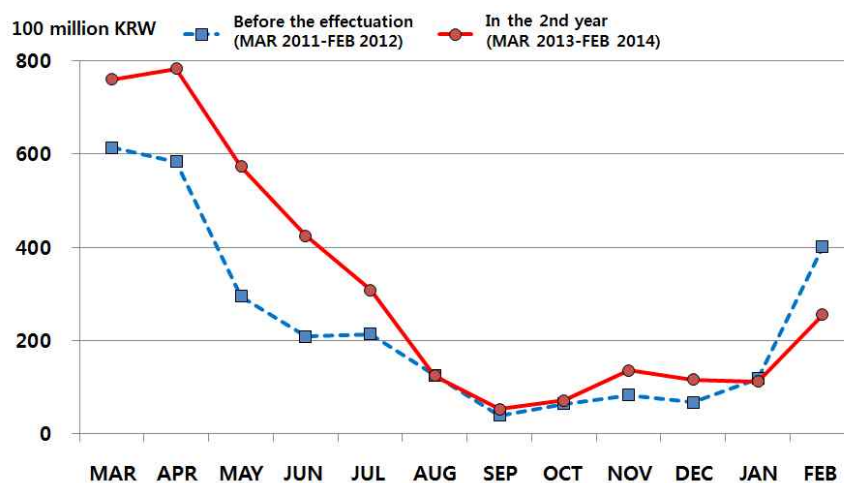
Unit: a million USD, %

Classification	Before the effectuation of the FTA (MAR 2011-FEB 2012) (A)	Implementation after the effectuation of the FTA		Increase/Decrease rate	
		First year (MAR 2012-FEB 2013) (B)	Second year (MAR 2013-FEB 2014) (C)	Second year/ Before the effectuation (C/A)	Second year/ First year (C/B)
Orange	173.5	195.6	186.9	7.7	-4.4
Cherry	45.5	80.9	87.51	92.4	8.1
Grape	18.2	27.8	35.0	93.0	25.8
Pomegranate	15.1	22.9	24.2	59.8	5.5
Lemon	9.5	15.8	23.8	151.0	50.6
Grapefruit	11.0	12.1	12.4	12.6	2.8
Total	272.8	355.1	369.8	35.6	4.1

Note: “Grape” includes raisins, and “Pomegranate” is presented based on the standard of HS0810.90.9000. Other American fresh fruits include cranberry, avocado and melon, but the import volume of these fruits is very small.

Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

Figure 6. Monthly Trend of Imports of American Fruit



Source: GTIS-GTA

□ **American fresh fruit is imported mostly in spring and summer, and the market share of American products in the domestic market also increases in these seasons.**

- The proportion of American products in the amount of the entire imports of fresh fruit increased from 32.2 percent in 2011 to 36.4 percent in 2013.
 - American oranges and cherries are imported from December to May and from May to August, respectively, leading to the increase of imports of fruit after the effectuation of the FTA.
 - ※ Due to the increase of the imports of oranges, the proportion of American products in the entire imports of fresh fruit in spring grew from 40.5 percent to 44.2 percent.
 - ※ The proportion of the imports of American products in summer, including cherries and lemons, also increased from 29.1 percent to 36.7 percent.
- Since the effectuation of the FTA, the domestic market share of American fresh fruit in spring (March-May) and summer (June-August) has grown by 1.2 percent point and 1 percent point, respectively.
 - Domestic market share of American fruit in spring: 7.9% (2011) → 9.1% (2013)
 - Domestic market share of American fruit in summer: 3.6% (2011) → 4.6% (2013)

Table 5. Changes in the Proportion of American Fresh Fruit and its Domestic Market Share

Classification	Amount of the entire supply of fruit (a billion KRW)						Proportion of American products in the entire amount of imports (%)		Domestic market share of American products (%)	
	Amount of imports				Amount of domestic supply					
	American products						2011	2013	2011	2013
	2011	2013	2011	2013	2011	2013	2011	2013	2011	2013
Spring	149	211	369	478	1,530	1,834	40.5	44.2	7.9	9.1
Summer	55	86	188	233	1,334	1,618	29.1	36.7	3.6	4.6
Fall	19	26	138	141	1,286	1,940	13.6	18.4	1.3	1.2
Winter	45	47	135	165	1,489	2,437	33.1	28.5	2.8	1.8
Total	267	370	830	1,018	5,640	7,829	32.2	36.4	4.1	4.2

Note 1) The calculation of (monthly amount of imports by item)x(monthly exchange rate) is applied to the amount of imported fresh fruit consumption.

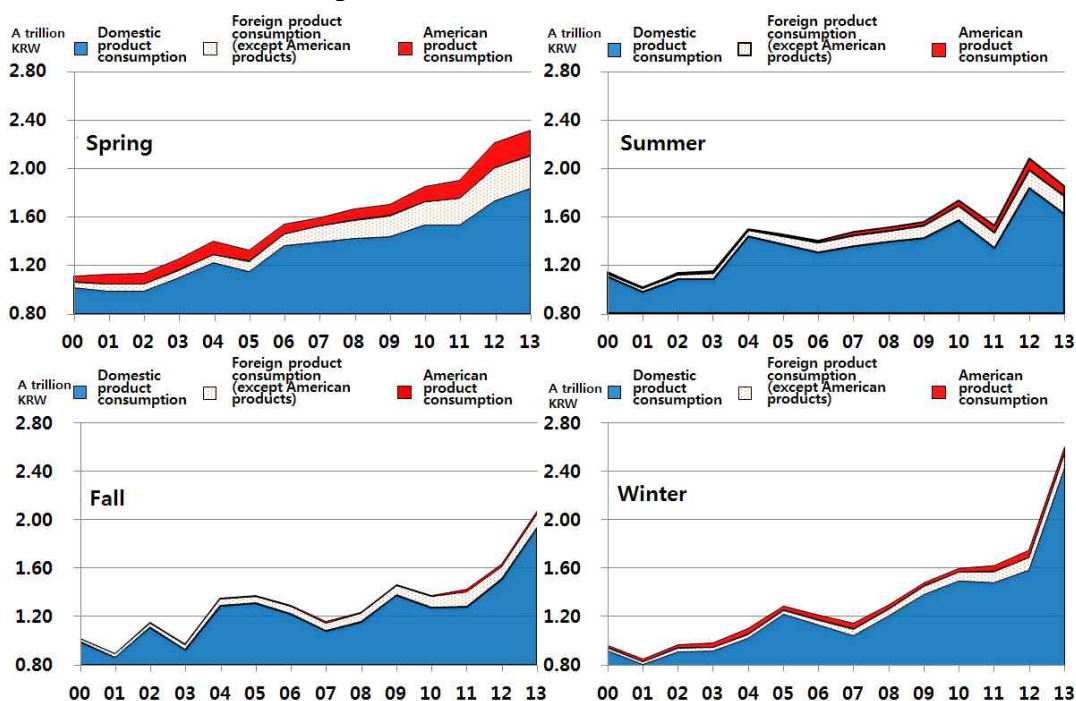
2) The calculation of (annual amount of supply by item)x(proportion of monthly shipments by item at Garak Market) is applied to the monthly amount of domestic fruit consumption (12 items including apples).

Source: GTIS-GTA, Statistics Korea, Seoul Agro-Fisheries & Food Corporation, the Bank of Korea

□ Although the imports of American fruit in spring and summer increased, the average annual domestic market share of American products has remained at the same level due to the increase of supply and demand of domestic fruit.

- In 2013, the domestic market share of American fruit was 4.2 percent, a similar percentage to that of 2011 (4.1%), down by 0.8 percent point from 2012.
- Domestic market share of American fresh fruit: 4.1% (2011) → 5.0 (2012) → 4.2 (2013)

Figure 7. Seasonal Consumption Trend of Fresh Fruit in Korea



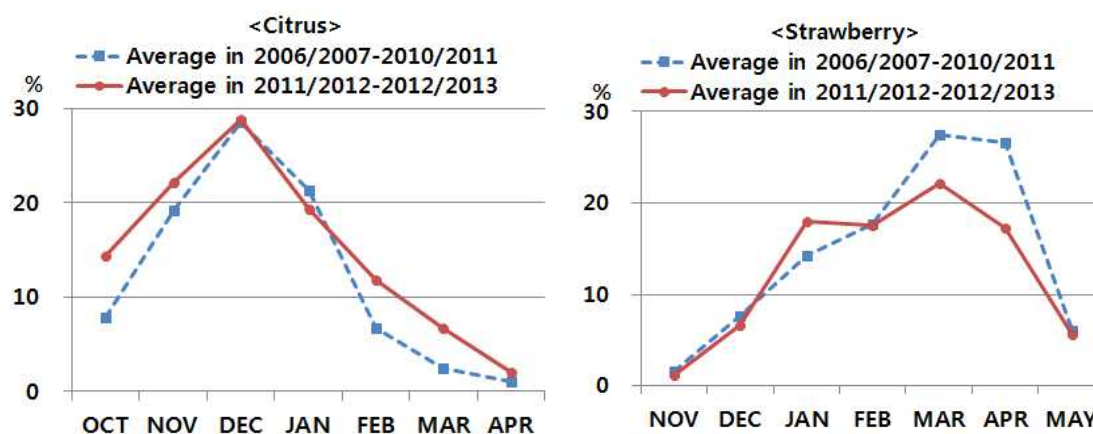
Note/Source: As described in the Table 5

□ Although the imports of American fruit have been on the rise since the effectuation of the FTA, there has been no specific effect on the domestic market due to the increase in the domestic consumption.

- In 2013, the consumption volume of domestic fruit increased by 38.8 percent compared to that of 2011.

- However, the increase of imports of American fresh fruit has affected the pattern of domestic consumption and the production structure of fruit and vegetables.
 - As the import of American fruit (orange) and the shipment of several types of domestic fruit and vegetables (citrus, strawberry, etc.) occur in the same period, domestic farms have attempted to change the production structure including the selection of variety and the period of shipment.
 - ※ In terms of citrus, which will be likely to be in competition with American oranges, farms and authorities have tried to modernize the current production facilities as a part of FTA investment and loan projects, enhance the quality of products and diversify the variety of crops to meet the preference of consumers.
 - ※ As the imports of American oranges and the shipment of citrus, strawberry and other domestic fruit occur in the same period, the shipment of domestic products tends to be brought forwarded or dispersed.

Figure 8. Changes in the Proportion of Monthly Shipment of Domestic Citrus and Strawberry



Note: The proportions of monthly shipment of citrus and strawberry are presented based on the trade performance record of Garak Market (a wholesale market of agro-fishery products).

Source: Korea Agro-Fisheries & Food Trade Corporation

2.2. Imports of American Livestock Products and its Impact

□ **In the second year of the implementation of the FTA, the amount of imports of American livestock products decreased by 12 percent from the figure before the effectuation.**

- The items with decreased amount of imports include pork (41.4%), chicken (46.1%), beef (8.0%), modified milk powder (34.5%) and turkey (28.8%).
- On the other hand, the imports of cheese, powdered skim milk, whey, other processed livestock products, egg white and honey increased by 51.3 percent, 583.4 percent, 27.1 percent, 8 percent, 20 percent and 78 percent, respectively, compared to the figure before the effectuation.

Table 7. Import Trend of American Livestock Products

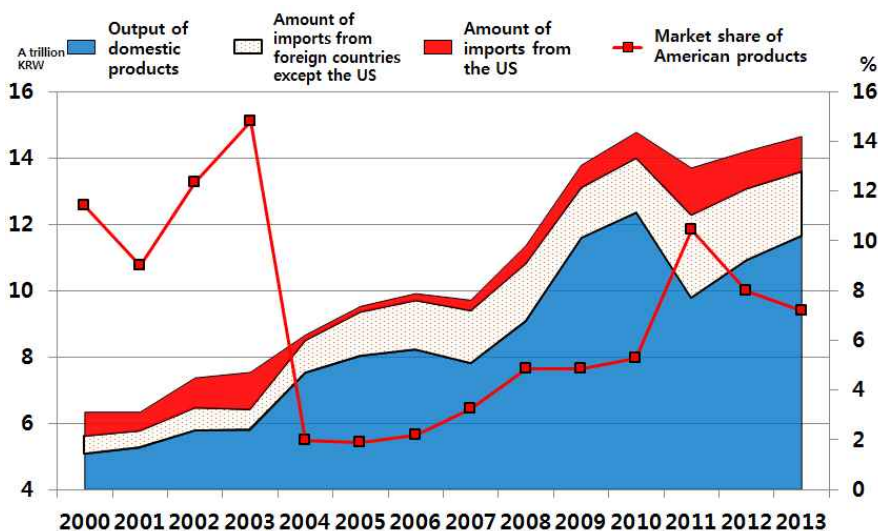
Unit: a million USD, %

Classification	Before the effectuation of the FTA (MAR 2011-FEB 2012) (A)	Implementation after the effectuation of the FTA		Increase/Decrease rate	
		First year (MAR 2012-FEB 2013) (B)	Second year (MAR 2013-FEB 2014) (C)	Second year/ Before the effectuation (C/A)	Second year/ First year (C/B)
Beef	649	538	597	-8.0	11.1
Pork	528	386	310	-41.4	-19.8
Cheese	138	146	209	51.3	42.8
Chicken	133	83	72	-46.1	-13.8
Powdered skim milk	4	6	26	583.4	322.3
Whey	17	24	22	27.1	-11.4

Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

- **The market share of American meat, which had significantly increased due to the outbreak of food-and-mouth disease (FMD) in Korea in 2010, dropped after the effectuation of the FTA.**
- The market share of American meat was on the steady rise following the renewal of the import of American beef in 2008, and rapidly increased in 2011 due to the outbreak of FMD in Korea in late 2010.
 - However, despite the tariff reduction following the effectuation of the FTA, the imports of American meat have been on the decline due to the increase of domestic meat production and stock of imported meat and the outbreak of BSE in the US.
 - The domestic market share of American meat dropped due to the decrease of imports of meat from the US.
 - ※ Domestic market share of American meat: 10.4% (2011) → 8.0% (2012) → 7.2% (2013)

Figure 9. Changes in Domestic Market Share of American Livestock Products (Meat)



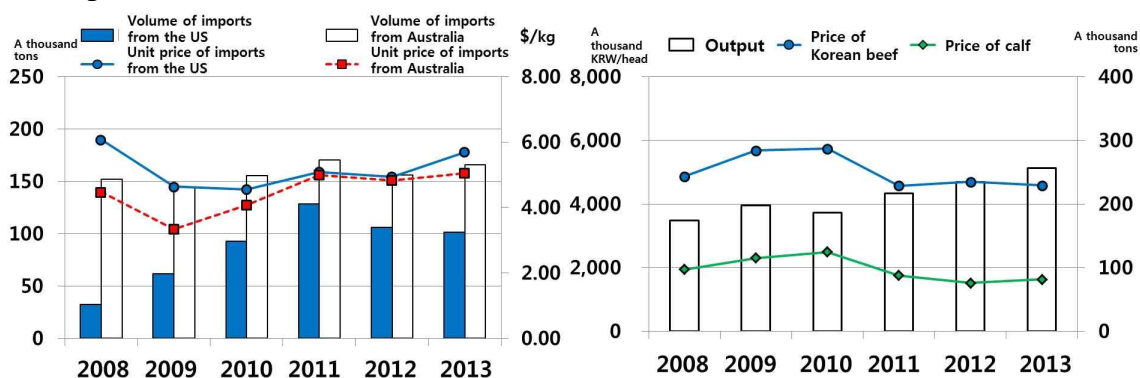
Source: GTIS-GTA, Statistics Korea, KREI Agricultural Outlook 2013

□ **In the second year of the implementation of the FTA, the amount and proportion of imports of American beef decreased due to the decline of beef production in the US and the increase of supply in Korea.**

- The volume and proportion of imports of American beef declined due to the decrease of the beef production and the rise of price in the US.
 - In the second year of the implementation, the import volume of American beef decreased to 102,000 tons, down by 20.4 percent from the figure before the effectuation. The amount of volume also decreased by 8 percent.
 - ※ Import unit price of American products: \$5.08/kg (2011) → \$4.94/kg (2012) → \$5.70/kg (2013)
 - ※ Import unit price of Australian products: \$4.99/kg (2011) → \$4.83/kg (2012) → \$5.05/kg (2013)
 - ※ Proportion of imported American products: 37.3% (2011) → 35.4% (2012) → 33.7% (2013)
 - ※ Proportion of imported Australian products: 49.4% (2011) → 52.1% (2012) → 55.1% (2013)

- The wholesale price of Korean beef and the imports of foreign beef decreased due to the increase of the production in Korea, and accordingly, the self-sufficiency rate of domestic beef products increased.
 - The wholesale price of beef: KRW 4.58 million/600kg (2011) → 4.70 (2012) → 4.59 (2013)
 - Self-sufficiency rate: 42.8% (2011) → 48% (2012) → 50.2% (2013)

Figure 10. Import Volume and Unit Price of Beef by Country of Origin and the Output and Price of Domestic Beef

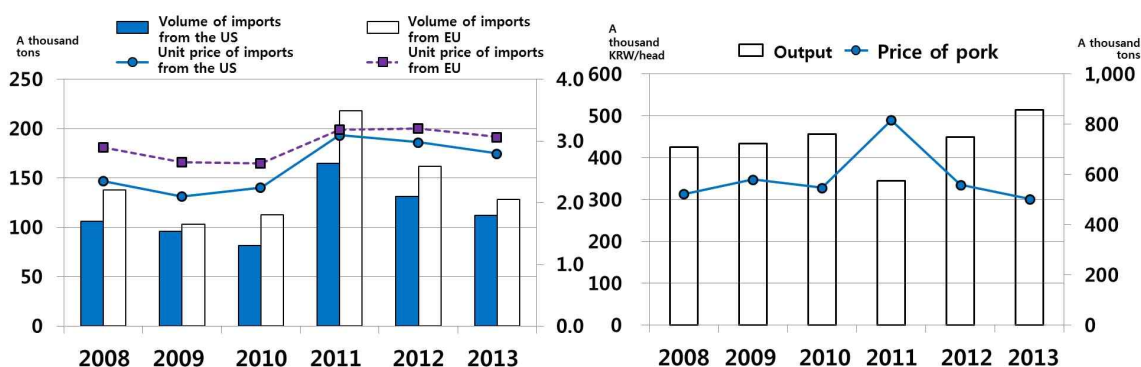


Source: GTIS-GTA, eKAPEPIA, National Agricultural Cooperative Federation (NACF), KREI Agricultural Outlook 2014

□ **After the FTA implementation, the imports of American pork dropped due to the increase of domestic supply.**

- Despite the FTA effectuation and the reduction of import unit price, the imports and the price of foreign pork decreased due to the increase of domestic production.
 - From 2011 to 2012, the imports with quota tariff rapidly increased due to the outbreak of FMD in late 2010.
 - The import volume of American pork decreased due to the base effect of imports with quota tariff. However, its proportion was on the rise as the imports of other foreign pork products decreased more significantly.
 - In the second year of the implementation of the FTA, the import volume of American pork was reduced to 109,000 tons by 35 percent from the figure before the effectuation. The amount of imports decreased by 46.4 percent.
 - ※ Import proportion of American pork: 31.4% (2011) → 32.6% (2012) → 34.8% (2013)
 - ※ Import proportion of EU pork: 41.4% (2011) → 39.9% (2012) → 39.6% (2013)
 - ※ The wholesale price of pork: KRW 490,000/110kg (2011) → 335 (2012) → 301 (2013)

Figure 11. Import Volume and Unit Price of Pork by Country of Origin and the Output and Price of Domestic Pork



Source: GTIS-GTA, eKAPEPIA, National Agricultural Cooperative Federation (NACF), KREI Agricultural Outlook 2014

□ **The imports of American chicken declined due to the increase of imports of Brazilian chicken with stronger price competitiveness.**

○ Despite the FTA implementation and tariff reduction, the proportion of imports of American chicken significantly decreased due to its weak price competitiveness compared to Brazilian products.

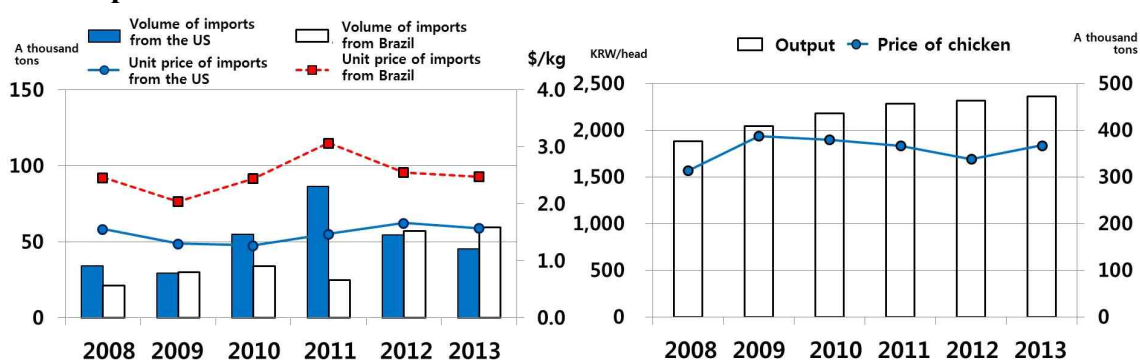
- In Korea, Brazilian chicken has much stronger price competitiveness compared to American products since Brazilian products are imported and consumed in the form of dressed chicken.

- In the second year, the import volume of American chicken decreased (to 46,000 tons) by 46.7 percent from the figure before the effectuation.

※ Import proportion of American chicken: 66.1% (2011) → 41.8% (2012) → 35.8 (2013)

※ Import proportion of Brazilian chicken: 19.0% (2011) → 43.7 (2012) → 46.9 (2013)

Figure 12. Import Volume and Unit Price of Chicken by Country of Origin and the Output and Price of Domestic Chicken



Source: GTIS-GTA, eKAPEPIA, KREI Agricultural Outlook 2014

○ As domestic chicken is consumed mostly in the form of whole chicken, it is not likely to substitute for or be substituted by imported products that are consumed in the form of dressed chicken (usually for sweet and sour chicken).

□ The volume and proportion of imports of American dairy products grew due to the import diversion effect following the increase of TRQ and tariff reduction.

- Although American dairy products are in competition with those from EU countries, Australia and New Zealand, the import proportion of American products increased due to the expansion of TRQ and highly reduced tariff.
 - In the second year of the FTA implementation, the import volume of cheese (51.7%), whey (18.2%) and powdered skim milk (551.9%) increased while that of milk sugar (15.1%) decreased.
 - Among American dairy products, the import proportion of powdered skim milk and cheese increased significantly after the effectuation of the FTA.
 - ※ Import proportion of American powdered skim milk: 2.8% (2011) → 10.3% (2012) → 30% (2013)
 - ※ Import proportion of American cheese: 42.6% (2011) → 41.1% (2012) → 50% (2013)
- Domestic raw milk is not in a fierce competition with imported dairy products since domestic milk production is operated by the quota system based on the consumption of market milk.

3. Prospects and Challenges

□ The implementation of the Korea-US FTA had a limited effect on increasing imports in the early stage. Its impact will emerge depending on the range of tariff reduction in the following years.

- Since the tariff was not highly reduced in the early stage of the FTA implementation, the agreement had a limited impact on increasing imports.
 - In the early stage of the implementation, economic conditions at home and abroad and crop situation and supply and demand conditions of the US and other foreign countries have more influence on import and export status.
 - Before the implementation of the FTA, measures to enhance competitiveness, conducted by the government and farmers, have contributed to minimizing damages on the domestic market.
- As the implementation of the FTA shows progress, tariff will be highly reduced and the imports of American products will be on the rise. Also, the impact on the domestic agricultural and livestock market will gradually emerge.
 - In the first and second year of the implementation of the FTA, in which tariff reduction range was relatively small, the increase of imports of American livestock products had a limited impact on the livestock sector due to the outbreaks of AI in Korea in late 2010 and of BSE in the US in early 2012.
 - Although the imports of American fruit increased after the effectuation of the agreement, it did not hit domestic farms hard as the domestic demand was also on the rise.
 - The increase of imports of American fruit with highly reduced tariff in the early stage of the implementation is expected to be alleviated. However, if the domestic demand for fruit drops in the following years, domestic production farms will be faced with direct and indirect damages due to the increase of imports.¹²⁾

□ Growing demand for countermeasures against the FTA to stabilize the management of farms and the establishment of income stabilization network

- As the government has signed FTAs with multiple countries including the US and the range of opening the agricultural and livestock market is expanded, there has been a growing demand for comprehensive income stabilization network for stable management of farms.
- In order to minimize the loss from opening of markets and stabilize the management of farms, the authorities should come up with income stabilization measures to comprehensively protect farms from direct and indirect damages caused by the implementation of the FTA.

□ Enhancing the effectiveness of the government's complementary measures and strengthening distinctive features of domestic agricultural products

- The authorities should promote communication with beneficiaries of policies and revise and complement the current measures to enhance the awareness of the FTA countermeasures among farmers and improve the effectiveness of the government's complementary plans.
 - As the half of the period granted to implement the complementary measures (from 2008 to 2017) passed, the authorities should identify the policy demand at the fields of production, distribution and consumption, and develop new projects that correspond to the purpose of the FTA complementary measures.¹³⁾

12) Moreover, countries that have signed the FTA with Korea will increasingly demand permission for import of agricultural and livestock products which are currently not allowed to be imported under the Sanitary and Phytosanitary Measures (SPS). Therefore, the authorities should reinforce the process of risk evaluation and seek for policy measures to respond to the abolition of quarantine barriers.

13) The Ministry of Agriculture, Food and Rural Affairs has recently vitalized the online/offline policy forum to build consensus and secure transparency by embracing and reflecting various

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- The promotion of market differentiation strategy and reinforcement of food safety should be selected as a major policy goal.
 - Although tariff for imported products is reduced, damages to domestic farms can be minimized when the government implements effective market differentiation strategies and boosts domestic demand.
 - The government should seek for diversified plans to increase the demand for safe and quality domestic agri-food and design the market differentiation strategies for domestic products by strengthening the indicate system of origin and expanding the traceability system and HACCP.

□ Establishing the export support system by utilizing the FTA and enhancing the export utilization rate

- For the continuous increase of the exports to the US, differentiated support programs for export should be established by managing processed agri-food and fresh agricultural products separately.
- In addition, the authorities should strengthen the distribution system at home and abroad and establish distribution networks in foreign markets, to efficiently support small and medium-sized exporters in charge of exporting fresh agricultural products that are directly connected with the income of farms.
- The government should improve its capacity to deal with the non-tariff system such as the process of the customs clearance including certification of origin, quarantine and examination and the application of local food safety regulations of countries to which Korea exports its products.

opinions of experts and farmers in the establishment, enhancement and supplementation of the FTA complementary measures.

Appendix 1. Changes in the Imports of Major Agricultural and Livestock Products in the 2nd year of the Implementation of the Korea-US FTA

Classification	Amount of Imports from the US (a million USD)					Volume of Imports from the US (a thousand tons)					FTA Import Utilization Rate	
	Before the ef- fectua- tion	First year	Second year	Second year/ Before the effectua- tion	Second year/ First year	Before the ef- fectua- tion	First year	Second year	Second year/ Before the effectua- tion	Second year/ First year	2012	2013
	(A)	(B)	(C)	(C/A)	(C/B)	(D)	(E)	(F)	(F/D)	(F/E)		
Total	7,507	6,527	5,989	-20.2	-8.2	-	-	-	-	-	49.9	73.9
Beef	649	538	597	-8.0	11.1	128	107	102	-20.4	-5.0	77.2	99.3
Composite food preparations	335	428	429	28.0	0.4	26	72	23	-10.2	-67.7	51.6	76.1
Wheat	551	722	401	-27.3	-44.5	1,442	2,224	1,091	-24.4	-51.0	55.8	99.6
Soybean	259	404	334	29.0	-17.3	424	627	517	21.9	-17.4	1.7	3.1
Pork	528	386	310	-41.4	-19.8	167	133	109	-35.0	-17.9	73.4	99.6
Feed roots	236	291	299	26.4	2.4	777	849	841	8.2	-1.0	31.3	29.7
Orange	189	230	235	24.2	2.0	151	165	160	6.0	-3.2	72.7	89.4
Corn	1,940	613	213	-89.0	-65.2	5,883	1,874	820	-86.1	-56.2	1.5	42.7
Cheese	138	146	209	51.3	42.8	31	33	47	51.7	43.5	76.0	97.7
Cardboard	36	203	198	451.4	-2.5	138	834	823	495.1	-1.2	-	-
Cotton	391	152	197	-49.7	29.1	102	61	93	-9.2	51.1	9.2	5.0
Almond	88	140	168	92.2	20.3	16	24	22	37.9	-7.5	90.1	100.0
Pulp	216	176	164	-24.2	-7.1	276	252	228	-17.5	-9.5	-	-
Brewing wastes	135	139	159	17.3	14.5	456	424	454	-0.4	7.1	67.8	96.6
Rice	122	58	127	4.4	119.9	148	79	178	20.1	125.9	-	-
Coniferous hard wood	152	113	120	-20.7	6.9	447	368	275	-38.4	-25.3	13.5	12.5
Potato	83	99	113	36.3	14.8	79	88	100	26.4	13.5	82.1	86.9
walnut	87	113	104	20.5	-7.5	10	11	10	2.3	-13.3	78.2	98.4
Cherry	48	84	91	87.9	8.3	6	10	10	74.7	-3.8	98.9	99.7
Other fruits	71	92	88	24.2	-4.3	18	23	23	28.0	1.3	77.0	90.7
Chicken	133	83	72	-46.1	-13.8	86	51	46	-46.7	-8.7	73.4	98.7
Cow rawhide	5	42	65	1,108.9	55.0	2	14	17	608.6	23.5	55.2	77.1
Chocolate	45	51	53	16.7	2.9	8	8	9	12.6	7.8	74.6	93.3
Grape	37	47	51	39.0	9.9	15	18	19	25.8	6.7	93.2	98.1
Soybean milk	20	16	43	115.4	166.0	15	13	36	147.3	175.9	95.4	8.7
Coffee	28	41	39	37.9	-3.9	2	3	3	47.8	9.8	73.0	86.7
Other cocoa prep- arations	33	41	36	8.3	-13.0	6	7	5	-2.9	-22.3	81.4	91.0
Other livestock preparations	31	23	34	8.0	44.2	7	6	8	24.4	30.9	66.9	99.3
Other bakery products	24	32	31	30.3	-3.1	7	8	8	8.5	-4.2	70.6	90.0
Dog food	28	32	31	11.3	-2.5	13	14	13	-1.8	-8.5	82.4	96.9
Soybean meal	76	94	31	-59.6	-67.0	179	146	54	-70.0	-63.2	49.0	18.6
Processed oil products	31	32	31	1.1	-3.8	1	0	0	-42.2	-16.9	46.2	68.8
Leaf tobacco	17	33	30	78.6	-8.6	2	4	3	55.3	-16.6	34.6	92.9
Sheep casing	28	35	28	-0.7	-20.9	9	9	8	-10.0	-14.7	71.2	99.7
Assorted feed	16	25	27	69.2	7.7	47	72	101	112.9	39.9	84.9	94.4
Tomato	19	24	27	37.8	11.8	17	22	25	44.3	12.7	66.5	78.5

Note 1) The changes in the imports of key agricultural and livestock products are presented in the descending order of the amount of imports in the second year.

2) Items without the FTA import utilization rate is on the lists of the unbound items or the existing non-tariff items.

Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

Appendix 2. Changes in the Exports of Major Agricultural and Livestock Products in the 2nd year of the Implementation of the Korea-US FTA

Classification	Amount of Exports to the US (a thousand USD)					Volume of Exports to the US (ton)					FTA Export Utilization Rate	
	Before the effectuation	First year	Second year	Second year/ Before the effectuation	Second year/ First year	Before the effectuation	First year	Second year	Second year/ Before the effectuation	Second year/ First year	2012	2013
	(A)	(B)	(C)	(C/A)	(C/B)	(D)	(E)	(F)	(F/D)	(F/E)		
Total	435,173	482,189	528,153	21.4	9.5	-	-	-	-	-	34.5	46.1
Cigarette	29,487	40,460	53,102	80.1	31.2	1,582	2,187	2,850	80.2	30.3	-	-
Composite food preparations	64,189	51,332	47,310	-26.3	-7.8	3,705	8,556	7,389	99.4	-13.6	28.6	39.4
Other beverages	31,901	44,124	46,628	46.2	5.7	39,413	55,310	58,519	48.5	5.8	43.6	58.2
Pear	26,604	23,995	26,821	0.8	11.8	9,221	7,231	9,457	2.6	30.8	37.2	39.4
Ramen	20,466	22,880	26,121	27.6	14.2	6,224	6,403	7,179	15.3	12.1	40.5	72.2
Biscuit	19,742	19,253	23,760	20.4	23.4	4,134	3,925	4,334	4.8	10.4	44.9	61.2
Gelatin	8,835	19,218	21,352	141.7	11.1	1,307	1,809	1,521	16.4	-15.9	76.9	98.5
Other types of pasta	11,186	13,046	13,360	19.4	2.4	4,168	4,921	4,931	18.3	0.2	44.8	48.4
Other types of sauce	9,742	10,336	11,784	21.0	14.0	2,839	2,862	3,397	19.6	18.7	45.4	73.5
Grain preparations	12,423	12,202	11,230	-9.6	-8.0	3,185	3,174	3,068	-3.7	-3.3	43.8	70.6
Noodles	12,392	12,274	10,647	-14.1	-13.3	6,403	6,628	6,025	-5.9	-9.1	35.4	47.2
Red pepper paste	6,632	8,441	9,866	48.8	16.9	3,525	3,954	4,487	27.3	13.5	23.9	48.9
Soju	9,102	8,698	9,585	5.3	10.2	5,859	5,670	6,025	2.8	6.3	29.6	37.7
Bread	4,889	6,342	8,810	80.2	38.9	1,188	1,513	1,919	61.5	26.8	19.5	22.2
Bakery Dough	5,758	7,196	8,740	51.8	21.5	2,333	2,498	2,841	21.8	13.8	0.8	0.8
Other bakery products	5,810	6,666	8,184	40.9	22.8	1,958	2,180	2,372	21.1	8.8	32.4	38.9
Coffee preparations	7,168	7,043	7,417	3.5	5.3	1,665	1,518	1,661	-0.3	9.4	35.0	66.3
Other food preparations	6,654	7,175	7,228	8.6	0.7	2,398	2,843	3,109	29.6	9.4	36.0	36.5
Other vegetables	5,571	7,562	6,877	23.5	-9.1	1,496	1,668	1,609	7.6	-3.5	29.4	28.7
Vegetable seed	5,444	11,751	6,625	21.7	-43.6	22	82	27	19.0	-67.2	20.8	29.1
Red ginseng extract	4,879	4,332	6,168	26.4	42.4	91	99	90	-1.3	-8.9	36.7	44.6
Instant noodle	4,094	6,354	5,967	45.7	-6.1	1,614	3,126	2,996	85.6	-4.2	14.5	34.3
Other furniture	422	3,871	5,894	1,296.7	52.3	106	697	1,117	956.8	60.1	36.8	48.8
Ice cream	4,370	5,516	5,692	30.2	3.2	1,531	1,783	1,855	21.1	4.0	29.9	12.0
Enoki mushroom	4,630	5,037	5,071	9.5	0.7	2,672	3,007	2,989	11.8	-0.6	58.4	80.1
Kimchi	2,979	3,943	5,034	69.0	27.7	850	1,037	1,253	47.5	20.8	21.0	56.3
Single fruit preparations	4,825	3,890	4,939	2.4	26.9	5,854	4,499	6,011	2.7	33.6	13.9	22.7
Chestnut	2,278	2,243	4,366	91.7	94.7	700	510	1,350	92.9	165.0	80.7	41.8
Soy sauce	3,298	3,736	4,135	25.4	10.7	3,930	3,804	3,898	-0.8	2.5	53.1	59.3
Wheat	4,357	4,519	4,043	-7.2	-10.5	3,911	4,972	4,557	16.5	-8.3	17.1	48.2
Articles of stone	146	241	3,979	2,616.8	1,548.6	79	52	2,192	2,684.9	4,130.8	35.1	94.9
Mixed seasoning	4,032	3,630	3,790	-6.0	4.4	919	857	904	-1.6	5.5	15.8	52.8
Other sugar	3,003	2,969	3,703	23.3	24.7	822	916	1,684	104.8	83.8	59.0	91.4
Fermented milk	3,272	3,639	3,350	2.4	-7.9	3,645	4,010	3,772	3.5	-5.9	78.8	85.7
Other vegetable mucilages	3,783	2,453	3,310	-12.5	35.0	332	229	299	-10.1	30.4	0.0	0.0
Red ginseng preparations	2,714	3,490	3,300	21.6	-5.5	217	181	230	6.4	27.0	43.5	49.7

Note 1) The changes in the exports of key agricultural and livestock products are presented in the descending order of the amount of exports in the second year.

2) An item (cigarette) without the FTA export utilization rate has no performance record of privileged export through certification of origin.

Source: Korea Customs and Trade Development Institute, Korea Agro-Fisheries & Food Trade Corporation

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130-710, 117-3, Hoegi-ro, Dongdaemoon-gu,

Seoul, Korea

+82-2-3299-4000 <http://www.krei.re.kr>

Printed by Munwonsa

+82-2-739-3911 munwonsa@hanmail.net

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