

**Voluntary Report** – Voluntary - Public Distribution

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**Report Name:** 2020 Rice Production Update

**Country:** Korea - Republic of

**Post:** Seoul

**Report Category:** Grain and Feed

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**Report Highlights:**

On November 12, 2020, Statistics Korea (KOSTAT) released a revised 2020 rice production estimate of 3.507 million metric tons (MMT), down an additional 3.4 percentage points from the initial rice production estimate surveyed in early September 2020 (3.631 MMT) and down 6.4 percent from the previous year. The drop in production reflects a decline in rice area (down 0.5 percent) coupled with lower than expected yields (down 5.9 percent). The MY 2020/21 stocks-to-use ratio is expected to fall slightly to 27.3 percent.

## Production

On November 12, 2020, Statistics Korea (KOSTAT) released its revised 2020 rice production estimate of 3,506,578 metric tons, representing an additional 3.4 percentage point drop from the most recent FAS Seoul update ([KS2020-0066](#)). Production is now down 6.4 percent compared to the 2019 crop due to consecutive typhoons and the longer monsoon season reducing sunshine during the grain heading and flowering stages from early July through early August. The earlier KOSTAT production estimates may have underestimated the production decline because of lower than expected average kernel harvest weight, caused by lack of sunshine. The PSD has been revised accordingly.

## Yield

Unfavorable weather developments (particularly lack of sunlight) during the rice heading and flowering stages resulted in a lower rice yield of 4,827kg per ha, which is down 5.9 percent from 2019, the lowest level since 2012.

<b>Korea: Rice Area, Yield and Production</b>			
Crop Year	Area (1,000ha)	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

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

<b>Korea: 2020 Rice Area, Yield and Production</b>			
Type of Rice Land	Area	Yield (KG/ha)	Production (Milled, MT)
Paddy Rice	726,180	4,828	3,505,984
Upland Rice	252	2,352	595
Total	726,432	4,827	3,506,579

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

**Korea: 2020 Rice Area and Production Estimate per Province****(November 12 Crop Survey Basis)**

Crop Year	Area (Hectare)			Production (Metric ton)		
	2019	2020	Change (%)	2019	2020	Change (%)
<b>National Total</b>	<b>729,814</b>	<b>726,432</b>	<b>-0.5</b>	<b>3,744,450</b>	<b>3,506,578</b>	<b>-6.4</b>
Kyonggi	76,642	75,128	-2.0	373,740	348,221	-6.8
Kangwon	28,640	28,405	-0.8	150,901	127,387	-15.6
Chungbuk	33,247	32,745	-1.5	173,916	160,623	-7.6
Chungnam	132,174	131,284	-0.7	709,215	677,533	-4.5
Chonbuk	112,146	110,880	-1.1	604,509	555,774	-8.1
Chonnam	154,091	156,230	1.4	725,094	687,812	-5.1
Kyounbuk	97,465	97,257	-0.2	529,210	495,058	-6.5
Kyongnam	65,979	65,028	-1.4	332,096	314,333	-5.3
Cheju	45	43	-4.4	100	70	-30.0
Cities <sup>1/</sup>	39,385	29,432	0.2	145,669	139,766	-4.1

Source: Statistics Korea (KOSTAT)

<sup>1/</sup> paddy land located in seven big cities such as Seoul, Pusan, etc.**Stocks:**

The MY 2020/21 ending stocks forecast (as of the end of October 2021) is revised down 3.2 percentage points to 1.09 MMT (27.3 percent of total consumption) from the previous report's 1.22 MMT forecast. MY 2019/20 ending stocks (as of the end of October 2020) are estimated at 27.5 percent of total domestic consumption, remaining unchanged from the previous report.

### Korea: Status of Rice Stocks

(Milled rice, 1,000 MT, as of end October)

Rice Year (Nov.-Oct.)	2015/16	2016/17	2017/18a/	2018/19b/	2019/20c/	2020/21c/
Total Stock	1,831	2,000	1,560	1,093	1,130	1,090
Government Stock	1,831	2,000	1,560	1,093	1,130	1,090
Total Domestic Consumption	4,212	4,435	4,746	4,572	4,102	3,992
Stock to Use Ratio (%)	43.5	45.1	32.9	23.9	27.5	27.3

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	2018/2019		2019/2020		2020/2021	
	Nov 2018		Nov 2019		Nov 2020	
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	738	738	730	730	726	726
Beginning Stocks (1000 MT)	1560	1560	1093	1093	1132	1130
Milled Production (1000 MT)	3868	3868	3744	3744	3850	3507
Rough Production (1000 MT)	5157	5195	4992	5084	5133	4713
Milling Rate (.9999) (1000 MT)	7500	7446	7500	7364	7500	7441
MY Imports (1000 MT)	290	290	450	450	450	500
TY Imports (1000 MT)	297	297	450	460	450	500
TY Imp. from U.S. (1000 MT)	151	151	0	135	0	160
Total Supply (1000 MT)	5718	5718	5287	5287	5432	5137
MY Exports (1000 MT)	53	53	55	55	55	55

<b>TY Exports</b> (1000 MT)	53	53	55	55	55	55
<b>Consumption and Residual</b> (1000 MT)	4572	4572	4100	4102	4000	3992
<b>Ending Stocks</b> (1000 MT)	1093	1093	1132	1130	1377	1090
<b>Total Distribution</b> (1000 MT)	5718	5718	5287	5287	5432	5137
<b>Yield (Rough)</b> (MT/HA)	6.9878	7.0393	6.8384	6.9644	7.0702	6.4917
(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 2020/2021 = January 2021 - December 2021						

## Appendix:

### Applicable Milling Rate from Brown Rice to Milled Rice:

Based on the outcome of an industry survey in November 2011, the Ministry of Agriculture, Food, and Rural Affairs (MAFRA) acknowledged that what had been the estimated average milling rate (paddy to milled) was too high and considered lowering it from 74 percent to 72 percent to reflect changed processing practices. Local processors have reportedly been polishing rice to a greater degree in response to consumer demand for well-milled high-quality rice.

The table below shows how milling rates change along the Degree of Milling (DOM) spectrum. The higher the number is in the 12 degrees spectrum, the whiter and higher quality the rice will be. Korean milling degrees have recently climbed from an average of nine to twelve degrees. While this affects the milling rate, the shelling rate to brown rice from paddy rice remains unchanged at 80 percent.

Korea: Milling Rate to Milled Rice from Paddy Rice							
(Percent)							
Degree(s)	1	2	5	7	9 <sup>a/</sup>	10	12 <sup>b/</sup>
% of Brown Rice Removed	0.8	1.6	4.0	5.6	7.2	8.0	9.6
% of Milled Rice Remaining	99.2	98.4	96.0	94.4	92.9	92.0	90.4

% of Shelling Rate	80	80	80	80	80	80	80
% of Milling Rate	79.36	78.72	76.80	75.52	74.32	73.60	72.32

Source: Statistics Korea (KOSTAT)

a/ milling rate applicable for official statistics at present

b/ milling rate to be revised in the future

The Korean government released rice production statistics that show a comparison of milled rice production based on milling rates of nine degrees and twelve degrees, as presented below. The change in milling rates will result in a production decrease on average of about two to three percent. However, as MAFRA continues to maintain its official data series based on nine degrees, PSD milling rate figures align accordingly.

Korea: Rice Production Comparison per Milling Rate						
Crop Year	Area (1,000 HA)	Rough Rice (1,000 MT)	Based on 9 Degrees		Based on 12 Degrees	
			Milled Rice (1,000 MT)	Milling Rate (%)	Milled Rice (1,000 MT)	Milling Rate (%)
1995	1,056	6,389	<b>4,694</b>	<b>73.47</b>	4,568	71.50
1996	1,050	7,123	<b>5,323</b>	<b>74.73</b>	5,179	72.71
1997	1,052	7,315	<b>5,449</b>	<b>74.49</b>	5,302	72.48
1998	1,059	6,790	<b>5,097</b>	<b>75.07</b>	4,959	73.03
1999	1,066	7,066	<b>5,263</b>	<b>74.48</b>	5,121	72.47
2000	1,072	7,197	<b>5,291</b>	<b>73.52</b>	5,148	71.53
2001	1,083	7,407	<b>5,515</b>	<b>74.46</b>	5,366	72.44
2002	1,053	6,687	<b>4,927</b>	<b>73.68</b>	4,794	71.69
2003	1,016	6,151	<b>4,451</b>	<b>72.36</b>	4,331	70.41
2004	1,001	6,737	<b>5,000</b>	<b>74.22</b>	4,865	72.21

2005	980	6,435	<b>4,768</b>	<b>74.09</b>	4,640	72.11
2006	955	6,305	<b>4,680</b>	<b>74.23</b>	4,554	72.23
2007	950	5,962	<b>4,408</b>	<b>73.93</b>	4,289	71.94
2008	936	6,468	<b>4,843</b>	<b>74.88</b>	4,712	72.85
2009	924	6,502	<b>4,916</b>	<b>75.61</b>	4,787	73.62
2010	892	5,811	<b>4,295</b>	<b>73.91</b>	4,180	71.93
2011	854	5,616	<b>4,224</b>	<b>75.21</b>	4,110	73.18
2012	849	5,405	<b>4,006</b>	<b>74.12</b>	3,898	72.12
2013	833	5,632	<b>4,230</b>	<b>75.11</b>	4,116	73.08
2014	816	5,638	<b>4,241</b>	<b>75.22</b>	4,126	73.18
2015	799	5,771	<b>4,327</b>	<b>74.98</b>	4,210	72.95
2016	779	5,625	<b>4,197</b>	<b>74.61</b>	4,084	72.60
2017	755	5,286	<b>3,972</b>	<b>75.14</b>	3,866	73.14
2018	738	5,195	<b>3,868</b>	<b>74.46</b>	3,764	72.45
2019	730	5,016	<b>3,744</b>	<b>74.64</b>	3,644	72.65
2020	726	4,713	<b>3,507</b>	<b>74.41</b>	3,412	72.40

Source: Statistics Korea (KOSTAT)

**Attachments:**

No Attachments.