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Report Highlights:

This report is an October 2021 update to the FAS Seoul Grain and Feed Annual released on March 31 and the Grain and Feed Update from June 27. Estimates for 2021 wheat production are revised down by 11 percent from the previous forecast, while consumption estimates are revised up by 12 percent. As a result, 2021 Korean wheat imports are expected to rise, including a bump in U.S. feed-grade wheat imports. Estimates for imports of U.S. corn and rice are unchanged.

Commodities:

Wheat

Wheat Production:

At the end of June 2021, Korea published official data showing that wheat production in MY 2020 was 16,985 MT. Yields were 3.25 metric tons (MT) per hectare (ha), down about 19 percent from the previous year due to weather damage.

The official number for MY 2021 wheat planted area (released in June 2021) was 6,224 ha, down 12 percent from Post's initial forecast as farmers have responded with less than expected interest in benefits from government support programs. The Korean government released the Presidential and Ministerial Decree 'Fostering Act for Korean Wheat Industry', effective February 28, 2020, to support domestic wheat production and consumption. The decree allows the Korean government to provide packaged support to the domestic wheat industries, including support for R&D, government purchasing programs, breeding, marketing, etc. The Act will be amended every five years.

Accordingly, FAS/Seoul revised the production estimate to 22,400 MT, down 11 percent from the previous forecast. The official production data will be available in June 2022.

Table 1

	Korea: Wheat Production									
Crop Year	Harvested Area (Hectares)	Yield (MT/ha)	Production (MT)							
2009	5,067	5.15	26,087							
2010	12,548	3.12	39,116							
2011	13,044	3.35	43,677							
2012	9,467	3.91	37,014							
2013	7,373	3.68	27,130							
2014	7,180	3.26	23,409							
2015	10,076	2.62	26,433							
2016	10,440	3.71	38,705							
2017	9,283	4.03	37,425							
2018	6,600	3.91	25,788							
2019	3,736	4.02	15,024							
2020	5,224	3.25	16,985							
2021 ^{b/}	6,224	3.60	22,406							

Source: Ministry for Agriculture, Food, and Rural Affairs (MAFRA), Statistics Korea (KOSTAT)

b/ FAS Seoul forecast

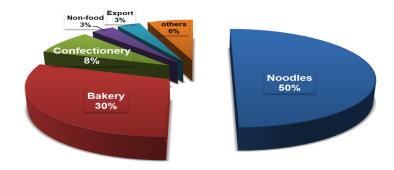
Wheat Consumption:

The MY 2021/22 wheat consumption forecast is revised up to 3.9 million metric tons (MMT), increasing 12 percent from the previous forecast due to expanding consumption for both milling wheat and feed grade wheat.

In MY 2020/21, wheat consumption is revised up to 3.55 MMT, increasing 2.5 percent from the previous estimate due to higher consumption of milling wheat. A major Korean bakery company involved in wheat milling processing has been successfully expanding its business for both domestic and overseas bakery markets, driving up demand.

MY 2019/20 wheat consumption is revised up to 3.6 MMT, increasing 1.6 percent from the previous estimate due to a greater consumption of milling wheat while feed wheat remains unchanged from the previous estimate.

Figure 1- Wheat Flour Consumption in 2020



Source: Korean Flour Industry Non-Food: Industrial Use, Pet

Other Foods: Starch & Cereal, Brewery, Fermented Soy Product, Dumpling, Fish Meat, Traditional Extruded Chewy Cake

Table 2

Kores	Korea: Post Estimates of Wheat Use								
(1,000 MT, July/June)									
Marketing Year	2018/19	2019/20	2020/21	2021/22 ^{c/}					
Imported Milling Wheat 1/	2,232	2,314	2,258	2,300					
Imported Milling Wheat ^{2/}	200	255	280	290					
Flour Imports ^{a/}	25	18	16	15					
Flour Exports ^{a/}	57	62	58	60					
Pasta Imports ^{a/}	160	160	177	180					
Pasta Exports ^{a/}	235	302	331	330					
Local Wheat	26	15	17	22					
FSI Consumption b/	2,351	2,398	2,359	2,417					
Feed Wheat	1,226	1,205	1,192	1,500					
Total Consumption b/	3,577	3,603	3,551	3,917					

Source: Korea Feed Association (KFA), Korea Flour Millers Industry Association (KOFMIA) and Korea Customs Service (KCS)

- 1/ KOFMIA members
- 2/ Non- KOFMIA member
- a/ Wheat basis
- b/ Includes local wheat and flour and pasta imports, but subtracts flour and pasta exports

Table 3

Table 3		Koros Ma	nthly Whe	at IIco		
			,000 MT)	ai Ose		
Month		Feed Wheat	,000 1411)	M	illing Wheat	a/
	MY	MX 2010/20	MY	MX 2010/10	MY	MY
	2018/19	MY 2019/20	2020/21	MY 2018/19	2019/20	2020/21
July	122	99	108	181	192	187
August	119	97	90	179	187	175
September	106	95	95	158	166	187
October	120	113	90	189	185	170
November	118	111	93	183	182	173
December	108	107	100	174	188	182
January	103	105	94	203	185	190
February	82	91	94	152	180	163
March	80	94	109	176	183	188
April	84	98	102	176	180	181
May	92	98	107	183	177	183
June	92	98	110	178	178	178
Total	1,226	1,205	1,192	2,132	2,184	2,159

Source: KFA and KOFMIA

a/ Includes wheat flour exports, but excludes the portion used in soy-sauce production (about 100,000 MT or so)

Table 4

Korea: Wheat Flour Utilization									
	(1,000 MT)								
Calendar Year	2015	2016	2017	2018	2019	2020			
Total Consumption 1/	1,706	1,701	1,739	1,745	1,770	1,783			
Per Capita (kg/Year) ^{2/}	33.7	33.2	33.8	33.8	34.2	34.3			

Source: Korea Flour Mills Industrial Association (KOFMIA)

Wheat Trade:

The MY 2021/22 wheat import forecast is revised up to 4.3 MMT, increasing ten percent from the previous forecast due to a greater demand for both milling and feed grade wheat. Of the 4.3 MMT imported, 2.8 MMT will be wheat for milling (including flour and pasta imports on a wheat equivalent basis) and 1.5 MMT will be for animal feed based on the actual contracts (Table 7). This import estimate hinges to a large extent on the continued availability of competitively priced feed wheat.

MY 2020/21 wheat imports are revised up to 3.89 MMT, including flour and pasta imports on a wheat equivalent basis. Imports of U.S. wheat in MY 2020/21 are revised up to 1.76 MMT due to greater imports of feed grade wheat, increasing 30 percent over the previous year.

^{1/} Based on flour millers' sales including exports, imports and animal feed use, on a wheat flour production basis and excluding animal feed and exports.

^{2/} Excludes animal feed and exports from total consumption, including imports of wheat flour

Korea imported 1.18 MMT of feed-grade wheat in MY 2020/21. The United States was the largest supplier at 452,702 MT, followed by Ukraine (340,699 MT), Canada (93,526 MT), Russia (87,061 MT), Romania (63,000 MT), Bulgaria (62,801 MT), and Estonia (60,294 MT).

Table 5

	Korea: Wheat Imports (1,000 MT, Customs Cleared Basis)								
Marketing Year (July/June)	Feed Wheat	Milling Wheat		Pasta Imports	Total				
08/09	1,151	2,058	69	105	3,383				
09/10	2,164	2,071	127	119	4,481				
10/11	2,075	2,520	63	123	4,781				
11/12	2,868	2,169	42	122	5,201				
12/13	2,820	2,461	39	135	5,455				
13/14	1,948	2,181	30	150	4,309				
14/15	1,391	2,370	44	143	3,948				
15/16	1,812	2,416	50	142	4,420				
16/17	2,174	2,313	33	147	4,667				
17/18	1,557	2,526	29	155	4,267				
18/19	1,225	2,500	25	160	3,910				
19/20	1,206	2,556	18	160	3,940				
20/21	1,177	2,518	16	177	3,888				

Source: Korea Customs Service

1/ Wheat basis

Table 6

Table 0						
		Korea: M	onthly Wheat	Imports		
			(1,000 MT)			
Month		Feed Wheat			Milling Wheat	-
	MY 2018/19	MY 2019/20	MY 2020/21	MY 2018/19	MY 2019/20	MY 2020/21
July	110	94	110	254	213	231
August	95	61	69	106	160	184
September	79	79	142	215	233	212
October	185	217	58	260	144	264
November	156	115	116	159	206	88
December	102	128	102	148	239	258
January	106	88	90	294	209	207
February	34	106	80	144	258	156
March	65	70	71	228	219	279
April	146	63	93	276	205	223
May	56	141	167	187	179	207
June	91	43	78	229	291	208
Total	1,225	1,206	1,177	2,500	2,557	2,517

Source: Korea Customs Service Note: exclude wheat flour and products

Table 7

	Korea: MY 2021/22 Feed Wh	neat Contracts					
	by Estimated Time of Arr	ival (ETA)					
(Unit: 1,000 MT, as of September 2020)							
ETA	Quantity	Price (US\$/MT) ^{1/}					
Jul. 2021	120	309.19					
Aug.	191	299.92					
Sep.	325	281.32					
Oct.	394	276.31					
Nov.	325	301.00					
Dec.	Na	Na					
Jan. 2022	Na	Na					
Feb.	Na	Na					
Mar.	Na	Na					
Apr.	Na	Na					
May	Na	Na					
Jun	Na	Na					
 Total	1,355						

Source: Local Grain Traders
1/ CNF on Weighted Average

Flour Trade:

MY 2020/21 flour imports were 16,272 MT (wheat equivalent), down 12 percent from the previous year, following declining demand from small-sized restaurants and noodle manufacturers who are traditionally the most loyal users of cheaply priced flour. Pasta imports were at 177,001 MT (wheat equivalent), up 11 percent from the previous year. Annual flour exports were at 58,354 MT (wheat equivalent), down 6 percent from the previous year, while pasta exports at 331,367 MT (wheat equivalent) rose 10 percent from the previous year. Korea exports pasta mostly to China, the United States, and Japan.

Table 8

Korea: Wheat Flour Imports									
	(H.S.: 1101)								
		(Metri	ic Tons, July/Jul	ne)					
Country	MY2015	MY2016	MY2017	MY2018	MY2019	MY2020			
U.S.A.	567	352	382	362	469	676			
Total	Total 36,816 24,395 20,735 18,042 13,498 11,89								
Wheat basis ^{a/}	50,364	33,372	28,365	24,681	18,465	16,272			

Source: Korea Customs Service (KCS) a/applied converting factor: 1.368

Table 9

Table 7									
Korea: Pasta Imports									
	(H.S.: 190219, 190230, 190240)								
	(Metric Tons, July/June)								
Country	MY2017	MY2018	MY2019	MY2020					
USA	449	492	480	637					
Total	113,631	116,638	116,827	129,387					
Wheat Basis ^{a/}	155,447	159,561	159,819	177,001					

Source: Korea Customs Service (KCS) a/applied converting factor: 1.368

Table 10

1 4010 10								
	Korea: Wheat Flour Exports							
	(H.S.: 1101)							
		(M	letric Tons, July	y/June)				
Country	MY2015	MY2016	MY2017	MY2018	MY2019	MY2020		
USA	5,328	5,494	5,806	6,416	8,585	7,084		
Total								
Wheat Basis a/	29,684	36,879	55,221	57,477	62,189	58,354		

Source: Korea Customs Service (KCS) a/applied converting factor: 1.368

Table 11

Table 11								
Korea: Pasta Exports (H.S.: 190219, 190230, 190240)								
	(Metric Tons, July/June)							
Country	MY2017	MY2018	MY2019	MY2020				
USA	28,687	30,555	38,609	45,982				
Total	173,310	171,719	220,732	242,227				
Wheat Basis ^{a/}	237,088	234,912	301,961	331,367				

Source: Korea Customs Service (KCS)

Production, Supply, and Distribution Data Statistics:

Wheat PS&D

Wheat	2019/2	2020	2020/	2021 2021/2022		
Market Year Begins	Jul 20)19	Jul 2	020	Jul 2021	
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	4	4	5	5	7	C
Beginning Stocks (1000 MT)	1532	1532	1574	1520	1540	1485
Production (1000 MT)	15	15	17	17	25	22
MY Imports (1000 MT)	3941	3940	3889	3888	3900	4300
TY Imports (1000 MT)	3941	3940	3889	3888	3900	4300
TY Imp. from U.S. (1000 MT)	1295	1347	0	1755	0	C
Total Supply (1000 MT)	5488	5487	5480	5425	5465	5807
MY Exports (1000 MT)	364	364	390	389	390	390
TY Exports (1000 MT)	364	364	390	389	390	390
Feed and Residual (1000 MT)	1200	1205	1200	1192	1200	1500
FSI Consumption (1000 MT)	2350	2398	2350	2359	2350	2417
Total Consumption (1000 MT)	3550	3603	3550	3551	3550	3917
Ending Stocks (1000 MT)	1574	1520	1540	1485	1525	1500
Total Distribution (1000 MT)	5488	5487	5480	5425	5465	5807
Yield (MT/HA)	3.75	3.75	3.4	3.4	3.5714	C

(1000 HA),(1000 MT),(MT/HA)

MY = Marketing Year, begins with the month listed at the top of each column
TY = Trade Year, which for Wheat begins in July for all countries. TY 2021/2022 = July 2021 - June 2022

Country Korea, Republic of Commodity Wheat

Time Period	July/June	Units:	1,000MT
Imports for:	2019		2020
U.S.	1345	U.S.	1753
Others		Others	
Australia	1072	Australia	1031
Canada	317	Canada	282
Ukraine	415	Ukraine	341
Bulgaria	289	Bulgaria	10
Romania	321	Romania	63
		Russia	87
		Brazil	63
		Estonia	60
Total for	2414		1937
Others	2414		1937
Others not	3		6
Listed	3		0
Grand Total	3762		3696

Note: excludes the import of wheat flour and pasta

Commodities:

Corn

Corn Production:

Corn production in MY 2020 was revised up to 91,766 MT based on the Korean government official numbers released at the end of June 2021. This number is up 18 percent from FAS/Seoul's previous forecast and 20 percent higher than a year earlier, reflecting increased acreage and yield.

Table 12

	Korea: Corn Production							
Crop Year	Area (ha)	Yield (MT/ha)	Production (MT)					
2011	15,823	4.65	73,612					
2012	17,001	4.89	83,210					
2013	15,905	5.06	80,465					
2014	15,839	5.18	82,008					
2015	15,356	5.10	78,243					
2016	15,183	4.85	73,681					
2017	15,074	4.82	72,587					
2018	15,472	5.04	78,012					
2019	14,840	5.14	76,336					
2020	15,633	5.87	91,766					
2021a/	15,000	5.00	75,000					

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

a/FAS Seoul forecast based on five-year average yield and acreage

Corn Consumption:

The 2021/22 corn consumption forecast is revised to 11.7 MMT (down 0.8 percent from the previous forecast), consisting of 9.4 MMT for feed purposes and 2.3 MMT for food, seed, and industrial (FSI) purposes. Feed corn is expected to be the major ingredient used in compound feed, (about 45 percent of total ingredients this marketing year) with feed wheat increasing to seven percent of total compound feed, one percentage point higher than the previous year (Table 16). Food, seed, and industrial (FSI) corn consumption is expected to stay around 2.3 MMT to meet stable demand for high fructose corn syrup (HFCS) and other corn products used by the Korean food industry.

MY 2020/21 corn consumption is estimated at 11.8 MMT, up 3.5 percent from the previous forecast based on actual consumption for the first ten months of the year. This total consists of 9.5 MMT for feed and 2.3 MMT for food, seed, and industrial (FSI) purposes (Table 14). Feed corn consumption is increasing to replace the lack of supply of feed grade wheat and domestic rice for feed. Consumption for processing corn remains unchanged from the previous year as the sluggish economy (COVID-19 related) has continued reducing demand for HFCS in soft drinks and corn starch used for paper sizing and beer brewing.

MY 2019/20 corn consumption remains unchanged from the previous report.

Feed

The MY 2021/22 compound feed production forecast is revised up to 21.1 MMT, increasing one percent from the previous forecast, to rebound to more than the record volume of 21 MMT in MY 2019/20, as swine and poultry numbers recover following inventory reductions caused by ASF and HPAI. Corn will continue to be the major ingredient used in compound feed with a 45 percent inclusion rate (9.4 MMT), followed by feed wheat with 1.5 MMT.

The 2020/21 compound feed production forecast is revised up to 20.7 MMT, increasing 1.5 percent from the previous forecast, but down 1.2 percent from the record volume of the previous year due to the reduction of swine and poultry inventories caused by the outbreaks of ASF and HPAI, respectively.

As of June 30, 2021, cattle population increased by 3.2 percent over the same period of the last year, and swine population increased slightly by 0.6 percent. Meanwhile, he poultry population decreased by 5.4 percent and the duck population decreased by 19.1 percent. The main reason for the decline in poultry and duck populations is the delay in restocking from the H5N8 highly pathogenic avian flu outbreak since October 2020, which killed 25.9 million chickens and 4 million ducks (Table 21).

Refer to the <u>Livestock and Products Update</u> (pending) and <u>Poultry and Products Annual</u> for more details.

Food

Corn processors use Genetically Engineered (GE) corn, non-biotech Identity Preserved (IP) corn, and conventional corn to produce corn starch, HFCS, and corn flour. GE corn imported from the United States and South American countries is used for starch production for industrial purposes such as paper sizing and glue. Non-biotech IP corn imported from the United States and Brazil, and traditional corn imported from Russia, South Africa, Serbia, Bulgaria, and Australia is used for corn starch and corn flour. The perceived public concern over biotech products continues to influence imported processing corn decisions, especially for corn that is used to manufacture cooking oil and HFCS. Many food processing companies remain reluctant to use ingredients derived from biotech corn. Some food processing companies utilizing corn starch products are sourcing ingredients imported from China, since these items are reportedly derived from non-biotech corn.

Table 13

	Korea: Monthly Corn Use							
			(1,000 MT))				
Month		Feed Corn			Processing Co	orn		
	MY 2018/19	MY 2019/20	MY 2020/21	MY 2018/19	MY 2019/20	MY 2020/21		
October	704	785	822	204	190	185		
November	687	745	813	192	190	190		
December	699	790	894	197	194	188		
January	752	798	809	198	180	183		

February	627	746	731	172	182	164
March	698	814	834	197	185	193
April	745	819	780	191	168	189
May	772	814	782	197	188	190
June	709	793	787	195	186	200
July	745	837	755	188	192	196
Subtotal	7,138	7,941	8,007	1,931	1,855	1,878
August	707	730	730	187	164	na
September	711	832	na	178	183	na
Total	8,556	9,502	na	2,298	2,204	na

Source: Korea Feed Association (KFA), Korea Corn Processing Industry Association (KOCPIA)

Table 14

	Korea: Total Corn Utilization (October/September, 1,000 MT)						
Marketing	Feed	Processing	Food	Total			
Year		a/	b/				
2011/12	5,690	2,036	89	7,815			
2012/13	6,483	1,900	98	8,481			
2013/14	7,762	2,034	95	9,891			
2014/15	8,035	2,118	97	10,250			
2015/16	7,841	2,220	93	10,154			
2016/17	7,031	2,315	89	9,435			
2017/18	7,564	2,292	88	9,944			
2018/19	8,556	2,298	93	10,947			
2019/20	9,502	2,204	91	11,797			
2020/21 c/	9,500	2,250	107	11,857			
2021/22 c/	9,500	2,250	90	11,840			

Source: Korea Feed Association (KFA), Korea Corn Processing Industry Association (KOCPIA)

Table 15

	Korea: Monthly Processing Corn Use							
			(MT)					
Month		MY 2019/20			MY 2020/2	1		
	Wet Milling	Dry Milling	Total	Wet Milling	Dry Milling	Total		
October	183,973	5,905	189,878	179,931	5,333	185,264		
November	184,181	5,804	189,985	183,335	6,399	189,734		
December	187,664	6,131	193,795	182,493	5,849	188,342		
January	174,400	5,833	180,233	176,980	6,088	183,068		
February	176,207	5,711	181,918	158,799	5,388	164,187		

a/ Used for wet and dry milling process based on imported corn.

b/ for on-farm human consumption (on-the-cob) or snack food consumed on-the-cob, as puffed kernels or as corn tea. Imported white corn for popping has been included since MY 2004.

c/ FAS Seoul forecast based on actual consumption for the first eleven months for feed and for the first ten months for processing.

March	179,613	5,784	185,397	186,973	5,937	192,910
April	162,282	5,864	168,146	183,227	5,929	189,156
May	182,286	6,056	188,342	184,486	5,548	190,034
June	180,468	5,609	186,077	194,287	6,158	200,445
July	186,713	5,453	192,166	190,902	4,874	195,776
Subtotal	1,797,787	58,150	1,855,937	1,821,413	57,503	1,878,916
August	159,599	4,722	164,321	na	na	na
September	177,528	5,795	183,323	na	na	na
Total	2,134,914	68,668	2,203,582	na	na	na

Source: Korea Corn Processing Industry Association (KOCPIA)

Table 16

Korea: Feed Ingredients Use for Compound Feed Production								
	(October/September, 1,000 MT)							
Items	MY 2018/19	MY 2019/20	MY 2020/21 ^{a/}	MY 2021/22 ^{a/}				
Sub-Total Grains and Grain Substitutes	12,976	13,481	13,400	13,600				
- Wheat	1,168	1,209	1,200	1,500				
- Corn	8,557	9,502	9,500	9,400				
- Rice (brown)	568	113	0	0				
- Other Grains and Grain Substitute b/	2,683	2,657	2,600	2,700				
Others c/	7,496	7,523	7,500	7,500				
Grand Total	20,472	21,004	20,800	21,100				

Source: Korea Feed Association (KFA)

a/ FAS Seoul forecast

b/ includes Tapioca, brans and gluten feed.

c/ includes vegetable protein meal, animal protein, minerals/additives, tallow, DDGs and molasses.

Table 17

Korea: Compound Feed Production by Species Use						
	(October/Sep	otember, 1,000 MT)				
Species	MY 2018/19	MY 2019/20	MY 2020/21 ^{a/}	MY 2021/22 b/		
Poultry	6,159	6,281	6,000	6,200		
Swine	6,784	6,947	6,850	6,900		
Cattle	5,961	6,186	6,450	6,500		
Others ^{c/}	1,511	1,538	1,400	1,500		
Sub Total	20,415	20,952	20,700	21,100		
Aquaculture	161	165	150	150		
Milk Substitute	49	49	50	50		
Grand Total	20,625	21,166	20,900	21,300		

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

a/FAS/Seoul forecast based on the actual production of compound feed for the first eleven months

b/ FAS/Seoul forecast

c/ Includes duck, rabbit, horse, sheep, deer, quail, etc.

Corn Trade:

The 2021/22 corn import forecast is revised up to 11.8 MMT from FAS/Seoul's initial forecast of 11.7 MMT, consisting of 9.5 MMT of feed corn for compound feed, and 2.3 MMT of processing corn for food processing. The slight increase in forecasted imports is due to rising animal inventories and greater availability of feed grade wheat based on updated contracts (Table 7).

Based on the average U.S. market share for corn in Korea over the previous five years, MY 2021/22 imports of U.S. corn are forecast to stay around 4 MMT, about 34 percent of total Korean corn imports.

As of late September 2021, importers have contracted for about 2.3 MMT of feed corn with October through December 2021 delivery periods, and they continue to make contracts for delivery in January 2021 onward. Most corn contracts for feed are optional origin at the seller's discretion with options including South America, Eastern Europe/Black Sea, or the United States with a price range of \$291.00-329.90 per metric ton cost and freight (CNF) (Table 20).

Total corn imports in 2020/21 are revised to 11.8 MMT, up 2.6 percent from the previous forecast (still slightly lower than the previous year), to meet greater demand for feed corn to offset a limited supply of competitively priced feed wheat and a dwindling rice supply. U.S. market share is estimated to increase to 32 percent of total corn imports, up from 22 percent in the previous year. U.S. feed corn exports to Korea for the first eleven months were 3.2 MMT, accounting for 37 percent of total imports of feed-grade corn followed by Argentina, Brazil, and Paraguay. Meanwhile, U.S. food-grade corn exports to Korea are expected to be 0.5 MMT, accounting for 22 percent of total imports of food-grade corn, making the U.S. the top supplier, followed by Russia, Serbia, and Brazil.

Market Constraints and Opportunities:

As the higher broken corn and foreign material (BCFM) content of U.S. corn has been a chronic issue for Korean buyers, importers have preferred purchasing other origins such as South American corn to U.S. corn loaded in the U.S. Pacific Northwest (PNW). Some Korean buyers entirely excluded suppliers who were bidding for PNW loading, preferring even to pay a premium (one or two dollars per MT) for South American origins.

Korea introduced a positive list system (PLS) as the new maximum residue limit (MRL) regulation for plant products in 2019, requiring agricultural chemicals to have registered import tolerances. Concerns over potential PLS complications have reportedly driven some major U.S. suppliers to not participate in the bidding processes due to concern about the higher-potential risks of corn contracts.

Table 18

	Korea: Corn Imports						
	(Oc	ctober/Septem	nber, 1,000 N	IT, Customs	Cleared Basis	s)	
Marketing		From World		F	From the U. S	•	U. S. Share
Year	Feed	Processing	Total	Feed	Processing	Total	%
11/12	5,600	2,035	7,635	3,450	307	3,757	49
12/13	6,230	1,944	8,174	341	115	456	6
13/14	8,319	2,086	10,405	3,769	842	4,611	44
14/15	8,055	2,112	10,167	3,495	527	4,022	40
15/16	7,833	2,289	10,122	2,387	522	2,909	29
16/17	6,912	2,308	9,220	4,988	973	5,961	65
17/18	7,680	2,326	10,006	4,453	717	5,170	52
18/19	8,519	2,326	10,845	3,519	895	4,414	41
19/20	9,695	2,187	11,882	2,243	361	2,603	22
20/21 ^{a/}	9,400	2,350	11,750	3,300	500	3,800	32
21/22 ^{b/}	9,500	2,300	11,800	3,500	500	4,000	34

Source: Korea Customs Service, Trade Data Monitor LLC

a/FAS/Seoul forecast based on the first eleven months imports

b/FAS/Seoul forecast

Table 19

		Korea:	: Monthly Cor	rn Imports		
			IT, Customs C	_		
Month		Feed Corn		F	Processing Corn	
	MY 2018/19	MY 2019/20	MY 2020/21	MY 2018/19	MY 2019/20	MY 2020/21
October	728	871	961	184	175	184
November	667	768	821	138	127	176
December	724	934	628	190	265	144
January	825	759	984	274	282	289
February	601	847	601	176	149	143
March	635	744	805	218	111	162
April	736	783	847	226	149	143
May	832	810	794	155	224	260
June	585	754	952	209	197	171
July	699	863	670	210	188	278
August	758	733	570	205	139	210
Sub Total	7,790	8,866	8,633	2,185	2,006	2,160
September	730	826	na	141	180	na
Total	8,519	9,695	na	2,326	2,187	na

Source: Korea Customs Service, Trade Data Monitor LLC

Table 20

Korea: MY 2021/22 Feed Corn Contracts 1/						
	By Estimated Time of Arri	val (ETA)				
	(Unit: 1,000 MT, as of September 24, 2021)					
ETA Quantity Price (USD/MT) ^{2/}						
Oct. 2021	604	281.00				
Nov.	940	318.72				
Dec. 734 328.00						
Total	2,278					

Source: Local Grain Traders

1/ reflecting 90-95 percent of actual contracts due to the omission of some data on contracts

2/ USD/MT, CNF on Weighted Average

Production, Supply, and Distribution Data Statistics:

Corn PS&D

Corn	2019/2	2020	2020/2	2021	2021/2	2022	
Market Year Begins	Oct 20	019	Oct 2	020	Oct 2021		
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Harvested (1000 HA)	15	15	15	15	15	15	
Beginning Stocks (1000 MT)	1835	1835	1998	1996	2176	2031	
Production (1000 MT)	76	76	78	92	75	75	
MY Imports (1000 MT)	11882	11882	11500	11800	11500	11800	
TY Imports (1000 MT)	11882	11882	11500	11800	11500	11800	
TY Imp. from U.S. (1000 MT)	2901	2604	0	3800	0	4000	
Total Supply (1000 MT)	13793	13793	13576	13888	13751	13906	
MY Exports (1000 MT)	0	0	0	0	0	(
TY Exports (1000 MT)	0	0	0	0	0	(
Feed and Residual (1000 MT)	9502	9502	9100	9500	9500	9500	
FSI Consumption (1000 MT)	2293	2295	2300	2357	2300	2340	
Total Consumption (1000 MT)	11795	11797	11400	11857	11800	11840	
Ending Stocks (1000 MT)	1998	1996	2176	2031	1951	2066	
Total Distribution (1000 MT)	13793	13793	13576	13888	13751	13906	
Yield (MT/HA)	5.0667	5.0667	5.2	6.1333	5	5	

(1000 HA), (1000 MT), (MT/HA)

MY = Marketing Year, begins with the month listed at the top of each column

TY = Trade Year, which for Corn begins in October for all countries. TY 2021/2022 = October 2021 - September 2022

Table 21

	(nimal Inventory 0 Birds, as of June 20	21)	
Animal	Year	March	,	September	December
Beef Cattle	2016	2,821	2,996		
Beer cause	2017	2,885	,	,	,
	2018	2,947			, , , , , , , , , , , , , , , , , , ,
	2019	3,059			· · ·
	2020	3,197			
	2021	3,373	3,568	· ·	·
Dairy Cattle	2015	425	420	421	418
	2016	416	414	411	409
	2017	408	405	407	408
	2018	407	401	404	408
	2019	409	406	408	410
	2021	406	400	400	410c/
Swine	2016	10,315	10,355	10,699	10,367
	2017	11,005	11,187	11,493	11,273
	2018	11,156	11,304	11,641	11,333
	2019	11,200	11,317	11,713	11,280
	2020	11,208	11,088	11,365	11,078
	2021	11,147	11,150	11,465	11,442c/
Layers a/	2016	70,177	68,281	69,853	71,043
	2017	51,608	57,383	67,833	72,710
	2018	71,324	67,043	71,227	74,741
	2019	70,103	71,405	70,895	72,701
	2020	72,811	74,921	73,853	72,580
	2021	62,110	65,871	70,722	na
Broilers b/	2016	86,541	101,014	76,420	87,830
	2017	79,332	104,205	80,546	85,436
	2018	91,053	112,681	83,278	85,915
	2019	93,599	121,588	88,530	88,738
	2020	96,350	110,842	88,203	94,835
	2021	96,361	109,720	10,738	na

Source: Korea Statistics (KOSTAT)

Note: The Korean government changed the basis for estimating cattle inventory as of September 2017. The Korea Statistics Service switched from a sample survey-based cattle inventory estimate to the actual number of cattle registered under the traceability system. As it is mandatory to register cattle under the traceability system, this change will allow for more accurate inventory numbers. However, this change increased cattle inventory statistics by an average of 240,000 heads (KS1810). Swine inventory numbers also followed the registration of the traceability system since 2017.

a/ Excluding breeders

b/ Excluding multi-use broilers

c/ FAS Seoul forecast

Commodities:

Rice, Milled

Rice Production:

Based on a nationwide survey of 6,300 rice fields conducted September 13-23, 2021, Statistics Korea (KOSTAT) estimates 2021 rice production at 3.83 million metric tons (MMT), up nine percent from the previous year due to both higher production area and yields.

The survey results show total harvested acreage at 732,477 ha, which is up 0.8 percent from the previous year. Yields are also above normal due to favorable weather such as adequate rain and sunshine during the grain filling stage in July and August. KOSTAT is expected to release a final survey showing production estimates shortly after the rice harvest is complete in mid-November. In the meantime, FAS Seoul revised 2020/21 rice production up to 3.83 MMT, increasing 0.7 percent from the previous forecast of 3.8 MMT.

Area

Rice planted area has continued to decline since 2001, with annual decreases ranging from 5,000 ha to 38,000 ha. In 2021, however, rice harvest area rebounded by 6,045 ha, up 0.8 percent from the previous year, in response to temporary lifting of the government 'rice reduction program' (in effect since 2018) designed to provide subsidies for rice farmers who cultivate other crops on paddy land previously planted with rice. Accordingly, rice farmers have increased their rice planting area, further supported by high domestic rice prices (Table 38 & 39). The prevalence of specialized equipment and expertise for rice cultivation in Korea is another reason many farmers can easily return to rice production when market conditions dictate.

Table 22

Korea: 2021 Rice Production Forecast								
2020 Rice Production 2021 Rice Production Forecast								
Area (1,000 ha)	726	732 ^{a/}						
Yield (kg/ha)	4,827	5,224 ^{b/}						
Production (1,000 MT)	3,507	3,827						

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

a/ KOSTAT Survey for September 13-23, 2021 b/ applied the average yield for past five years

Table 23

	Korea: Rice Area, Yield and Production										
Crop Year	Area (1,000 ha)	Yield (KG/ha)	Production (Milled, 1,000 MT)								
2011	854	4,946	4,224								
2012	849	4,718	4,006								
2013	833	5,081	4,230								
2014	816	5,200	4,241								
2015	799	5,416	4,327								
2016	779	5,389	4,197								
2017	755	5,264	3,972								
2018	738	5,244	3,868								
2019	730	5,131	3,744								
2020	726	4,827	3,507								
2021	732 ^{a/}	5,224	3,827								

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

a/ KOSTAT Survey for September 13-23, 2021

Yield

Favorable weather developments during the rice filling stage resulted in a higher average rice yield of 5,224 kg per ha, up 8.2 percent from the previous year and slightly higher than the average yield of 5,210kg/ha averaged for the previous five-years (2016-2020).

Government Rice Purchase Program under the Public Food Grain Stockholding Program (PFSP):

The Korean government directly purchases rice for price stabilization and food security purposes. Under the PFSP, the government will purchase domestic paddy rice during the harvest season (October-December) at the average market price and sell it during non-harvest periods at the prevailing domestic market price.

Between October and December 2021, the Korean government plans to purchase 350,000 MT (milled basis) of paddy rice, representing around nine percent of the estimated 2021 rice crop production, which includes an additional purchase of 10,000 MT for the APTERR (ASEAN Plus Three Emergency Rice Reserve). The APTERR was established to provide member countries with rice in the event of natural disasters. The total amount of rice agreed upon in July 2013 by the 13 member countries and stored in reserve was targeted at 787,000 metric tons, including 150,000 metric tons promised by Korea.

Table 24

Korea: Government Rice Purchases									
Ţ	Under Public Food Grain Stockholding Program (PFSP)								
Crop Year	Production (1,000 MT)	Purchase (1,000 MT)	%						
2011	4,224	261	6.2						
2012	4,006	363	9.1						
2013	4,230	367	8.7						
2014	4,241	610 ^{a/}	14.4						
2015	4,327	717 ^{b/}	16.5						
2016	4,197	678 ^{c/}	16.1						
2017	3,972	711 ^{d/}	17.9						
2018	3,875	350 ^{e/}	9.0						
2019	3,744	346 ^{f/}	9.3						
2020	3,507	332 ^{g/}	10.0						
2021	3,827	350 ^{h/}	9.1						

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

h/ Plan to purchase 340,000 MT under PFSP and 10,000 MT for APTERR (ASEAN Plus Three Emergency Rice Reserve) by the end of the year

Rice Consumption:

Korean consumers prefer short-grain rice for table use. 80 percent of domestic production (all short grain) was consumed as table rice in MY 2019/20. Per capita table rice consumption continues to decline, as eating habits change due to rising incomes and the growing popularity of more diverse international foods. Annual per capita table rice consumption reached its peak at 136.4 kg in 1970, but declined to 57.7 kg in MY 2019/20. FAS/Seoul estimated per capita table rice consumption at 56.5 kg in the past marketing year (MY 2020/21) based on declining consumption trends, and forecasts it decreasing further to 55.3 kg in MY 2021/22 (Table 25).

MY 2021/22 rice consumption is forecast at 3.95 MMT, down 0.3 percent from the previous year due to continuously decreasing table rice consumption partially offset by rises in processing consumption. Imported rice constitutes about ten percent of total consumption.

In MY 2020/21, rice consumption is expected to decline to 3.96 MMT, down three percent from the previous year due to decreases in both table and feed rice. Consumption for food processing is expected to remain unchanged from the level of the previous year due to higher market prices caused by lower

a/Includes 240,000 MT to stabilize rice market in addition to 370,000 MT under PFSP, but excludes 30,000 MT for APTERR (ASEAN Plus Three Emergency Rice Reserve)

b/ Includes 357,000 MT to stabilize rice markets in addition to 360,000 MT under PFSP, but excludes 30,000 MT for APTERR (ASEAN Plus Three Emergency Rice Reserve)

c/ Includes 299,000 MT to stabilize rice markets in addition to 349,000 MT under PFSP, but exclude 30,000 MT for APTERR (ASEAN Plus Three Emergency Rice Reserve)

d/ Includes 370,000 MT to stabilize rice markets in addition to 331,000 MT under PFSP and 10,000 MT for APTERR (ASEAN Plus Three Emergency Rice Reserve)

e/ Includes 340,000 MT under PFSP and 10,000 MT for APTERR (ASEAN Plus Three Emergency Rice Reserve)

f/ Includes 336,000 MT under PFSP and 10,000 MT for APTERR (ASEAN Plus Three Emergency Rice Reserve)

 $^{\,}$ g/ Includes 331,000 MT under PFSP and 10,000 MT for APTERR (ASEAN Plus Three Emergency Rice Reserve) along with 1,000 MT of damaged rice

domestic crop supply. As ending stocks in MY 2018/19 declined to the level of one million metric tons, Korea has halted distribution of older rice stocks for animal feed since early 2020. Therefore, consumption for animal feed has been minimal.

In MY 2019/20, rice consumption is estimated at 4.0 MMT, down 14 percent from the previous year due to sharply declining rice distribution for animal feed.

Feed:

The Korean government has no plan to release old rice for feed after using 1.82 MMT of brown rice for the past five years (MY2015-MY2019), equivalent to 1.64 MMT on a milled basis.

Table 25

14010 20										
Korea: Rice Utilization Pattern										
(1,000 MT, milled)										
Rice Year (November – October)	MY 2018/19 ^a /	MY 2019/20 ^{b/}	MY 2020/21 ^{c/}	MY 2021/22 ^{c/}						
Table Rice	3,070	2,991	2,926	2,867						
Processing	744	650	650	700						
(for food)	(553)	(492)	(500)	(500)						
(for liquor)	(191)	(158)	(150)	(200)						
Feed	453	42	1	0						
Seed	32	31	31	31						
Other and Loss	351	362	350	350						
Total Demand	4,650	4,076	3,958	3,948						
Per Capita Table Rice	59.2	57.7	56.5							
Consumption (kg)										

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

a/ MAFRA Revised

b/ MAFRA Preliminary

c/ FAS/Seoul forecast

Table 26

Korea: Rice Consumption Pattern for Processing Purpose										
	(1,0	000 MT, milled)								
Purpose	MY 2016/17	MY 2017/18 ^a	MY 2018/19 ^{b/}	MY 2019/20 ^c						
KRFA	220	260	299	305						
KALIA	216	188	191	158						
Others ^{d/}	272	308	254	187						
Sub Total	708	756	744	650						
Feed	378	671	453	42						
Grand Total	1,086	1,427	1,197	692						

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

a/ Revised

b/ Preliminary

c/ FAS/Seoul forecast

d/ Traditional foods or beverage made of local rice.

Note: Korea Rice Foodstuffs Association (KRFA), Korea Alcohol & Liquor Industry Association (KALIA)

Table 27

	Korea: Rice Consumption for Animal Feed										
		(N.	Iarketing	Year, Broy	wn rice bas	sis, MT)					
Month	M	Y 2018/19)	N	IY 2019/2	0	M	Y 2020/2	1		
	Domestic	Imported	Total	Domestic	Imported	Total	Domestic	Imported	Total		
	Rice	Rice		Rice	Rice		Rice	Rice			
November	66,286	1,009	67,295	29,500	2,518	32,018	140	0	140		
December	53,349	2,021	55,370	25,168	1,338	26,506	200	0	200		
January	42,868	116	42,984	9,927	63	9,990	119	0	119		
February	43,781	8	43,789	3,822	0	3,822	136	0	136		
March	51,147	26	51,173	1,897	0	1,897	132	0	132		
April	42,124	6	42,130	1,042	0	1,042	89	0	89		
May	35,510	1,112	36,622	672	0	672	174	0	174		
June	37,845	17	37,862	284	0	284	103	0	103		
July	42,311	1,808	44,119	318	0	318	102	0	102		
August	33,284	3,606	36,890	227	0	227	102	0	102		
September	31,142	5,210	36,352	152	0	152	na	na	na		
October	33,156	3,535	36,691	119	0	119	na	na	na		
Total	512,804	18,474	531,278	73,128	3,919	77,047	na	na	na		
Total (milled)	461,523	16,627	478,150	65,815	3,527	69,342	na	na	na		

Source: Korea Feed Association (KFA)

Note: actual rice consumption for feed is slightly different from government's estimate of feed use

Rice Trade:

Korea continues to import the mandatory volume of 408,700 metric tons from Most Favored Nation (MFN) countries at the current duty level of five percent under the Tariff Rate Quota (TRQ) regime implemented in 2015. aT (Korea Agro-Fisheries and Food Trade Corporation), the government's state trading arm, manages the purchase of all imported rice through a tendering process, and subsequently auctions off imported table rice.

At the end of 2019, Korea agreed to a compromise with the five countries who had raised concerns with the rice tariff schedule and market access. As part of this compromise, Korea agreed to allocate 408,700 MT of the WTO rice TRQ among the five countries as detailed below.

Within the rice TRQ, Korea established a country-specific quota (CSQ) for each of the five parties and allocated the following volumes on a milled rice basis:

United States: 132,304 MT

China: 157,195 MT Vietnam: 55,112 MT Thailand: 28,494 MT Australia: 15,595 Through the plurilateral agreement which took effect in January 2020, Korea has made 20,000 MT (milled) of the rice TRQ available on a Most-Favored Nation (MFN) basis to all WTO members, including the parties.

In accordance with the WTO special treatment clause, Korea continues to import the mandatory volume of 408,700 MT annually (at the current duty level of five percent) with CSQ countries accounting for 388,700 MT and Most Favored Nation (MFN) countries with the remaining 20,000 MT. Tariffs outside the quota remain prohibitively high at 513 percent.

Imports:

The MY 2021/22 rice import forecast remains unchanged from the initial forecast at 410,000 MT (milled basis). Korea has purchased 80 percent of the 408,700 tons (milled basis) 2021 rice TRQ to date.

In MY 2020/21, rice imports remain unchanged from the initial forecast at 500,000 MT (milled basis) due to actual delivery of a major portion of the 2020 TRQ contracts rolling over into the following year. Annual U.S. rice exports in 2021 also remain unchanged from the initial forecast at 160,000 MT (milled basis) because all contracts made under the 2020 TRQ are scheduled for delivery in 2021.

In MY 2019/20, Korea's rice imports were 465,609 MT (milled), consisting of 390,700 MT imported under the 2019 TRQ, and 74,909 MT imported under the 2020 TRQ. In 2020, the United States exported 153,231 MT to Korea, consisting of 121,233 MT under the 2019 TRQ and 31,988 MT under the 2020 TRQ.

2021 TRQ Tendering Process:

Under the 2021 TRQ, Korea has so far purchased 325,301 MT (milled), approximately 80 percent of the total TRQ, as shown in the Table 28. The remaining 20 percent of TRQ will be purchased by the end of the year. However, actual delivery for 44 percent of the total TRQ is expected to take place in the first half of 2022 due to the slower pace of the bidding process caused by inflated bidding prices as well as ongoing supply chain disruptions.

The total quantity of 325,301 MT (milled basis) that Korea has purchased under the 2021 TRQ so far consists of:

- 86,666 MT (78,000 milled basis) of medium-grain brown rice from the United States
- 1,500 MT of medium grain milled rice for table purpose from the United States
- 179,105 MT (161,195 milled basis) of short-grain brown rice 169,105 from China and 10,000 MT from Vietnam
- 5,000 MT of short grain sweet rice (milled) from China
- 85,673 MT (77,106 milled basis) of long-grain brown rice 52,215 MT from Thailand and 33,458 MT from Vietnam.
- 2,500 MT of long grain milled rice for table purpose 1,500 from Thailand (including 100 MT of Hom Mali) and 1,000 MT from Vietnam (Table 29).

Table 28

Korea: Updated Rice Contracts Status by Country under 2021 CSQ/MFN TRQ (Metric Ton, milled, as of September 15, 2021)									
Country	Allocated TRQ	Contracts	Open	Contractual Rate					
USA	132,304	79,500	52,804	60					
China	157,195	157,195	0	100					
Vietnam	55,112	40,112	15,000	73					
Thailand	48,494 ^{a/}	48,494 ^{a/}	0	100					
Australia	15,595	0	15,595	0					
Total	408,700	325,301	83,399	80					

Source: Korea Agro-Fisheries and Food Trade Corporation (aT) a/includes 20,000 MT of MFN quota

Table 29

Korea: Rice Varieties of Contracts by Country under 2021 CSQ/MFN TRQ ^{1/} (Metric Tons, milled, as of September 15, 2021)									
Rice Variety	Medium Grain	Short Grain	Long Grain	Total					
USA	79,500	0	0	79,500					
China	0	157,195	0	157,195					
Thailand	0	0	48,494	48,494					
Vietnam	0	9,000	31,112	40,112					
Total	79,500	166,195	79,606	325,301					
Ratio (%)	34.44%	51.09%	24.47%	100.00%					
Open	na	na	na	83,399					

Source: Korea Agro-Fisheries and Food Trade Corporation (aT) 1/ under ongoing process of buying tenders since January 2021

Table 30

Korea: 2021 TRQ Rice Tender Results (as of September 15, 2021)

Quota Quota Volume Awarded Bid Date Volume Terms and Delivery Local Rice Type (Milled Origin Price Supplier Conditions (mm-dd-yy) (Contrac Date Agent US\$/MT Rice t Basis) Basis) Jun. 30, 2021 1/22/2021 MG #3 Brown 22,222 20,000 **USA** 918.24 CIP Philasun ADM 1/22/2021 MG #3 Brown 22,222 20,000 **USA** 912.34 CIP July 31, 2021 Philasun ADM 1/22/2021 1,500 1,500 **USA** CIF Jun. 30, 2021 ADM MG #1 Milled 997.64 Philasun KienGiang Import & Jupiter 1/22/2021 CIF LG #1 Milled 1,400 1,400 Thailand 620.00 May. 31, 2021 Export Korea Jointstock Company LG #1 Milled. 1/22/2021 Thailand CIF 100 100 1176.66 May. 31, 2021 Hyolim Chiameng Hom Mali POSCO 1/22/2021 SG #3 Brown 22,222 20,000 China 927.00 CIP Apr. 30, 2021 **COFCO** Int'l 3/4/2021 SG #3 Brown 15,000 929.00 CIP Jun. 30, 2021 Jilin Grain 16,667 China Singsong Thai Capital 3/25/2021 LG #3 Brown 15,549 13,994 Thailand 617.74 CIP Jul. 31, 2021 D&B Crop Sangfah POSCO 3/25/2021 LG #3 Brown 14,444 13,000 Thailand 607.00 CIP Sep. 30, 2021 Product Co., Int'l Ltd Youngwo 3/25/2021 LG #3 Brown 11,236 CIP Jun. 30, 2021 10,112 Vietnam 584.00 na o Int'l SG #3 Sweet May 1-June POSCO 3/25/2021 5,000 5,000 China 1198.00 CIF COFCO Rice, Milled 30, 2021 Int'l POSCO 5/14/2021 SG #3 Brown 22,222 20,000 China 988.00 CIP Sep. 30, 2021 COFCO Int'l 5/14/2021 SG #3 Brown 22,222 20,000 China 988.88 CIP Oct. 31, 2021 Singsong Jilin Grain **POSCO** COFCO 5/14/2021 SG #3 Brown 11,111 10,000 986.00 CIP Nov. 30,2021 China Int'l **POSCO** 5/14/2021 SG #3 Brown 16,667 15,000 China 989.00 CIP Dec. 31, 2021 **COFCO** Int'l Youngwo 5/14/2021 LG #3 Brown 11,111 10,000 Vietnam 572.00 CIP Sep. 30, 2021 na o Int'l Youngwo 5/14/2021 LG #3 Brown 11,111 10,000 578.50 CIP Oct. 31, 2021 Vietnam na o Int'l **POSCO** 7/20/2021 SG #3 Brown 13.550 12,195 China 1005.00 CIP Dec. 31, 2021 **COFCO** Int'l 7/20/2021 22,222 20,000 1006.49 SG #3 Brown China CIP Feb. 28, 2022 Jilin Grain Singsong POSCO 7/20/2021 SG #3 Brown 11,111 10,000 China 1008.00 CIP Mar. 31, 2022 COFCO Int'l POSCO 7/20/2021 SG #3 Brown 11,111 10,000 China 1009.00 CIP COFCO Apr. 30, 2022 Int'l MH 7/20/2021 SG #3 Brown 10,000 9,000 Vietnam 568.40 CIP Nov. 30, 2022 Methanol Jupiter LG #1 Milled 7/20/2021 1,000 1,000 580.00 CIF Oct. 31, 2022 Vina Food2 Vietnam Korea 8/11/2021 MG #3 Brown 22,222 20,000 USA 1224.54 CIP Mar. 31, 2022 Philasun ADM 9/9/2021 18,000 CIP ADM MG #3 Brown 20,000 **USA** 1238.42 Apr. 30, 2022 Philasun Aisa Golden/Capita **POSCO** 9/9/2021 LG #3 Brown 11,111 10,000 Thailand 1/ 485.00 CIP Feb. 28, 2022 1 Rice Co., Int'l Ltd

9	9/9/2021	LG #3 Brown	11,111	10,000	Thailand 1/	487.00	CIP	Mar. 31, 2022	POSCO Int'l	Sangfah Product Co., Ltd
	Total		360,444	325,300						

Source: Korea Agro-Fisheries and Food Trade Corporation (aT) 1/ under Global Quota

Auctions for Imported Table Rice:

The Korea Agro-Fisheries & Food Trade Corporation (aT) sells imported table rice shipments to consumer distribution channels through a public auction system. MAFRA distributes processing rice to end-users, such as food processors and alcoholic beverage producers, at a set price throughout the year.

Due to heavy stocks of domestic rice caused by overproduction since 2013, the pace of auctions for imported rice for table use has been very slow, effectively reducing the annual volume of auctioned rice. As large rice stocks have dampened domestic prices, farmers' groups have regularly petitioned the government to slow auctions for imported table rice. During the harvest season, farmers' groups have further requested a complete stop to auctions for imported medium and short grains, which compete with domestic short grain rice.

Accordingly, the Korean government slowed the pace of auctions for imported rice in recent years. The unsold portion of imported table rice has been converted to alcohol processing, with 52,959 MT (including 34,035 MT of U.S. medium grain) under the 2015 TRQ, 23,690 MT (including 23,084 MT of U.S. medium grain) under the 2016 TRQ, and 13,546 MT of U.S. medium grain under the 2017 TRQ, respectively (Table 31).

The unsold portion of 12,101 MT of U.S. medium grain rice under 2018 TRQ was converted to alcohol or food processing (Table 32).

On January 4, 2021, aT started auctioning 37,000 MT of U.S. medium grain rice imported under the 2019 TRQ, which was delivered into Korea in the first half of 2020, completing selling auctions for 36,879 MT as of September 29, 2021. Selling auctions for U.S. table rice under the 2019 TRQ were held at a much faster pace than previous years to help alleviate high domestic market prices. Vietnamese long grain rice of 3,000 MT was auctioned starting in June 2020 and completed on March 22, 2021 (Table 33).

On October 5, 2021, aT began auctioning 38,500 MT of U.S. medium grain milled rice imported under the 2020 TRQ, delivered into Korea in the first half of 2021. Thai long grain rice of 1,500 MT was auctioned starting in April 2021 and completed on August 16, 2021 (Table 34).

Under the 2021 TRQ, aT has auctioned off 1,500 MT of Thai long grain milled rice since August 23, 2021, which was delivered into Korea in May 2021, while Vietnamese long grain milled rice? of 1,000 MT will be delivered to Korea in October 2021. aT purchased 1,500 MT of U.S. medium grain milled

rice, delivered in June 2021, and plans to purchase the remainder of 40,000 MT by the end of the year (Table 35).

Table 31

Korea: Status of Table Rice Imports and Distribution													
(MT, Milled rice)													
	Total Rice	Table Purpose	Rate of	Distribution	Conversion								
TRQ	Imports		Table Rice	to	to								
(Calendar Year)			of Total	Consumers	Processing								
			Imports (%)	Market	11000551115								
	MMA Quota Regime (2005-2014)												
2005	225,575	22,557	10	22,557	0								
2006	245,922	34,429	14	34,429	0								
2007	266,270	47,928	18	47,928	0								
2008	286,617	63,055 ^{a/}	22	38,121	24,934								
2009	306,964	79,810 ^{b/}	26	45,007	34,803								
2010	327,311	98,193 ^{c/}	30	92,576	5,617								
2011	347,658	104,297	30	104,297	0								
2012	368,006	110,401	30	110,401	0								
2013	388,353	116,505	30	116,505	0								
2014	408,700	122,610 ^{d/}	30	65,072	57,538								
Total	3,171,376	799,785	25	676,893	122,892								
	TR	Q Regime (Since	2015)										
2015	408,700	60,000e/	15	7,041	52,959								
2016	408,700	50,000f/	12	26,310	23,690								
2017	408,700	40,000g/	10	25,914	14,086								
2018	408,700	39,800h/	9.7	27,689	12,111								
2019	408,700	40,000i/	10	39,872	128								
2020	408,700	40,000j/	10	1,700	na								
2021	408,700	44,0 <u>00k/</u>	11	404									

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

f/ suspended auctions for 23,084 MT of U.S. medium grain and 546 MT of Vietnamese short grain as of September 24, 2018 but completed auctioning-off for 7,000 MT of Thai long grain as of January 2, 2019. 546 MT of Vietnamese short grain has already converted to alcohol processing immediately. The unsold U.S. medium grain has been converted to alcohol processing since January 2019.

g/ consisting of 37,000 MT of U.S. medium grain and 3,000MT of Vietnamese long grain, of which, 13,546 MT of U.S. rice was converted to alcohol processing after suspending selling auction on Jan. 6, 2020 and 540 MT of Vietnamese long grain was converted to animal feed due to a damage over transportation.

a/ of which, 24,934 MT of Chinese rice was diverted to alcohol processing purpose in CY 2010

b/ of which, 33,303 MT of Chinese rice and 1,500 MT of Thai rice were diverted to alcohol processing purpose in CY 2011 c/ of which, 5,671 MT of Chinese rice were diverted to alcohol processing purpose in CY 2012.

d/ of which, 8,754 MT of U.S. rice, 43,386 of Chinese rice and 5,395 MT of Australian rice were converted to alcohol processing purpose in CY 2016

 $e\!/$ of which, 34,035 MT of U.S. rice and 18,924 MT of Chinese rice have been converted to alcohol processing purpose in CY 2018

h/ consisting of 2,800 MT of Vietnamese long grain delivered in December 2018 and 37,000 MT of U.S. medium grain delivered during April - May 2019 based on contracts; of which, 12,010 MT of U.S. rice is converted to alcohol or food processing after suspending selling auction on Dec. 30, 2020 with Vietnamese long grain auctions completed on June 1, 2020 i/ consisting of 3,000 MT of Vietnamese long grain delivered in April 2020 and 37,000 MT of U.S. medium grain delivered during February - June 2020 based on contracts. Selling auctions for Vietnamese long grain completed on March 29, 2021 with selling auctions for U.S. medium grain completing on September 29, 2021 auctioning off from Jan. 4, 2021. j/ consisting of 1,500 MT of Thai long grain delivered in October 2020, completed selling auctions on August 16, 2021 and 38,500 MT of U.S. medium grain delivered during January - June 2021, with ongoing selling auctions since October 5, 2021. k/ consisting of 1,500 MT of Thai long grain delivered in May 2021, ongoing selling auctions since August 23, 2021 and 1,000 MT of Vietnamese long grain to be delivered in October 2021. 1,500 MT of U.S. medium grain delivered in June 2021, remainder of 40,000 MT will be purchased by the end of the year which will be delivered in the first half of 2022.

Table 32

14010 32						
Korea: Status of Rice Auction for Table Rice under 2018 TRQ						
(Unit	:: metric tons, i	milled basis,	as of Decen	nber 30, 2020	0)	
Commodity	USDA	Total Table	Auctioned	Balance	Auctioned	Auctioned
(Period of Auctions)	Grade	Rice TRQ	Off	Dalance	Off (%)	Price 1/
U.S. Medium Grain 2/				12,101	67	1 792
(Jan 13 – Dec 30, 2020)	#1	37,000	24,899	12,101	67	1,782
Vietnamese Long Grain3/						
(Aug 26, 2019~June 1,				10	100	1,308
2020)	#1	2,800	2,790			
Total		39,800	27,689	12,111	70	

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

Table 33

Korea: Status of Rice Auction for Table Rice under 2019 TRQ							
(U	nit: metric tons,	milled basis,	as of Septer	mber 29, 202	1)		
Commodity	USDA	Total Table	Auctioned	Balance	Auctioned	Auctioned	
(Period of Auctions)	Grade	Rice TRQ	Off	Balance	Off (%)	Price 1/	
U.S. Medium Grain 2/							
(January 4 ~ September							
29, 2021)	#1	37,000	36,879	121a/	100	1,857	
Vietnamese Long							
Grain3/							
(June 8, 2020~March 29,							
2021)	#1	3,000	2,993	7	100	1,170	
Total		40,000	39,872	128	100		

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

- 1/ Weighted average in Korean Won per Kg
- 2/ delivered in the first half of 2020, completed selling auctions on September 29, 2021.
- 3/ delivered in April 2020, completed selling auctions on March 29, 2021
- a/ damaged kernels which will be converted to processing purpose later

^{1/} Weighted average in Korean Won per Kg

^{2/} imported in the first half of 2019 with 2018 crop, stopped selling auctions as of December 30, 2020 due to deteriorated quality, the unsold is currently converted to alcohol or food processing purpose.

^{3/} imported in December 2018, completed selling auctions as of June 1, 2020

Table 34

1 4010 3 1							
Korea: Status of Rice Auction for Table Rice under 2020 TRQ							
	(Unit: metric tons, milled basis, as of October 5, 2021)						
Commodity	USDA	Total Table	Auctioned	Balance	Auctioned	Auctioned	
(Period of Auctions)	Grade	Rice TRQ	Off	Dalance	Off (%)	Price 1/	
U.S. Medium Grain 2/							
(October 5, 2021~)	#1	38,500	200	38,300	1	2,021	
Thai Long Grain3/ (April 5~August 16,	#3	1,410	1,410	0	100	1,366	
2021)	#1a/	90	90	0	100	3,278	
Total		40,000	1,700	38,300	4	na	

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

- 1/ Weighted average in Korean Won per Kg
- 2/ delivered in the first half of 2021, auctioning off since October 5, 2021
- 3/ delivered in October 2020, completed selling auctions on August 16, 2021
- a/ Hom Mali

Table 35

1 4010 33							
Korea: Status of Rice Auction for Table Rice under 2021 TRQ							
	(Unit: metric tons, milled basis, as of October 5, 2021)						
Commodity	USDA	Total Table	Auctioned	Balance	Auctioned	Auctioned	
(Period of Auctions)	Grade	Rice TRQ	Off	Balance	Off (%)	Price 1/	
U.S. Medium Grain 2/	#1	41,500	none	41,500	na	na	
Thai Long Grain3/	#1	1,400	372	1,028	27	1,234	
(August 23, 2021~)	#1a/	100	32	68	32	3,026	
Vietnamese Long Grain							
4/	#1	1,000	none	1,000	na	na	
Total		44,000	404	43,596	1	na	

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

- 1/ Weighted average in Korean Won per Kg
- 2/ purchased 1,500 MT with the remainder being tendered later
- 3/ delivered in May 2021, ongoing selling auctions since August 23, 2021
- 4/ to be delivered in October 2021
- a/ Hom Mali

Exports:

Under the Food Assistance Convention (FAC), Korea shipped 50,000 MT of domestic rice (milled) to six countries in May 2021: 18,000 MT to Yemen, 13,680 MT to Ethiopia, 9,500 MT to Kenya, 4,500 MT to Uganda, 3,000 MT to Syria, and 1,320 MT to Laos.

In MY2020/21, Korea is expected to export 52,000 MT of domestic rice, including food aid and commercial exports based on rice exports for the first ten months.

Table 36

]	Korea: Rice Exports (Milled)	3	
Calendar Year	To the	World	To the Uni	ted States
	Quantity (MT)	Value (USD1,000)	Quantity (MT)	Value (USD1,000)
2011	3,782	6,277	161	244
2012	2,223	4,424	90	185
2013	1,517	3,363	86	180
2014	1,684	3,894	123	303
2015	1,987	4,472	365	1,148
2016	2,313	4,847	477	1,175
2017	2,767	5,641	540	1,390
2018	64,164a/	43,823	425	1,171
2019	52,663b/	26,234	425	1,156
2020	55,196c/	27,377	654	1,766
2021 (1-8)	50,845d/	18,923	269	879

Source: Korea Customs Service (KCS) and Trade Data Monitor LLC

Rice Marketing

Lower rice production in 2020 triggered rice wholesale market prices to increase by 14-20 percent from October through December over the same period in 2019. In response, the Korean government announced a distribution plan for 370,000 MT of government-held rice stocks to curb the increase in domestic rice prices. The first batch released totaled 116,000 MT: 76,000 MT (2020 crop) for table rice and 40,000 MT (2018 crop) for processing in January; 48,000 MT (2019 crop) for processing in February; and 46,000MT (2019 crop) for processing in April. Korea released an additional 80,000 MT in June with 50,000 MT (2020 crop) for table use and 30,000 MT (2019 crop) for processing. After the 20,000 MT was released in August out of the remaining 80,000 MT, total distribution from government stocks reached 310,000 MT on the year.

a/includes 60,000 MT of food assistance in 2018

b/ includes 51,000 MT of food assistance in 2019

c/includes 52,954 MT of food assistance in 2020

d/include 49,948 MT of food assistance in 2021

Figure 2



Stocks:

Korea worked to reduce the amount of rice stocks in storage by allowing rice use for animal feed from MY 2015 to MY 2019, with MY 2018/19 stocks (at the end of October 2019) declining to 1.02 MMT (21.8 percent of total domestic consumption). The rice animal feed policy resulted in the use of 1.82 MMT of brown rice (equivalent to 1.64 MMT, milled) for feed purposes for the past four years. However, since 2020, the Korean government has eliminated the policy to secure sufficient rice stocks for possible food aid, including a planned donation to the DPRK.

Accordingly, MY 2019/20 ending stocks rebounded to 1.2 MMT (28.8 percent of total consumption at the end of October 2020), up seven percentage points from the previous year.

MY 2020/21 ending stocks (at the end of October 2021) are expected to remain unchanged at 1.2 MMT, or 29.5 percent of stock to use ratio.

MY 2021/22 ending stocks (at the end of October 2022) are forecast at 1.4 MMT (35.5 percent of total forecast consumption) up six percentage point from the previous year due to increased production and constant imports, coupled with reduced consumption.

Table 37

1 4010 57						
Korea: Status of Rice Stocks						
	(Milled ric	e, 1,000 M	Γ , as of end Γ	October)		
Rice Year (NovOct.)	2016/17	2017/18	2018/19a/	2019/20b/	2020/21c/	2021/22c/
Total Stock	2,000	1,560	1,015	1,172	1,169	1,403
Government Stock	2,000	1,560	1,015	1,172	1,169	1,403
Total Domestic Consumption	4,435	4,746	4,650	4,076	3,958	3,948
Stock to Use Ratio (%)	45.1	32.9	21.8	28.8	29.5	35.5

Source: FAS/Seoul Estimate based on MAFRA data

a/ MAFRA Revised b/ MAFRA Preliminary c/ FAS/Seoul forecast

Production, Supply, and Distribution Data Statistics:

Rice PS&D

Rice, Milled	2019/2020		2020/2021		2021/2022	
Market Year Begins	Nov 2019		Nov 2020		Nov 2021	
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	730	730	726	726	732	732
Beginning Stocks (1000 MT)	1093	1093	1136	1172	1038	1169
Milled Production (1000 MT)	3744	3744	3507	3507	3816	3827
Rough Production (1000 MT)	5016	5016	4713	4713	5131	5140
Milling Rate (.9999) (1000 MT)	7464	7464	7441	7441	7437	7445
MY Imports (1000 MT)	454	466	450	500	410	410
TY Imports (1000 MT)	465	477	450	500	410	410
TY Imp. from U.S. (1000 MT)	150	153	0	160	0	132
Total Supply (1000 MT)	5291	5303	5093	5179	5264	5406
MY Exports (1000 MT)	55	55	55	52	55	55
TY Exports (1000 MT)	55	55	55	52	55	55
Consumption and Residual (1000 MT)	4100	4076	4000	3958	3950	3948
Ending Stocks (1000 MT)	1136	1172	1038	1169	1259	1403
Total Distribution (1000 MT)	5291	5303	5093	5179	5264	5406
Yield (Rough) (MT/HA)	6.8712	6.8712	6.4917	6.4917	7.0096	7.0219

(1000 HA),(1000 MT),(MT/HA) MY = Marketing Year, begins with the month listed at the top of each column

TY = Trade Year, which for Rice, Milled begins in January for all countries. TY 2021/2022 = January 2022 - December 2022

Table 38

14010 30	Korea: Mont	hly Wholes	ale Price of N	Milled Rice		
	ixorca. Wioni	High Q		viiiicu Kicc		
Month\Year	CY 20	<u> </u>	CY 2	020	CY	2021
·	Won/kg	USD/kg	Won/kg	USD/kg	Won/kg	USD/kg
January	2,469	2.20	2,355	2.02	2,827	
February	2,469	2.20	2,353	1.97	2,872	2.59
March	2,470	2.18	2,355	1.93	2,903	2.57
April	2,464	2.16	2,350	1.92	2,926	2.62
May	2,459	2.08	2,349	1.92	2,935	2.75
June	2,452	2.09	2,420	2.00	2,944	2.63
July	2,449	2.08	2,436	2.03	2,955	2.58
August	2,450	2.03	2,470	2.08	2,951	2.54
September	2,447	2.06	2,536	2.15	2,846	2.42
October	2,307	1.95	2,620	2.29	2,845a/	2.40
November	2,362	2.03	2,780	2.49	na	na
December	2,352	2.00	2,811	2.57	na	na
Average	2,429	2.09	2,487	2.11	na	na

Source: Korea Agricultural Marketing Information Service (KAMIS)

Note: Monthly Average Exchange Rate is applied

a/ October 1-8, 2021, new crop

Table 39

	Korea: Mo	onthly Retai	l Price of Mi	illed Rice		
		(High Q	Quality)			
Month\Year	CY 20	019	CY 2	2020	CY	2021
	Won/kg	USD/kg	Won/kg	USD/kg	Won/kg	USD/kg
January	2,665	2.38	2,586	2.22	2,999	2.73
February	2,662	2.37	2,586	2.17	3,019	2.72
March	2,658	2.35	2,578	2.12	3,000	2.65
April	2,653	2.33	2,575	2.11	3,000	2.68
May	2,645	2.24	2,581	2.11	3,055	2.86
June	2,634	2.24	2,585	2.14	3,062	2.73
July	2,607	2.22	2,588	2.16	3,086	2.70
August	2,598	2.15	2,618	2.21	3,066	2.64
September	2,580	2.17	2,637	2.24	2,866	2.44
October	2,554	2.16	2,816	2.47	2,738a/	2.31
November	2,585	2.22	2,945	2.64	na	na
December	2,618	2.23	3,023	2.76	na	na
Average	2,622	2.25	2,676	2.27	na	na

Source: Korea Agricultural Marketing Information Service (KAMIS)

Note: Monthly Average Exchange Rate is applied.

a/ October 1-8, 2021, old crop

Table 40

	Korea: Foreign Exchange	Rate					
(Korean Won against USD)							
Month	CY 2019	CY 2020	CY 2021				
January	1,121	1,165	1,097				
February	1,121	1,194	1,111				
March	1,131	1,218	1,130				
April	1,140	1,223	1,118				
May	1,182	1,226	1,067				
June	1,174	1,208	1,121				
July	1,175	1,199	1,144				
August	1,208	1,186	1,161				
September	1,190	1,177	1,174				
October	1,183	1,142	1,186a/				
November	1,166	1,115	na				
December	1,175	1,095	na				
Average	1,164	1,180	na				

Source: Global Financial Service

a/ October 1-6

Attachments:

No Attachments