



Economic
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Situation and
Outlook

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Wheat Outlook

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2017 Winter Wheat Plantings Lowest in 108 Years; 2016/17 Ending Stocks Raised on Lower Seed, Feed and Residual Use

Wheat Chart
Gallery will be
updated on
January 17, 2017.

The next release is
February 13, 2017.

Approved by the
World Agricultural
Outlook Board.

The *Winter Wheat and Canola Seedings* report revealed 2017 winter wheat seedings to be the second-lowest on record and the lowest since 1909. This results in an 8-million-bushel cut to 2016/17 seed use, now projected at 61 million. The *Grain Stocks* report informs updated domestic use estimates and, in combination with rising wheat prices, provides support for a 35-million-bushel reduction in 2016/17 feed and residual use. With no changes made to wheat production and all wheat trade projections, seed and feed and residual use adjustments underpin an increase in 2016/17 ending stocks, raised 43 million this month and remaining at the highest level since 1987/88.

Projected 2016/17 record world-wheat production is up this month, with increases in Argentina, Russia, and the European Union (EU). Wheat consumption and stocks are projected higher, while record-high wheat trade is increased further for the July-June international trade year.

Domestic Outlook

2016/17 U.S. Wheat Ending Stocks Raised; Feed and Residual Lowered

With the release of three key USDA NASS reports this month, a number of U.S. all wheat and wheat by class balance sheet adjustments were made. Most notably, 2016/17 ending stocks are raised slightly more than 43 million bushels to 1143.4 million, the highest level since 1987/88, when ending stocks reached 1260.8 million. Higher ending stocks are projected, in part, based on reduced feed and residual use, down 35 million bushels to 225 million. The feed and residual reduction is attributable to slower than expected movement of lower-protein, mainly Hard Red Winter (HRW), wheat into feeding channels, which is itself due to abundance of corn and the rising relative cost of feed wheat. Marketing may have been slowed in recent weeks due to bitterly cold and snowy weather that is reported to have delayed rail car loadings; during weeks 46-52 of 2016 when grain rail traffic largely fell below 2014 levels.

Seed use estimates for the current marketing year are updated this month and reflect winter wheat planted area for the 2017/18 marketing year, as reported in the NASS *Winter Wheat and Canola Seedings* report. With winter wheat planted area for 2017/18 projected at just 32.39 million acres, a 3.75 million acre drop year-to-year, seed use in 2016/17 is lowered 8 million bushels to 61 million. All wheat imports, exports and food use are unchanged this month.

2017 Winter Wheat Seedings Lowest in 108 Years

After consecutive years of low prices and sizable carryouts, U.S. farmers have opted to plant the second lowest number of winter wheat acres on record, and the smallest number in 108 years. Winter wheat sowings for the current marketing year (2016/17) were well below average and, at the time, the sixth lowest on record. With a 10 percent year-to-year decline, winter wheat sowing for 2017/18 are estimated at just 32.4 million acres. HRW plantings are reduced 3.3 million acres (12 percent) from 2016, to 23.3 million acres. Plantings in most HRW growing States are down and are record-low in Nebraska and Utah. Winter wheat plantings in Kansas alone are down 1.1 million acres. Other sizable year-to-year reductions in planted area are projected for Montana (down 350,000 acres), Oklahoma (down 500,000 acres) and Texas (down 500,000 acres).

In the majority of reporting States, the wheat crop is reported to be in good to excellent condition at the end of December. However, in Kansas, a lack of moisture followed by a period of deep cold has reduced winter wheat condition ratings to below normal and far below last year. Just 44 percent of the winter wheat crop in the State is rated good (42 percent) to excellent (2 percent), in contrast to 96 percent rated similarly at the same time a year prior. Last year, the production-reduction effects of lower year-to-year HRW planted area were more than offset by record yields. Based on the conditions ratings to date, yields are not expected to repeat the same performance in 2017/18.

2016/17 Winter Wheat Production, By Class

Hard red winter (HRW) wheat production, forecast at 1,081.7 million bushels, is unchanged from December but up 251 million bushels from a year ago. Record-high HRW yields bolstered production in the 2016/17 marketing year, even as planted area declined from the prior year. Soft red winter (SRW) wheat production is forecast at 345 million bushels, unchanged from December, but down nearly 14 million bushels from last year due to a combination of lower harvested area and lower yields. White winter wheat production for 2016 is forecast to total 244.6 million bushels, up nearly 60 million bushels

from a year ago. The planted and harvested areas, production, and yield for white winter wheat are as follows (hard white winter = HWW and soft white winter = SWW):

2016	HWW	SWW
Planted area (million acres)	0.515	3.016
Harvested area (million acres)	0.474	2.908
Yield (bushels/acre)	53.7	75.4
Production (million bushels)	25.476	219.136
2015	HWW	SWW
Planted area (million acres)	0.48	2.934
Harvested area (million acres)	0.422	2.812
Yield (bushels/acre)	38.1	60.1
Production (million bushels)	16.109	169.081








Balance Sheet Changes

For 2015/16, the balance sheet updates this month are limited to ending stocks for HRW and durum, based on new NASS data releases. These minor changes, documented in the [Wheat Data](#) section of the USDA ERS website, result in a slightly reduced beginning stocks estimate for 2016/17. With no changes made to all wheat production and imports, total 2016/17 supply is lowered by, 86,000 bushels, the amount equivalent to the change in carry-in. Ahead of the next USDA NASS *Grain Milling* report, no adjustments to marketing year or quarterly food use are made this month. Seed use is lowered 8 million bushels to 61 million on the basis of revised out-year winter wheat planted area expectations and seed use associated with the baseline out-year projections for durum and other spring wheat.

Feed and residual use is lowered 35 million bushels this month to 225 million. Nearly 70 percent of the 2016/17 wheat crop has been marketed through November with limited reports of wheat use for feed, despite the HRW crop having lower protein levels which make the grain easier to incorporate into feed rations. When coupled with recent increases in cash prices which reduce the competitiveness of wheat as a feed ingredient relative to corn in regional cash markets where feeding is most likely to be observed, there is ample downward pressure on the feed component of the feed and residual category. Also, HRW exports have ticked up relative to expectations in recent weeks, increasing the importance of a non-feed outlet for the crop.

In recognition of higher-than-normal proportion of #4 and #5 grade durum and vomitoxin (DON) levels in areas of the Northern Plains, durum feed and residual is raised 5 million bushels this month. These quality issues contribute to expectations that non-milling quality durum has or will make its way into livestock feeding channels.

Table 1 - Wheat supply and utilization at a glance (2016/17), January 2017

Direction of change	Balance Sheet Item	Last Month (December)	Current Month (January)	Previous Year	Change from previous month	Comments
Item						<i>May-June Marketing Year</i>
	Area Planted (Mil. Ac)	50.154	50.154	54.999	0	
	Area Harvested (Mil. Ac)	43.89	43.89	47.318	0	
	Yield Bu.	52.6	52.6	43.6	0	
Supply						<i>Million bushels</i>
	Beginning Stocks	975.689	975.602	752.394	-0.087	Slight NASS reduction to 2015/16 ending stocks, 2016/17 carryin due to very slight decrease in Q3 15/16 durum and HRW ending stocks revision
	Production	2309.675	2309.675	2061.939	0	No NASS update to 2016/17 All Wheat production
	Import	125	125	112.912	0	No All Wheat Change, HRW (-1), HRS (-2), SRW (+4), durum (-1), based on pace of trade through Q2 and U.S. Census sales data.
	Supply, Total	3410.364	3410.3	2927.2	-0.087	
Demand						<i>Million bushels</i>
	Food	963.0	963.0	957.4	0	No change ahead of February USDA-NASS milling report
	Seed	69.0	61.0	67.2	-8	Based on revised planted area expectations for 2017/18 crop informed by the NASS <i>Winter Wheat and Canola Seedings</i> report
	Feed and Residual	260.0	225.0	152.2	-35	Lower-than-expected Sept-Dec disappearance; rising wheat-corn price ratio; ample stocks of competing feeds
	Domestic, Total	1292.0	1249.0	1176.6	-43	
	Exports	975.0	975.0	775.1	0	Based on pace of sales in Q1, trade expansion for HRW (+15) and HRS (+10 bu.)
	Use, Total	2267.0	2224.0	1952.0	-43	Carry through of seed use and feed and residual changes
	Ending Stocks	1143.0	1186.3	975.6	43.277	Reduced domestic use builds '16/17 ending stocks

Source: USDA, World Agricultural Outlook Board.

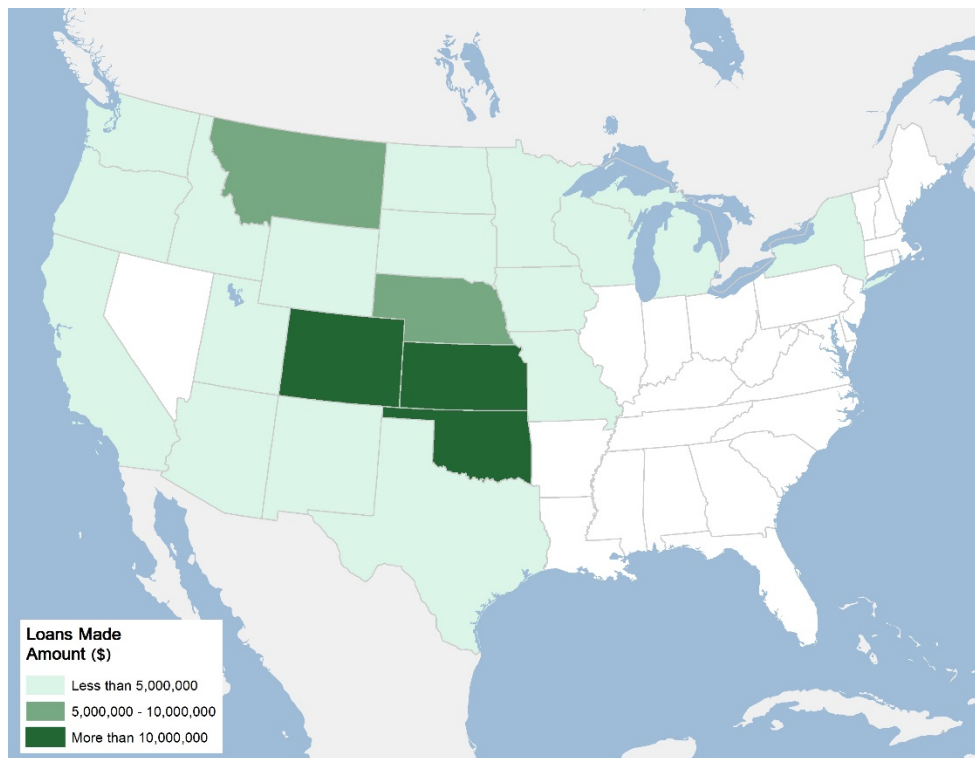
All Wheat Price Moves Upward

Encouraged by higher cash prices, farmers are reported to be increasing marketings of their stored wheat crops. The season average farm price was raised by 10 cents this month to \$3.80 per bushel. With the majority of the 2016/17 crop marketed to date, the price range is narrowed by a 15-cent increase on the low end and a 5-cent increase on the high-end.

Loan Deficiency Payments Provide Support during Period of Low Wheat Prices

When wheat prices posted at county elevators (e.g., posted county prices) fall below the county and class-specific marketing assistance loan rate announced annually each spring by the USDA, local growers are considered to be eligible to receive Loan Deficiency Payments (LDPs) on their wheat. With 2016/17 all wheat prices reaching decade lows in many regions, a number of producers have been able to benefit from government support, including the LDP program. This is the first time LDPs have been made for wheat since the 2010/11 marketing year. USDA reports that LDPs in the 2016/17 marketing year to date are \$114.5 million and well short of the record-large \$854.7 million in the 1998/99 marketing year. Posted county prices have been particularly low for HRW, and in the 2016/17 marketing year, LDPs to date have been confined to HRW. Payments have been made on a total of 551.2 million bushels of wheat with an average LDP of almost 19 cents per bushel. Per bushel payments (to date) are highest in Oklahoma, at near 26 cents per bushel. By far, the largest number of bushels receiving an LDP are found in Kansas. To date, about 271.5 million bushels of wheat or about 58 percent of the total volume of wheat produced in the State and during the current marketing year has received an LDP.

Figure 1: USDA Loan Deficiency Payments received by wheat farmers in 2016/17, to date



Source: USDA, Farm Services Agency

International Outlook

World Wheat Production Record Continues to Increase

World wheat record-high production in 2015/16 is projected to reach 751.3 million tons, up 1.4 million this month, surpassing last year's record by 15.8 million tons.

In Argentina, wheat production for 2016/17 is up 0.6 million tons to 15.0 million, the highest in 5 years. Although unusually wet conditions delayed wheat planting in Argentina last August, the abundance of moisture ensured a high level of subsoil moisture that allowed wheat to hold well through dryness in November and the first part of December.

In Russia, wheat production for 2016/17 is up 0.5 million tons to 72.5 million, as the Russian Government statistical agency reported the so-called “clean weight” of wheat output (as opposed to “bunker weight,” clean weight measures grain output after it has been adjusted for standard moisture and cleaned). The agency actually reported 73.0 million tons of wheat harvested, but this number includes the Crimea, which officially is part of Ukraine, and where wheat output is projected to be 0.8 million tons.

Another small increase is made for the European Union (EU), where wheat production in 2016/17 is projected slightly up by 0.4 million tons to 144.3 million. The increase is based on an official revision of harvest results. For more information and a visual display of this month's changes in wheat production see table A and map A.

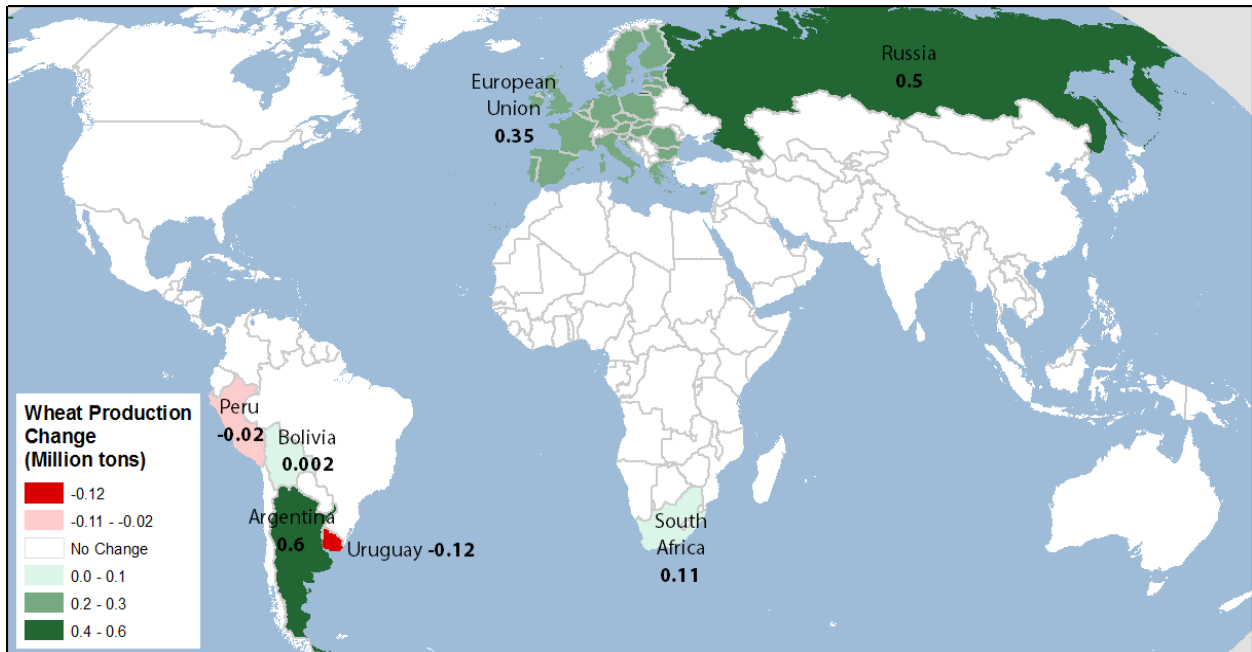
Table A - Wheat production at a glance (2016/17), January 2017

	Country or region	Crop year	Production	Change ¹	Comments
			<i>Million tons</i>		
↑	World		752.7	+1.4	An increase in record-high world wheat production, up 17.2 million tons compared to previous record of 2015/16.
↑	Foreign		689.8	+1.4	
	United States	<i>June-May</i>	62.9	No change	See section on U.S. domestic wheat.
↑	Argentina	<i>Dec-Nov</i>	15.0	+0.6	Although unusually wet conditions affected wheat planting back in August, wheat area ended up higher than expected before as was recently reported by the Government. Virtually all wheat has been harvested in Argentina with higher-than-projected reported yields.
↑	Russia	<i>July-June</i>	72.5	+0.5	Preliminary harvest results were issued by the Russian statistical agency ROSSTAT. Crimean wheat output (0.8 million tons) is deducted from the result.
↑	European Union	<i>July-June</i>	144.3	+0.4	At this point, the increase is a fine-tuning of the European wheat area and output. This month, small changes are made for Germany, Austria, Bulgaria, and the U.K.

¹Change from previous month. Changes of less than 0.2 million tons are also made for several countries; see map A.

Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Map A – Wheat production changes for 2016/17, January 2017



Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Wheat Use Slightly Up

Global consumption of wheat in 2016/17 is up fractionally this month to 739.9 million. Ample supplies of low-quality, competitively priced wheat encourage additional wheat feeding in wheat-producing and importing countries. Foreign feed and residual wheat use is forecast up 0.5 million tons this month, with higher feed use projected for Canada and Vietnam. Food use is projected to increase in India (see COUNTRY FOCUS – INDIA below) as well as in Brazil and Bangladesh.

At-a-glance information on this month's changes in wheat domestic consumption is presented in table B.

Table B - Wheat domestic consumption at a glance (2016/17), January 2017

	Country or region	Domestic consumption	Change ¹	Comments
		<i>Million tons</i>		
↑	World	739.9	+0.1	Includes both feed and residual use as well as food, seed, and industrial (FSI) use.
↑	Foreign	705.9	+1.3	Includes both feed and residual use as well as food, seed, and industrial (FSI) use.
↓	United States	34.0	-1.2	See section on U.S. domestic wheat.
↑	India	96.8	+0.7	The Government has adjusted the applied tariff for wheat to facilitate private-sector imports and moderate open market prices. The tariff was reduced from 25 to 10 percent in September 2016, and then to zero in early December 2016. Higher-quality additional imported wheat is expected to be used for milling purposes to blend with lower-quality domestic wheat. See also "COUNTRY FOCUS-INDIA".
↑	Canada	10.2	+0.3	Further increase in feed use in Canada is expected. Exports are projected lower as more reduced-quality wheat is expected to be used for feeding purposes.
↑	Brazil	11.5	+0.2	Food use of wheat is projected higher this month, as the country is expected to import more higher-quality wheat for milling purposes.
↑	Vietnam	3.2	+0.2	With feed-quality wheat prices at historical lows, the country's pace of imports is high. Additional wheat from Australia and Argentina is expected to be partly used for food, and partly to expand wheat feeding for both animals and aquaculture. It should be noted that the feed and residual use category by definition includes unaccounted-for-wheat sent to neighboring countries.
↑	Bangladesh	6.5	+0.1	Food use is up this month, reflecting a high pace of wheat imports, mainly from Russia, Ukraine, Canada, and Australia.

¹Change from previous month.

Note: Wheat food use is also slightly adjusted for Angola and Moldova based on trade changes.

Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

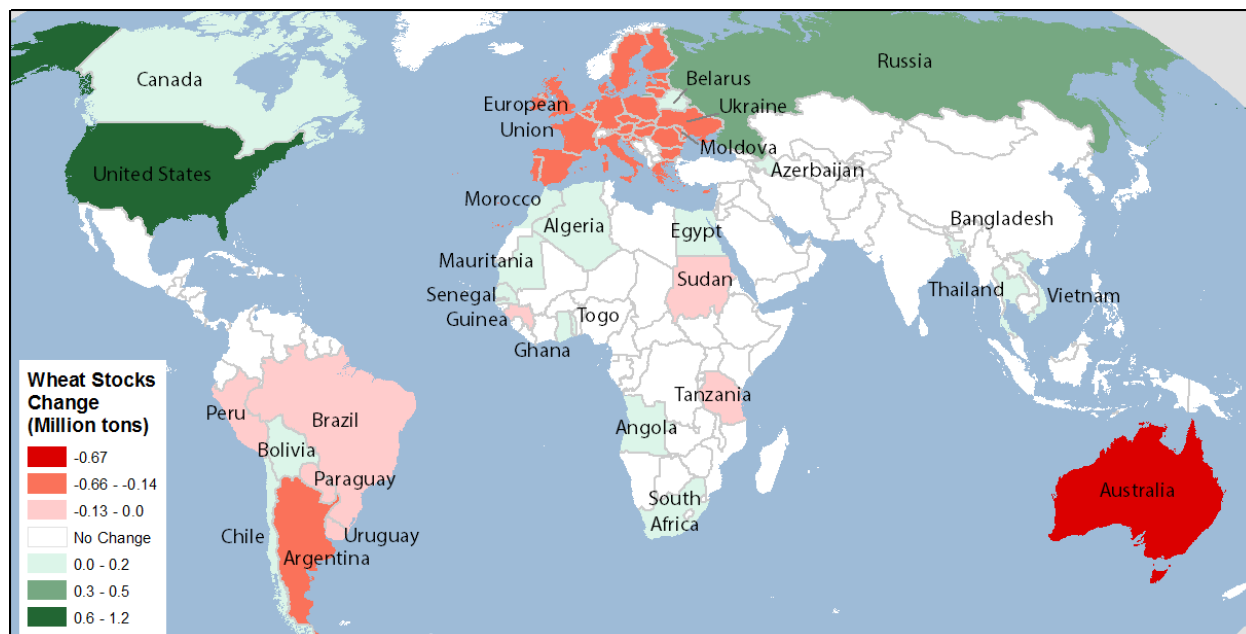
Foreign Wheat Ending Stocks Unchanged

The projected expansion of world wheat supplies exceeds higher projected consumption, such that estimates for global ending stocks are up. Stocks are now projected to increase the record to 253.3 million tons, up 1.2 million. Multiple changes in stocks are made this month as a result of specific countries' production and trade revisions, but the resulting foreign wheat ending stocks are unchanged.

At-a-glance information for this month's changes in wheat ending stocks is presented in table C and map C.

Table C - Wheat ending stocks at a glance (2016/17), January 2017				
	Country or region	End stocks	Change¹	Comments
		<i>Million tons</i>		
	World	253.3	+1.2	World wheat ending stocks are projected to decline fractionally. The record-high stocks are currently projected up 11.6 million tons on the year.
	Foreign	221.0	No change	Changes in stocks for individual countries are fully offsetting.
↑	United States	32.3	+1.2	See section on domestic U.S. wheat.
↓	Australia	6.7	- 0.7	Increase in projected wheat exports for 2016/17 and lower beginning stocks.
↓	Ukraine	2.8	- 0.2	Higher projected wheat exports.
↓	Argentina	0.7	- 0.2	Lower beginning stocks, while higher production is fully offset by increased exports.
↑	Canada	6.2	+0.2	Higher projected wheat feed use is only partly offset by a decline in exports, leaving more to stocks.
↑	Russia	10.6	+0.5	Increase in projected wheat supplies.
¹ Change from previous month. Smaller changes are made for a number of countries; see map C.				
Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.				

Map C – Wheat ending stocks changes for 2016/17, January 2017



Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

World Wheat Record Trade Continues To Rise

Projected record world wheat trade for the international 2016/17 July-June trade year is further increased this month by 1.6 million tons, to 177.0 million. Competition among exporters is getting tougher. Wheat-importing countries are taking advantage of the “buyer” wheat market to stock up on additional wheat supplies.

India is projected to import additional 0.7 million tons of wheat to reach the level of 3.7 million tons of imports not seen since 2006. See the narrative on India below.

COUNTRY FOCUS - INDIA

Uncertainty in India’s Near Term Wheat Import Outlook

(Submitted by Maurice Landes, ERS/USDA, mlandes@ers.usda.gov)

Historically, India’s wheat trade has been cyclical. Periods of good harvests tend to boost government procurement, ease consumer demand for subsidized wheat, and build stocks above food security targets, leading to occasional exportable surpluses. Government policy typically responds to stock surpluses with relatively small adjustments to the support price. Periods of weaker price incentives and/or weather-reduced harvests tend to reduce procurement, boost demand for subsidized wheat, and deplete stocks, leading to occasional Government imports. Government policy has then typically responded to the shortage with relatively large increases in the support price, contributing to the next cyclical stock buildup. With consecutive years of weather-damaged wheat crops in 2015 and 2016 leading to reduced government procurement, wheat stocks are currently approaching a cyclical low. Declining stocks have led to a surge in wheat imports in the 2016/17 marketing year, and questions about potential for additional near-term import demand.

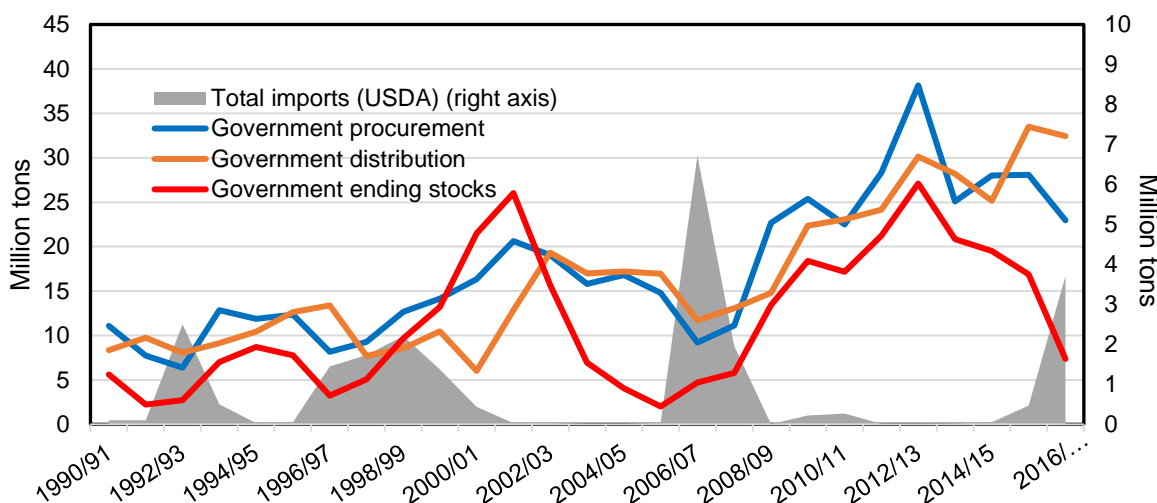
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Several factors add uncertainty to the outlook assessment:

- It is unusual for there to be such a *large discrepancy between the government (93.5 million tons) and trade estimates (85-87 million) of the size of the 2016 wheat crop*. Low procurement and firm open market prices have added credence to the lower trade estimates—and to prospects for larger imports—but there is still an unusual degree of uncertainty about open market supplies.
- *India's new National Food Security Act (NFSA)* has finally been implemented in most states during 2016/17, and it is unclear to what extent this may affect the amount of subsidized wheat actually distributed from Government stocks. Under previous policy, quantities distributed tended to fluctuate depending on the size of Government stocks and market price conditions. Under the NFSA, ration amounts are now legally guaranteed and the subsidized prices are much lower. Although the targeted total volume of subsidized wheat to be distributed under the NFSA is similar to what was distributed in recent years under the old policy, the Government may have less flexibility to adjust Government distribution levels as stocks decline.
- *In a significant change from past management of wheat shortages, the Government has adjusted the applied tariff for wheat to facilitate private sector imports and moderate open market prices*. The tariff was changed from 25 to 10 percent in September 2016, and then to zero in early December 2016. So far, all of the 3.7 million tons of imports that are forecast to arrive in 2016/17 are expected to be by the private sector. It is uncertain to what extent these private imports will moderate demand for wheat from Government stocks through its open market sales to flour millers and, hence, the need for the Government to import additional quantities of wheat.
- Stability in consumer prices of food staples and support of farm prices are both important, if conflicting, political priorities in India that have historically required policymakers to strike a balance. Farmers in major wheat-producing states such as Uttar Pradesh, Punjab, and Haryana are highly reliant on the Government support price, but support prices can also influence prices faced by consumers for open market supplies. With upcoming elections in key States, including the largest state of Uttar Pradesh, it is unclear how the policy debate will be resolved under current circumstances. In recent years, meeting low consumer price inflation targets has become an increasingly important macroeconomic policy objective, a fact that may argue for the Government to take steps, including wheat imports, to ensure consumer price stability. However, the Government may prefer not to undertake imports on its own account, with a possible backlash from wheat producers, until after the April-June 2017 wheat harvest.

Continued on next page.

Figure 1: Indian Government wheat operations



Sources: GOI (Government of India), Ministry of Consumer Affairs, Food and Public Distribution; USDA, Foreign Agricultural Service, Production, Supply, and Distribution database.

Despite Strong Performance, U.S. Exports are Unchanged

The U.S. wheat export forecast for 2016/17 is unchanged this month at 26.0 million tons. Exports have been strong in the first months of the season. However, the still-strong U.S. dollar and ample wheat supplies in all major wheat-exporting countries are expected to slow down the U.S. pace of exports. A special challenge is coming from Argentina, which is becoming the most competitive wheat supplier in all parts of the world and is quickly gaining market share. For at-a-glance information on this month's changes in wheat trade with country-specific details, see table D, and map D1 (wheat exports) and map D2 (imports).

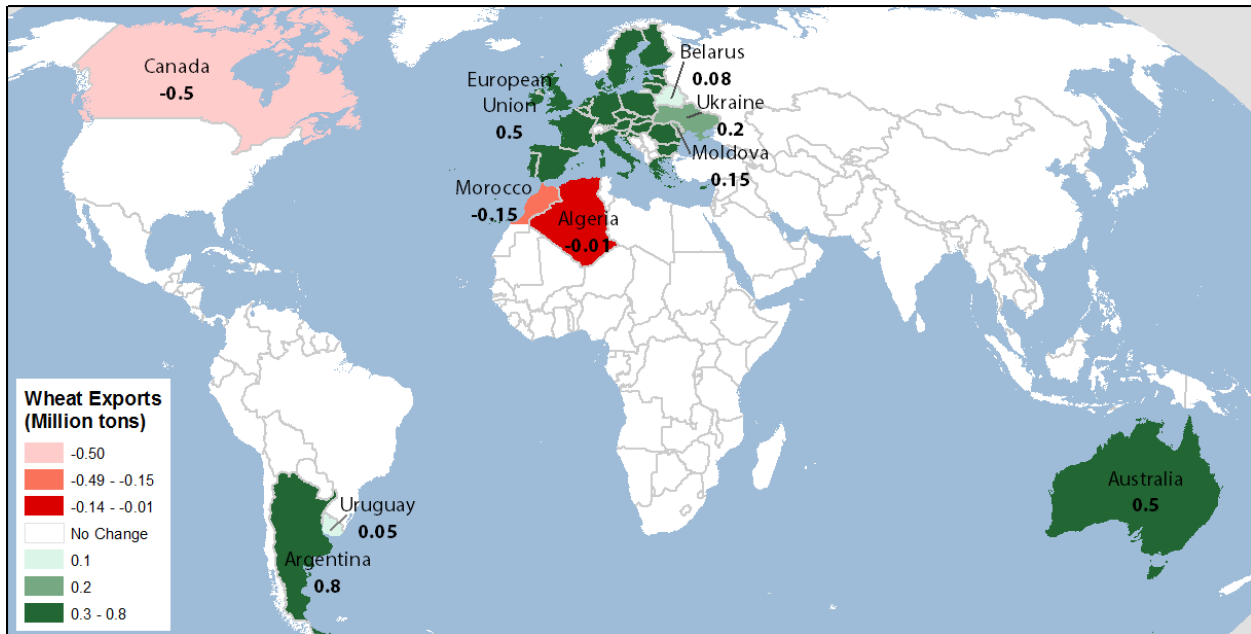
Table D - Wheat trade at a glance (2016/17), January 2017

	Country or region	Trade	Change ¹	Comments
		<i>Million tons</i>		<i>July-June international trade year</i>
↑	World	177.0	+1.6	
↑	Foreign	151.0	+1.6	
Wheat Exports (2016/17)				
↑	United States	26.0	No change	Despite strong export commitments, U.S. wheat export prospects are unchanged, reflecting increased competitor supplies and the somewhat slowing pace of sales.
↑	Argentina	9.0	+0.8	The increase is based on the strong pace of wheat export shipment in October-November, the last months of the Argentine 2015/16 local marketing year that ends in November. The December-November marketing year overlaps with the 2016/17 international trade year that starts in July. Argentine wheat is currently the cheapest among major competitors.
↑	Australia	23.5	+0.5	Record-high projected wheat output, ample exportable supplies, and declining domestic prices make Australia highly competitive. In addition to its traditional destinations, Australia is expected to become a primary supplier of milling wheat to India.
↑	European Union	25.5	+0.5	Higher exportable supplies of wheat projected this month.
↓	Canada	21.0	-0.5	The decline is supported by the pace of exports, which is high, but not sufficient to reach the previously projected level. Share of lower-quality wheat in Canadian supplies is high this season, and competition in this segment of the wheat market is strong.
Wheat Imports (2016/17)				
↑	India	3.7	+0.7	The Government has adjusted the applied tariff for wheat to facilitate private sector imports and moderate open market prices. The tariff was reduced from 25 to 10 percent in September 2016, and then to zero in early December 2016. See "COUNTRY FOCUS—INDIA" on the uncertainty in India's near-term wheat import outlook.
↑	Vietnam	3.6	+0.3	Very high pace of imports from Australia and Argentina.
↑	Bangladesh	5.3	+0.2	Higher pace of wheat imports from Russia, Ukraine, Canada, and Australia in recent months. Prospects of even cheaper wheat purchases from Australia with its record-high crop.
↑	Brazil	7.3	+0.3	Higher pace of wheat imports from Argentina, United States, and Paraguay. Wheat output in Brazil is expected to have a large share of low-quality crop, and Brazilian millers need higher-quality wheat for blending purposes.

¹Change from previous month. Smaller changes for wheat exports and imports are made for a number of countries; see maps D1 and D2.

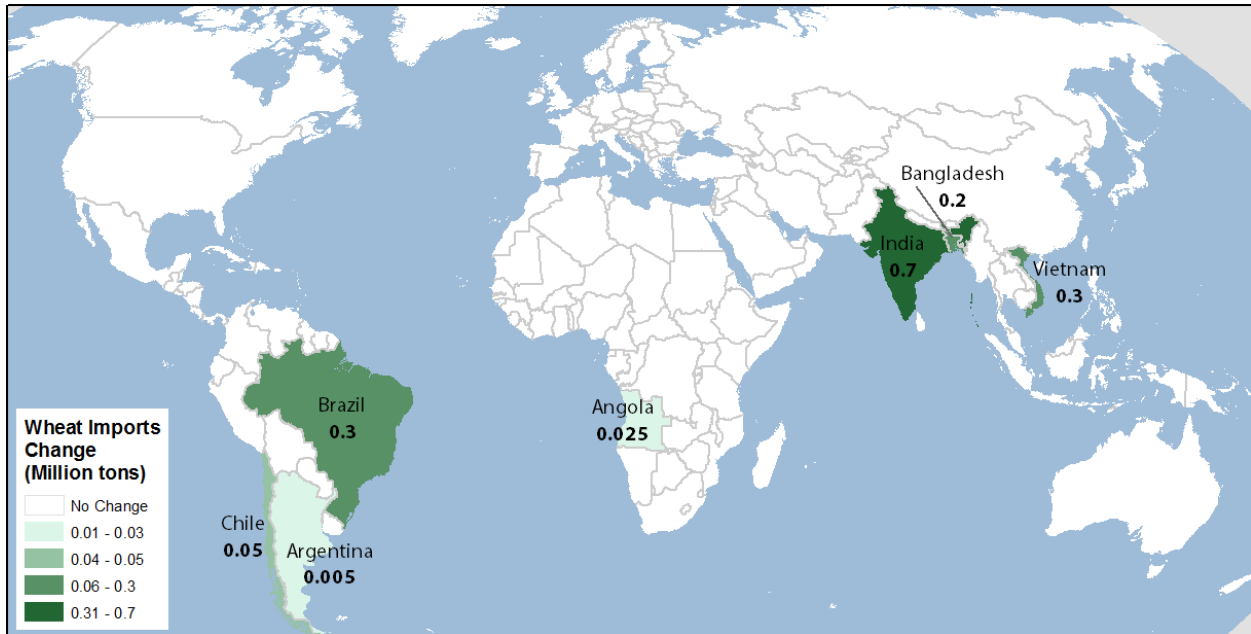
Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Map D1 – Wheat exports changes for 2016/17, January 2017



Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Map D1 – Wheat imports changes for 2016/17, January 2017

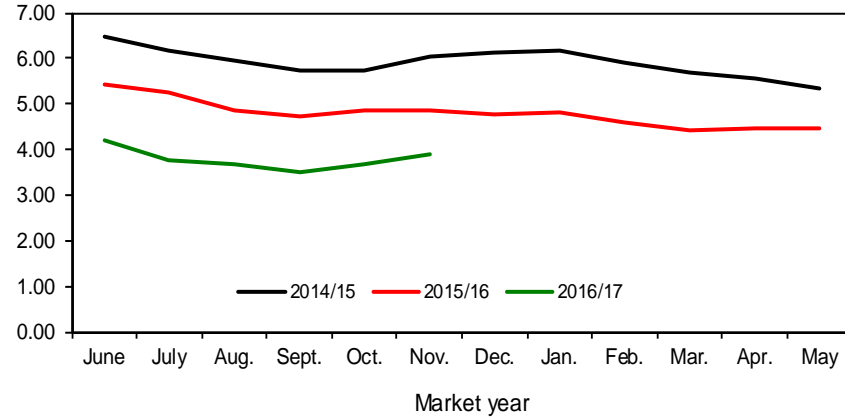


Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution online database.

Figure 1

All wheat average prices received by farmers

Dollars per bushel

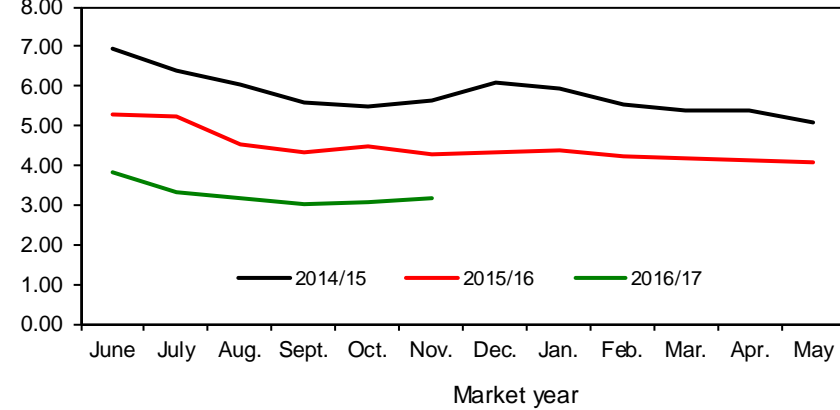


Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 2

Hard red winter wheat average prices received by farmers

Dollars per bushel

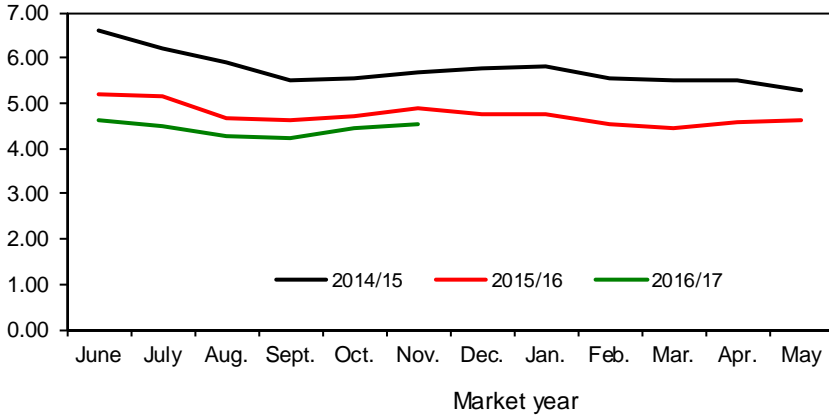


Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 3

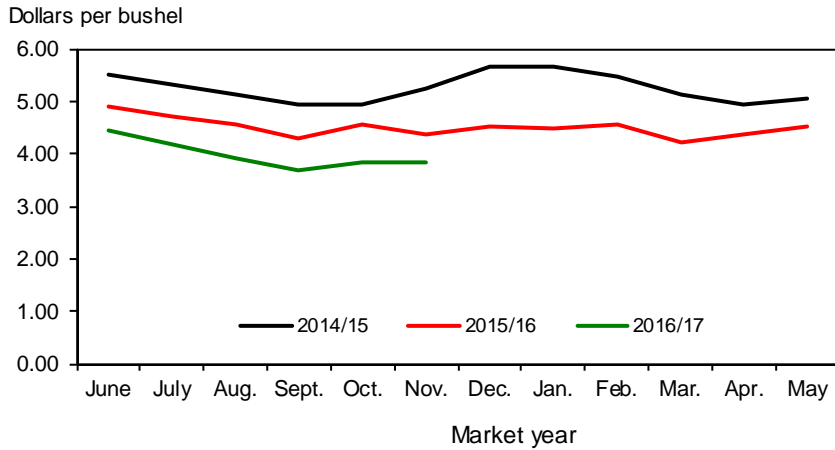
Hard red spring wheat average prices received by farmers

Dollars per bushel



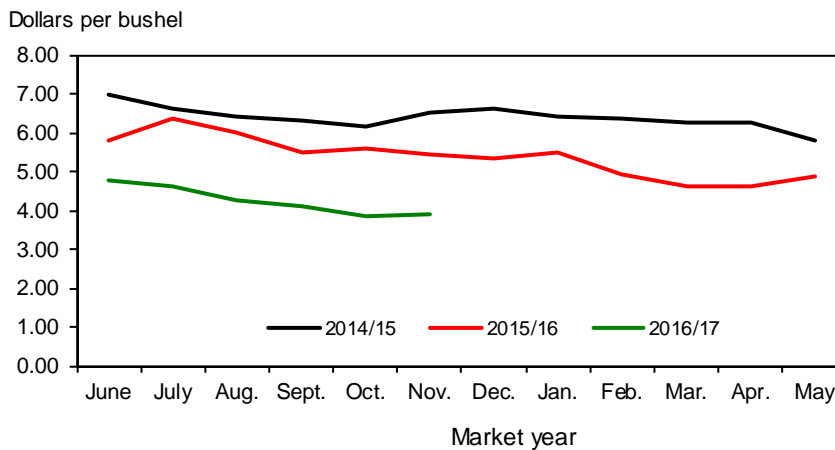
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 4
Soft red winter wheat average prices received by farmers



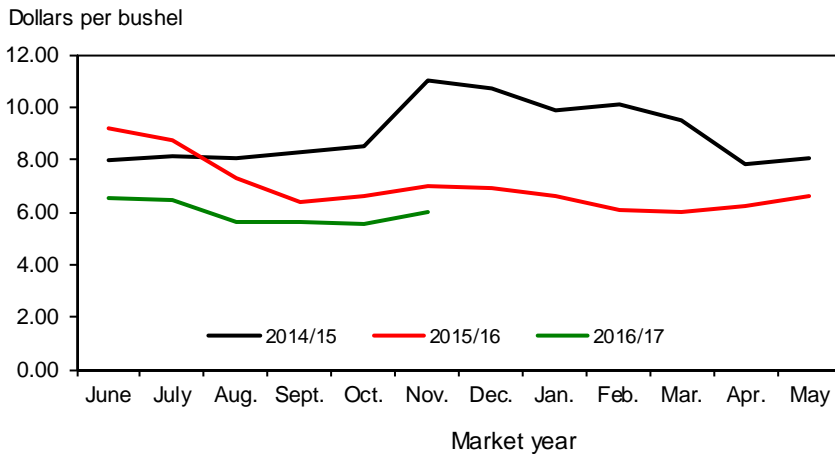
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 5
Soft white wheat average prices received by farmers



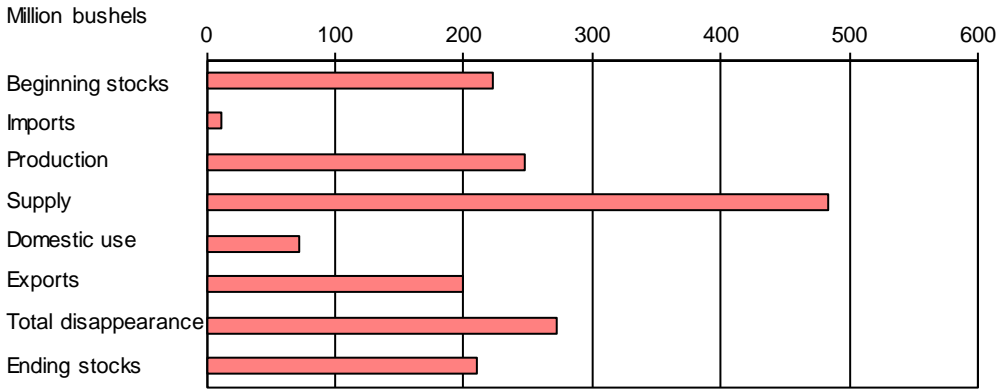
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 6
Durum wheat average prices received by farmers



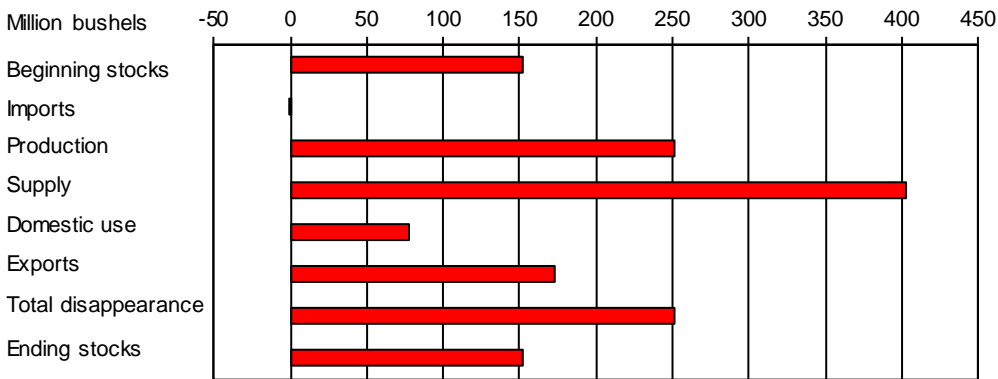
Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Figure 7
All wheat: U.S. supply and disappearance change from prior market year



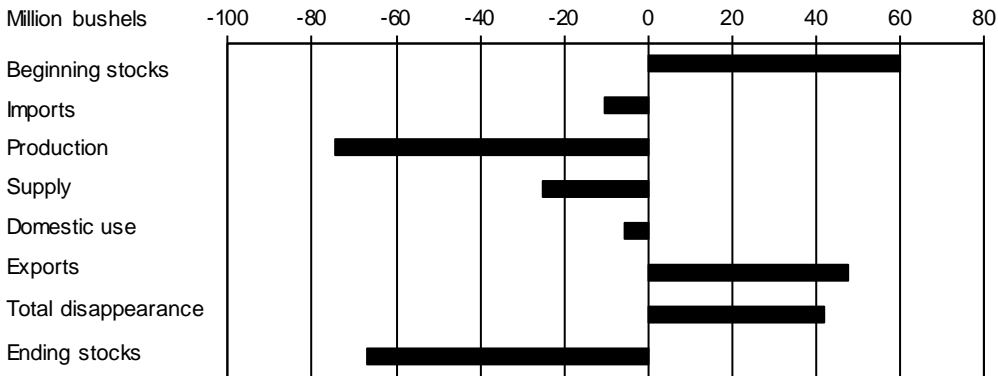
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Figure 8
Hard red winter wheat: U.S. supply and disappearance change from prior market year



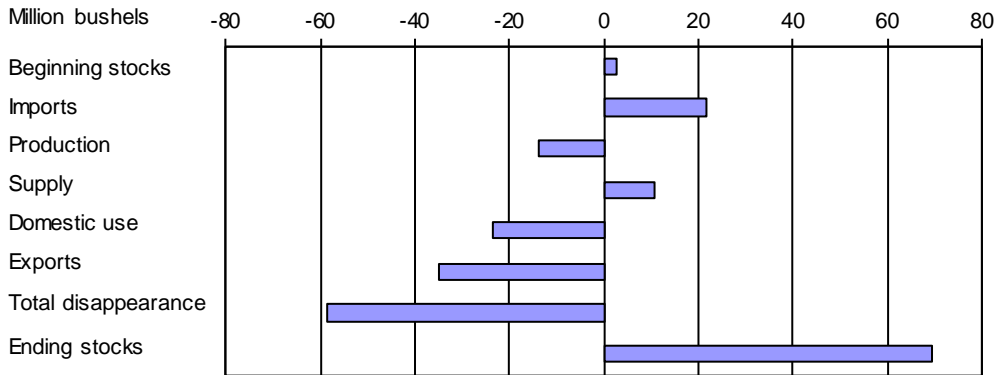
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Figure 9
Hard red spring wheat: U.S. supply and disappearance change from prior market year



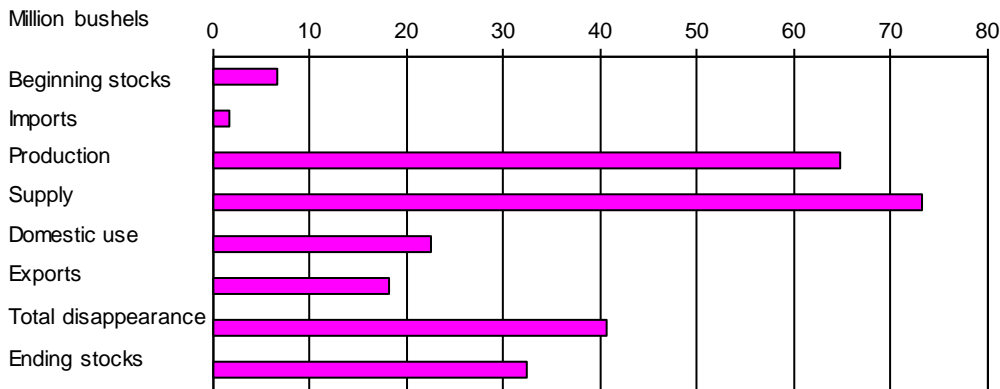
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Figure 10
Soft red winter wheat: U.S. supply and disappearance change from prior market year



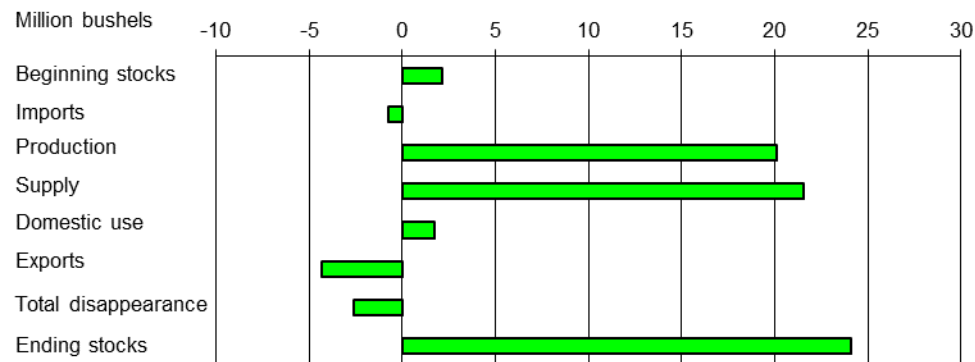
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Figure 11
White wheat: U.S. supply and disappearance change from prior market year



Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Figure 12
Durum: U.S. supply and disappearance change from prior market year



Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Table 1--Wheat: U.S. market year supply and disappearance, 1/17/2017

Item and unit		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Area:								
Planted	Million acres	52.6	54.3	55.3	56.2	56.8	55.0	50.2
Harvested	Million acres	46.9	45.7	48.8	45.3	46.4	47.3	43.9
Yield	Bushels per acre	46.1	43.6	46.2	47.1	43.7	43.6	52.6
Supply:								
Beginning stocks	Million bushels	975.6	863.0	742.6	717.9	590.3	752.4	975.6
Production	Million bushels	2,163.0	1,993.1	2,252.3	2,135.0	2,026.3	2,061.9	2,309.7
Imports ¹	Million bushels	96.9	113.1	124.3	172.5	151.3	112.9	125.0
Total supply	Million bushels	3,235.6	2,969.2	3,119.2	3,025.3	2,767.9	2,927.2	3,410.3
Disappearance:								
Food use	Million bushels	925.6	941.4	950.8	955.1	958.3	957.2	963.0
Seed use	Million bushels	70.7	75.6	73.1	75.6	79.4	67.2	61.0
Feed and residual use	Million bushels	84.8	158.5	365.3	228.2	113.6	152.2	225.0
Total domestic use	Million bushels	1,081.1	1,175.5	1,389.3	1,258.8	1,151.3	1,176.6	1,249.0
Exports ¹	Million bushels	1,291.4	1,051.1	1,012.1	1,176.2	864.1	775.1	975.0
Total disappearance	Million bushels	2,372.6	2,226.6	2,401.4	2,435.1	2,015.5	1,951.6	2,224.0
Ending stocks	Million bushels	863.0	742.6	717.9	590.3	752.4	975.6	1,186.3
Stocks-to-use ratio		36.4	33.4	29.9	24.2	37.3	50.0	53.3
Loan rate	Dollars per bushel	2.94	2.94	2.94	2.94	2.94	2.94	2.94
Contract/direct payment rate	Dollars per bushel	73.00	73.80	73.70	72.80	56.40	56.40	56.50
Farm price ²	Dollars per bushel	5.70	7.24	7.77	6.87	5.99	4.89	3.75-3.85
Market value of production	Million dollars	12,579	14,269	17,383	14,604	11,915	10,203	8,777

Latest market year is projected; previous market year is estimated. Totals may not add due to rounding.

¹ Includes flour and selected other products expressed in grain-equivalent bushels.

² U.S. season-average price based on monthly prices weighted by monthly marketings. Prices do not include an allowance for loans outstanding and government purchases.

Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Date run: 1/17/2017

Table 2--Wheat by class: U.S. market year supply and disappearance, 1/17/2017

Market year, item, and unit			All wheat	Hard red winter ¹	Hard red spring ¹	Soft red winter ¹	White ¹	Durum
2015/16	Area:							
	Planted acreage	Million acres	55.00	29.17	12.62	7.09	4.16	1.95
	Harvested acreage	Million acres	47.32	23.22	12.33	5.89	3.96	1.91
	Yield	Bushels per acre	43.58	35.77	46.03	60.92	55.70	43.96
	Supply:							
	Beginning stocks	Million bushels	752.39	293.74	212.00	154.00	67.00	25.66
	Production	Million bushels	2,061.94	830.45	567.64	359.05	220.79	84.01
	Imports ²	Million bushels	112.91	6.20	48.55	18.24	6.18	33.73
	Total supply	Million bushels	2,927.25	1,130.38	828.19	531.30	293.98	143.40
	Disappearance:							
	Food use	Million bushels	957.22	391.25	251.00	153.00	83.00	78.97
	Seed use	Million bushels	67.19	29.69	16.67	11.70	5.50	3.64
	Feed and residual use	Million bushels	152.16	37.45	36.09	89.97	-15.01	3.66
	Total domestic use	Million bushels	1,176.57	458.39	303.75	254.67	73.49	86.27
	Exports ²	Million bushels	775.08	226.46	252.47	120.00	146.81	29.33
	Total disappearance	Million bushels	1,951.64	684.85	556.22	374.67	220.30	115.60
	Ending stocks	Million bushels	975.60	445.53	271.97	156.63	73.68	27.80
2016/17	Area:							
	Planted acreage	Million acres	50.15	26.59	10.95	6.02	4.19	2.41
	Harvested acreage	Million acres	43.89	21.86	10.67	4.98	4.02	2.37
	Yield	Bushels per acre	52.62	49.48	46.23	69.37	71.04	44.02
	Supply:							
	Beginning stocks	Million bushels	975.60	445.53	271.97	156.63	73.68	27.80
	Production	Million bushels	2,309.68	1,081.69	493.13	345.23	285.51	104.12
	Imports ²	Million bushels	125.00	6.00	38.00	40.00	8.00	33.00
	Total supply	Million bushels	3,410.28	1,533.22	803.09	541.86	367.19	164.92
	Disappearance:							
	Food use	Million bushels	963.00	375.00	267.00	155.00	86.00	80.00
	Seed use	Million bushels	61.00	26.00	16.00	11.00	5.00	3.00
	Feed and residual use	Million bushels	225.00	135.00	15.00	65.00	5.00	5.00
	Total domestic use	Million bushels	1,249.00	536.00	298.00	231.00	96.00	88.00
	Exports ²	Million bushels	975.00	400.00	300.00	85.00	165.00	25.00
	Total disappearance	Million bushels	2,224.00	936.00	598.00	316.00	261.00	113.00
	Ending stocks	Million bushels	1,186.28	597.22	205.09	225.86	106.19	51.92

Latest market year is projected; previous market year is estimated. Totals may not add due to rounding.

¹ Area and yield data are unpublished National Agricultural Statistics Service data. Supply and disappearance data, except production, are approximations.

² Includes flour and selected other products expressed in grain-equivalent bushels.

Source: USDA, National Agricultural Statistics Service, Crop Production and unpublished data; and USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Date run: 1/17/2017

Table 3--Wheat: U.S. quarterly supply and disappearance (million bushels), 1/17/2017

Market year and quarter		Production	Imports ¹	Total supply	Food use	Seed use	Feed and residual use	Exports ¹	Ending stocks
2008/09	Jun-Aug	2,512	28	2,845	236	1	405	345	1,858
	Sep-Nov		28	1,886	238	54	-124	295	1,422
	Dec-Feb		36	1,458	219	1	28	170	1,040
	Mar-May		35	1,075	233	21	-41	206	657
	Mkt. year	2,512	127	2,945	927	78	268	1,015	657
2009/10	Jun-Aug	2,209	28	2,893	231	1	251	200	2,209
	Sep-Nov		24	2,234	237	44	-81	252	1,782
	Dec-Feb		30	1,812	222	1	31	201	1,356
	Mar-May		37	1,393	229	21	-59	227	976
	Mkt. year	2,209	119	2,984	919	68	142	879	976
2010/11	Jun-Aug	2,163	27	3,166	235	1	215	265	2,450
	Sep-Nov		24	2,473	242	51	-63	311	1,933
	Dec-Feb		23	1,956	221	1		308	1,425
	Mar-May		22	1,448	228	16	-67	407	863
	Mkt. year	2,163	97	3,236	926	71	85	1,291	863
2011/12	Jun-Aug	1,993	21	2,877	230	5	201	295	2,147
	Sep-Nov		32	2,179	244	51	-16	238	1,663
	Dec-Feb		30	1,693	231	1	44	217	1,199
	Mar-May		30	1,229	236	19	-70	301	743
	Mkt. year	1,993	113	2,969	941	76	159	1,051	743
2012/13	Jun-Aug	2,252	26	3,020	238	1	403	264	2,115
	Sep-Nov		33	2,148	247	55	-22	198	1,671
	Dec-Feb		35	1,705	229	1	5	235	1,235
	Mar-May		31	1,266	238	15	-20	315	718
	Mkt. year	2,252	124	3,119	951	73	365	1,012	718
2013/14	Jun-Aug	2,135	36	2,889	235	4	422	358	1,870
	Sep-Nov		48	1,918	249	53	-168	309	1,475
	Dec-Feb		42	1,517	231	2	-1	228	1,057
	Mar-May		47	1,104	240	17	-25	282	590
	Mkt. year	2,135	172	3,025	955	76	228	1,176	590
2014/15	Jun-Aug	2,026	44	2,661	239	6	256	253	1,907
	Sep-Nov		35	1,942	248	49	-93	208	1,530
	Dec-Feb		37	1,566	231	2	8	185	1,140
	Mar-May		36	1,176	240	22	-58	219	752
	Mkt. year	2,026	151	2,768	958	79	114	864	752
2015/16	Jun-Aug	2,062	27	2,841	240	1	298	205	2,097
	Sep-Nov		27	2,124	249	45	-108	192	1,746
	Dec-Feb		34	1,780	230	1		179	1,372
	Mar-May		25	1,397	239	20	-37	199	976
	Mkt. year	2,062	113	2,927	957	67	152	775	976
2016/17	Jun-Aug	2,310	33	3,318	238	1	267	267	2,545
	Sep-Nov		29	2,574	250	41	-30	241	2,073
	Mkt. year	2,310	125	3,410	963	61	225	975	1,186

Latest market year is projected; previous market year is estimated. Totals may not add due to rounding.

¹ Includes flour and selected other products expressed in grain-equivalent bushels.

Date run: 1/17/2017

Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Table 4--Wheat: Monthly food disappearance estimates (1,000 grain-equivalent bushels), 1/17/2017

Mkt year and month 1/	Wheat ground for flour	+	Food imports ²	+	Nonmilled food use ³	-	Food exports ²	=	Food use ¹
2014/15	Jun	74,070		2,740		2,000		1,760	77,050
	Jul	74,244		3,035		2,000		1,866	77,413
	Aug	81,143		2,853		2,000		1,541	84,455
	Sep	78,025		2,507		2,000		1,812	80,720
	Oct	82,617		2,941		2,000		1,825	85,733
	Nov	79,077		2,731		2,000		2,075	81,734
	Dec	74,226		2,908		2,000		1,625	77,509
	Jan	73,996		2,815		2,000		1,661	77,150
	Feb	73,409		2,614		2,000		1,824	76,198
	Mar	77,884		3,024		2,000		2,183	80,725
	Apr	75,805		2,889		2,000		1,681	79,012
	May	77,507		2,948		2,000		1,847	80,609
2015/16	Jun	74,155		3,374		2,000		1,760	77,769
	Jul	74,749		2,992		2,000		1,850	77,891
	Aug	81,695		2,786		2,000		1,889	84,592
	Sep	78,556		2,771		2,000		1,928	81,399
	Oct	82,604		2,861		2,000		2,119	85,346
	Nov	79,065		2,994		2,000		2,050	82,009
	Dec	74,215		2,873		2,000		2,118	76,969
	Jan	73,643		2,770		2,000		2,026	76,386
	Feb	73,058		2,756		2,000		1,655	76,159
	Mar	77,511		2,851		2,000		2,146	80,216
	Apr	74,776		4,207		2,000		1,771	79,212
	May	76,456		2,836		2,000		2,023	79,268
2016/17	Jun	73,149		2,934		2,000		2,137	75,945
	Jul	74,188		2,642		2,000		1,666	77,164
	Aug	81,082		3,196		2,000		1,856	84,422
	Sep	77,966		2,537		2,000		2,120	80,383
	Oct			2,969				2,323	646
	Nov			3,192				2,181	1,011

¹ Current year is preliminary. Previous year is preliminary through August of current year, estimated afterwards.

² Food imports and exports used to calculate total food use. Includes all categories of wheat flour, semolina, bulgur, and couscous and selected categories of pasta.

³ Wheat prepared for food use by processes other than milling.

□ Estimated food use equals wheat ground for flour plus food imports plus nonmilled food use minus food exports. See <http://www.ers.usda.gov/Briefing/Wheat/wheatfooduse.htm> for more information.

Source: Data through the 2nd quarter of 2011 was calculated using data from U.S. Department of Commerce, Bureau of the Census' Flour Milling Products (MQ311A) and U.S. Department of Commerce, Bureau of Economic Analysis' Foreign Trade Statistics. Subsequent flour milling calculations are based on data from the North American Millers Association.

Date run: 1/17/2017

Table 5--Wheat: National average price received by farmers (dollars per bushel) , 1/17/2017

Month	All wheat		Winter		Durum		Other spring	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
June	5.42	4.20	5.20	3.97	9.16	6.50	5.20	4.61
July	5.23	3.75	5.15	3.56	8.74	6.47	5.15	4.48
August	4.84	3.67	4.80	3.41	7.28	5.59	4.71	4.24
September	4.72	3.49	4.64	3.25	6.36	5.62	4.68	4.22
October	4.86	3.68	4.76	3.36	6.57	5.52	4.78	4.38
November	4.86	3.88	4.66	3.40	6.97	6.00	4.91	4.48
December	4.75		4.57		6.93		4.80	
January	4.82		4.63		6.60		4.81	
February	4.61		4.47		6.08		4.56	
March	4.40		4.28		6.03		4.47	
April	4.46		4.31		6.24		4.55	
May	4.45		4.28		6.57		4.64	

Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Table 6--Wheat: National average prices received by farmers by class (dollars per bushel), 1/17/2017

Month	Hard red winter		Soft red winter		Hard red spring		White	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
June	5.26	3.84	4.91	4.45	5.18	4.61	5.79	4.75
July	5.21	3.32	4.69	4.16	5.13	4.48	6.34	4.63
August	4.55	3.15	4.54	3.92	4.67	4.25	6.00	4.24
September	4.35	3.03	4.31	3.69	4.63	4.24	5.49	4.09
October	4.46	3.07	4.56	3.83	4.73	4.46	5.57	3.87
November	4.30	3.15	4.37	3.85	4.88	4.54	5.44	3.92
December	4.34		4.52		4.77		5.35	
January	4.37		4.48		4.77		5.48	
February	4.22		4.54		4.54		4.94	
March	4.19		4.21		4.46		4.63	
April	4.13		4.38		4.56		4.62	
May	4.08		4.52		4.62		4.88	

Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Date run: 1/17/2017

Table 7--Wheat: Average cash grain bids at principal markets, 1/17/2017

Month	No. 1 hard red winter (ordinary protein) Kansas City, MO (dollars per bushel)		No. 1 hard red winter (13% protein) Kansas City, MO (dollars per bushel)		No. 1 hard red winter (ordinary protein) Portland, OR (dollars per bushel)		No. 1 hard red winter (ordinary protein) Texas Gulf, TX ¹ (dollars per metric ton)	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
June	6.40	5.04	6.64	5.54	6.13	5.18	209.81	176.55
July	6.27	4.24	6.36	5.18	5.92	4.66	197.31	151.57
August	5.70	4.15	5.86	5.32	5.44	4.62	179.68	149.18
September	5.44	4.24	5.59	5.36	5.69	4.41	172.70	150.47
October	5.62	4.40	5.73	5.58	5.86	4.20	--	152.12
November	5.55	4.64	5.72	5.70	5.56	4.12	177.10	150.28
December	5.60	4.56	5.79	5.76	5.46	--	189.60	141.83
January	5.46	--	5.71	--	5.42	--	193.64	--
February	5.28	--	5.48	--	5.28	--	187.03	--
March	5.34	--	5.53	--	5.33	--	191.43	--
April	5.22	--	5.44	--	5.27	--	187.39	--
May	5.08	--	5.42	--	5.18	--	171.78	--
Month	No. 1 dark northern spring (13% protein) Chicago, IL (dollars per bushel)		No. 1 dark northern spring (14% protein) Chicago, IL (dollars per bushel)		No. 1 dark northern spring (14% protein) Portland, OR (dollars per bushel)		No. 1 hard amber durum Minneapolis, MN (dollars per bushel)	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
June	6.50	--	7.56	--	7.48	6.35	--	--
July	--	--	--	--	6.71	5.82	--	--
August	--	--	--	--	6.10	5.97	--	--
September	--	--	--	--	6.32	5.98	--	--
October	--	--	--	--	6.53	6.34	--	--
November	--	--	--	--	6.39	6.28	--	--
December	--	--	--	--	6.34	6.49	--	--
January	--	--	--	--	6.15	--	--	--
February	--	--	--	--	6.09	--	--	--
March	--	--	--	--	6.11	--	--	--
April	--	--	--	--	6.27	--	--	--
May	--	--	--	--	6.27	--	--	--
Month	No. 2 soft red winter St. Louis, MO (dollars per bushel)		No. 2 soft red winter Chicago, IL (dollars per bushel)		No. 2 soft red winter Toledo, OH (dollars per bushel)		No. 1 soft white Portland, OR (dollars per bushel)	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
June	5.14	4.74	5.17	4.70	5.22	4.69	--	5.46
July	5.08	4.23	5.40	4.12	5.58	4.22	--	5.07
August	4.48	3.90	5.00	3.99	5.20	4.03	5.55	4.89
September	4.28	3.89	4.86	3.76	5.04	3.72	5.38	4.77
October	4.45	3.89	5.02	3.82	5.25	3.90	5.49	4.65
November	4.41	4.04	4.98	3.88	5.16	3.92	5.37	4.64
December	4.22	3.91	4.83	3.94	4.97	3.80	--	4.57
January	4.32	--	4.75	--	4.93	--	5.31	--
February	4.70	--	4.69	--	4.69	--	5.30	--
March	4.74	--	4.70	--	4.61	--	--	--
April	4.79	--	4.71	--	4.63	--	5.33	--
May	4.64	--	4.65	--	4.61	--	5.34	--

-- = Not available or no quote.

¹ Free on board.Source: USDA, Agricultural Marketing Service, State Grain Reports, <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateS&navID=MarketNewsAndTransportationData&leftNav=MarketNewsAndTransportationData&page=LSMarketNewsPageStateGrainReports>.

Date run: 1/17/2017

Table 8--Wheat: U.S. exports and imports for last 6 months (1,000 bushels), 1/17/2017

Item		Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016
Exports	All wheat grain	85,398	75,502	100,797	103,769	61,679	68,618
	All wheat flour ¹	1,710	1,338	1,401	1,669	1,870	1,770
	All wheat products ²	460	371	496	480	485	439
	Total all wheat	87,567	77,210	102,694	105,917	64,034	70,827
Imports	All wheat grain	5,757	7,078	10,957	9,149	5,946	5,311
	All wheat flour ¹	1,266	1,058	1,339	1,180	1,272	1,327
	All wheat products ²	1,698	1,614	1,892	1,378	1,717	1,894
	Total all wheat	8,721	9,750	14,187	11,707	8,934	8,532

Totals may not add due to rounding.

¹ Expressed in grain-equivalent bushels. Includes meal, groats, and durum.

² Expressed in grain-equivalent bushels. Includes bulgur, couscous, and selected categories of pasta.

Source: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics; and ERS calculations using Census trade statistics.

Date run: 1/17/2017

Table 9--Wheat: U.S. exports, Census and export sales comparison (1,000 metric tons)

Importing country	2014/15		2015/16		2016/17 (as of 01/05/17)		
					Shipments	Out-standing	Total
Data source	Census 1/	Export sales 2/	Census 1/	Export sales 2/	Export sales 2/		
Country:							
China	331	332	609	764	616	348	963
Japan	3,054	3,121	2,499	2,434	1,553	431	1,984
Mexico	2,842	2,721	2,503	2,318	1,539	636	2,175
Nigeria	1,790	1,904	1,457	1,401	724	359	1,083
Philippines	2,376	2,338	2,077	2,118	1,651	394	2,045
Korean Rep.	1,181	1,148	1,093	1,074	629	471	1,100
Egypt	156	387	99	42	49	0	49
Taiwan	983	1,002	1,129	1,034	672	160	832
Indonesia	691	643	666	608	591	112	703
Venezuela	457	438	252	239	248	0	248
European Union	658	724	831	934	526	0	526
Total grain	22,610	22,622	20,467	19,440	14,962	6,378	21,341
Total (including products)	23,249	22,693	21,117	19,544	15,053	6,463	21,515
USDA forecast of Census				21,094			26,535

¹ Source: U.S. Department of Commerce, U.S. Census Bureau

² Source: USDA, Foreign Agricultural Service, *U.S. Export Sales*.