Wheat

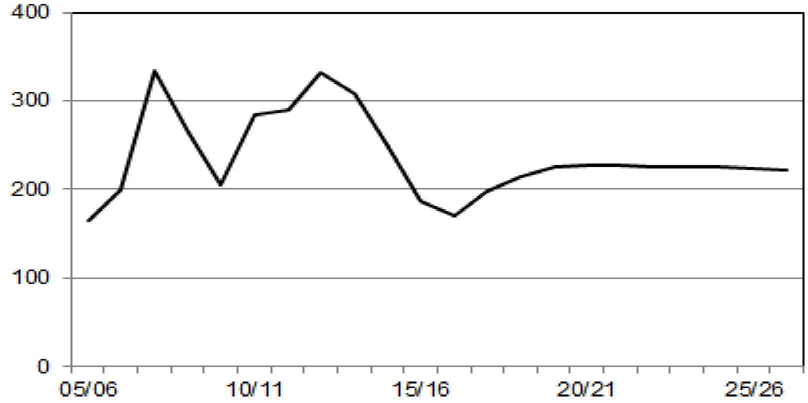
- Another increase in global production in 2016/17 coupled with abundant stocks with expectations of further increases resulted in supplies far exceeding demand. As a result wheat prices have dropped even more than in recent years. Wheat prices are currently at their lowest level since 2005/06 and wheat is priced similar to feedgrains on the world market.
- With the assumption of normal weather and average yields in coming years, production is expected to decline to levels that will balance global supply and demand at more normal, higher, stable prices. These somewhat higher prices will ensure that wheat successfully competes for land against other crops.
- Despite the oversupply of wheat which has eased wheat prices, the underlying costs of production have risen. Fertilizers and other agricultural chemicals, and other inputs are pricier than just a few years ago, but those prices are not expected to appreciate rapidly. In addition, energy prices are only projected to increase moderately through the baseline period. This will help constrain increases in long-term prices necessary for meeting global wheat demand.

- Declining prices resulted in a 3.4 million hectare reduction in wheat area worldwide. The largest reductions were in the U.S., Canada, India, Morocco, and Algeria, more than offsetting gains in Russia, Kazakhstan, and Argentina. Going forward, area is expected to decline further in 2017/18 in response to this year's bargain basement prices, and then gradually increase over the next ten years.
- Globally, wheat production increased by 40 mmt, pressuring prices further downward and pushing inventories higher despite increases in both food and feed use. Lower production is expected in 2017/18 as a result of area declines, but will increase thereafter primarily as yields increase. The lower production next year will not result in a shortfall.
- By the end of the baseline period, wheat area is projected to stabilize around 220 million hectares and production will increase primarily through yield growth, which is projected to average around 1% per year.

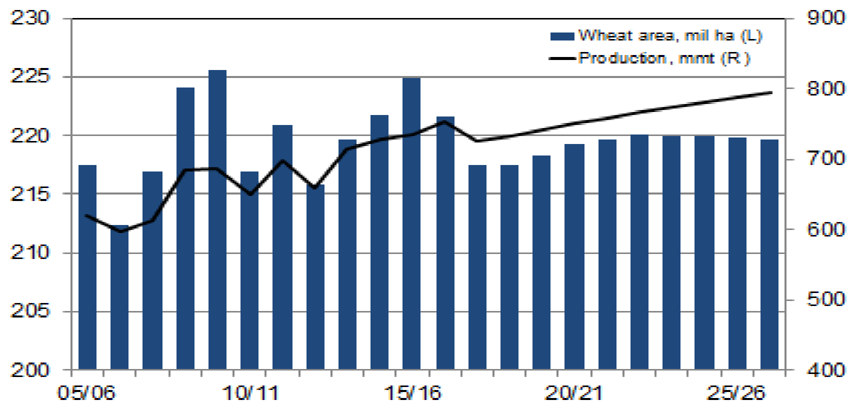
- Wheat food consumption will be driven primarily by global population growth. Income impacts on wheat vary across regions and income levels. Per capita consumption is declining in high-income countries where diets are less based on grains and more on meats and other foods. In many emerging countries, per capita consumption is already high and income growth will contribute little to demand.
- Health and weight issues also contribute to declining per capita consumption in developed countries. While grains, especially whole grains are important dietary components, the caloric intake of many populations in higher-income countries is well beyond daily nutritional requirements and a growing number of societies are faced with obesity issues.
- For developing countries, wheat per capita consumption is increasing as incomes above subsistence levels allow the population to diversify diets beyond traditional staples. Globalization also plays a role in changing diets in some nations as foods from other countries become available.

Current Low Wheat Prices Cannot Be Sustained

Wheat price, HRW, U.S. Gulf, $/mt

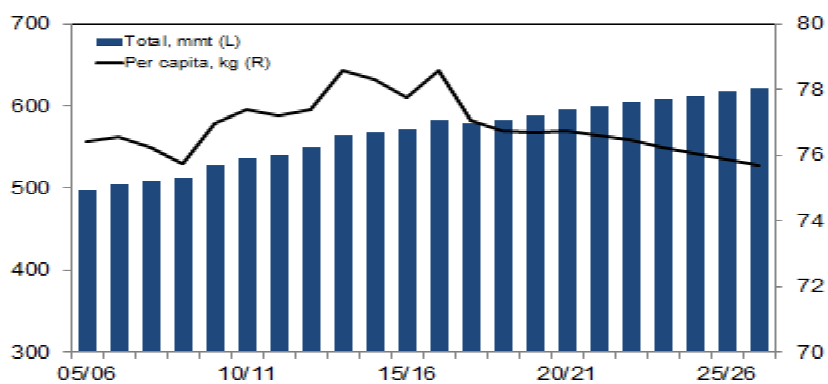


Higher Prices Will Help Wheat Area to Recover



Little Change in Per Capita Use of Staple Grains

Global wheat food and industrial use



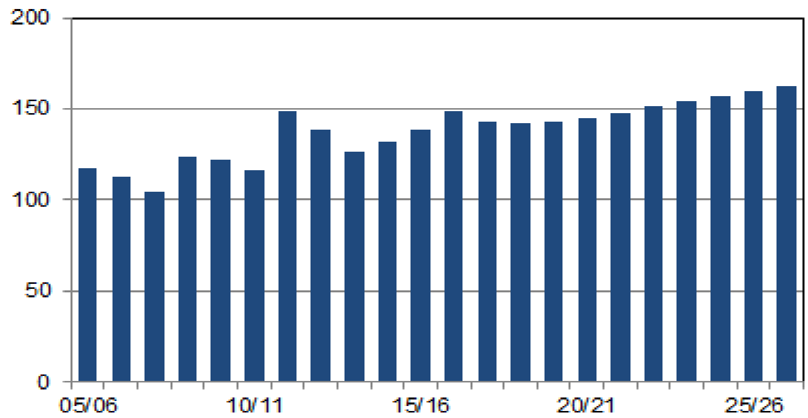
- The grain belt of the former Soviet Union and Europe traditionally feeds large quantities of wheat as they have an advantage in production. In 2016/17, approximately 10 mmt more wheat will be used for livestock feed compared to last year. Increased feed use will occur in Russia, as well as other countries such Australia, Canada, China, Indonesia, and the U.S.
- Cattle inventory declines have slowed in Russia and Ukraine, and hog and poultry production have turned the corner in these countries, as well as Kazakhstan. During the baseline period, livestock production is expected to increasing again in major wheat feeding regions, and accompanying wheat feed use is expected to increase.
- Wheat feed use also tends to increase or decrease in a given year depending on wheat and competing feedgrain production and prices. When producers enjoy large wheat crops, wheat feeding generally increases in those countries, especially if some of that wheat is of lower quality.
- Importing countries also adjust feed rations with price changes. In 2015/16 and again this year Indonesia, a traditional corn feeding nation cut back on corn use and imports and opted to import inexpensive wheat, boosting usual miniscule wheat feed consumption by roughly one mmt.

- Wheat trade is expected to be similar to last year's levels in 2016/17, although the share of specific importers and exporters will shift. Particularly, production changes in exporting countries will result in substantial shifts in trade patterns this year. Australia, Russia, and the U.S. are seeing increases in exportable supplies. Exports are expected to drop relative to last year in India, the EU, and Ukraine.
- No major importers are expected to show significant increases in 2016/17. Egypt will remain the single largest export market throughout the baseline, with Indonesia, Algeria, and Brazil also consistently among the top importers.
- Rising global excess demand over the projection period will be met primarily by traditional major exporting nations. Trade will cover approximately 19% of worldwide consumption. Most major import destinations are expected to increase dependency on the world market in coming years.

- Globally, inventories are expected to increase by the end of 2016/17 by approximately 15 mmt. This will be the fourth consecutive year of substantial rebuilding from the sharp drawdown of 2012/13. The increase in ending stocks is expected to occur primarily in China, Russia, and the U.S.
- China's grain policies result in holding a large proportion of annual needs in reserve to buffer production shortfalls and high prices. In the past four years, China has been building wheat ending stocks, resulting in a substantial rise in the stocks-to-use ratio, with nearly a full year's consumption requirements expected to be on hand at the end of 2016/17, compared to about 33% for the world.
- Because China's grain markets are still relatively insulated from world markets, the inventories held by that country are not available to buffer production shortfalls in other parts of the world. As a result, that country's higher proportion of stocks does not reduce world market volatility.

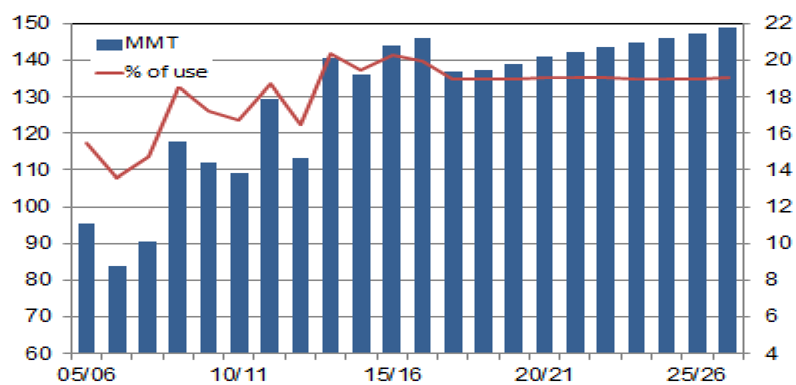
Feed Use Expands Primarily in the EU, FSU

Global wheat feed use, mmt



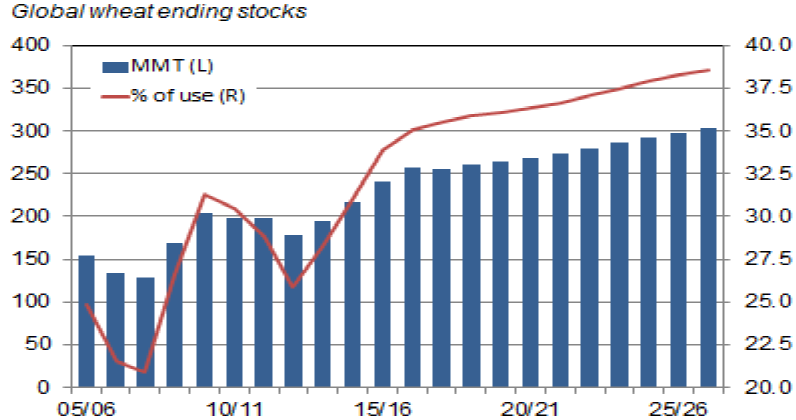
One-Fifth of Wheat Consumption Is Imported

Wheat net trade



Plenty of Buffer In the Wheat Market

Global wheat ending stocks



World Wheat Supply & Utilization

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
					(Million hectares)						
Area Harvested	217.5	212.3	216.9	224.1	225.6	216.9	221.0	215.8	219.6	221.7	225.0
					(Metric tons per hectare)						
Yield	2.84	2.81	2.82	3.05	3.05	2.99	3.16	3.05	3.26	3.28	3.27
					(Million metric tons)						
Supply	864.8	836.2	832.9	923.5	964.9	961.3	1,017.7	978.3	1,026.2	1,053.9	1,094.0
Production	618.8	596.7	611.9	684.0	687.2	649.5	697.3	658.6	715.1	728.1	735.5
Beginning stocks	156.2	153.3	133.4	128.1	169.1	203.3	198.9	198.5	177.8	194.9	217.3
Net imports	89.7	86.3	87.6	111.5	108.5	108.6	121.4	121.2	133.4	130.9	141.2
Utilization	769.4	752.3	742.4	805.6	852.9	852.2	888.3	864.9	885.4	917.7	950.1
Feed and residual	117.7	113.1	104.6	124.0	122.3	116.8	148.7	138.2	126.6	131.8	138.5
Food, seed & industrial	498.4	505.8	509.7	512.5	527.4	536.5	541.1	548.8	563.9	568.6	571.1
Ending stocks	153.3	133.4	128.1	169.1	203.3	198.9	198.5	177.8	194.9	217.3	240.5
Net exports	95.4	83.9	90.6	117.9	112.0	109.2	129.4	113.4	140.8	136.2	143.9
Total Demand	864.8	836.2	832.9	923.5	964.9	961.3	1,017.7	978.3	1,026.2	1,053.9	1,094.0

World Wheat Supply & Utilization

	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
						(Million hectares)					
Area Harvested	221.6	217.5	217.5	218.3	219.3	219.7	220.1	220.0	219.9	219.8	219.7
						(Metric tons per hectare)					
Yield	3.40	3.34	3.37	3.39	3.42	3.45	3.48	3.52	3.55	3.58	3.61
						(Million metric tons)					
Supply	1,134.0	1,114.8	1,121.4	1,134.2	1,149.8	1,163.7	1,179.3	1,193.1	1,207.0	1,220.9	1,235.0
Production	752.7	726.4	733.2	740.5	750.0	757.7	766.7	773.5	780.4	787.0	794.1
Beginning stocks	240.5	256.5	256.1	259.9	263.8	268.8	274.1	280.0	285.8	291.5	296.9
Net imports	140.8	132.0	132.1	133.8	136.0	137.2	138.6	139.6	140.8	142.3	143.9
Utilization	988.1	977.7	984.2	995.3	1,008.8	1,021.5	1,035.7	1,048.4	1,061.1	1,073.5	1,086.0
Feed and residual	148.2	142.9	141.7	143.0	145.0	147.6	151.0	153.9	156.7	159.5	162.2
Food, seed & industrial	583.4	578.7	582.6	588.4	595.0	599.8	604.6	608.7	612.9	617.1	621.4
Ending stocks	256.5	256.1	259.9	263.8	268.8	274.1	280.0	285.8	291.5	296.9	302.5
Net exports	145.9	137.1	137.2	138.9	141.0	142.3	143.7	144.7	145.9	147.4	149.0
Total Demand	1,134.0	1,114.8	1,121.4	1,134.2	1,149.8	1,163.7	1,179.3	1,193.1	1,207.0	1,220.9	1,235.0

Wheat Area Harvested

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
					(Million hectares)						
Algeria	1.7	1.7	1.7	1.8	1.9	2.0	2.0	2.0	2.0	1.7	2.1
Argentina	5.5	6.2	6.6	5.3	4.0	4.8	5.2	3.6	3.5	5.0	3.9
Australia	12.5	11.8	12.6	13.5	13.9	13.5	13.9	13.0	12.6	12.4	12.8
Brazil	2.4	1.8	1.8	2.4	2.4	2.2	2.2	1.9	2.2	2.7	2.5
Canada	9.4	9.7	8.6	10.0	9.7	8.3	8.6	9.5	10.4	9.5	9.6
China	22.8	23.6	23.7	23.6	24.3	24.3	24.3	24.3	24.1	24.1	24.1
Egypt	1.3	1.3	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.3
EU-28	26.0	24.7	24.9	26.8	26.0	26.0	25.8	26.0	25.9	26.7	26.8
India	26.4	26.5	28.0	28.0	27.8	28.5	29.1	29.9	30.0	30.5	31.5
Iran	7.0	6.9	7.2	5.3	6.6	7.0	6.4	6.4	6.4	6.8	6.8
Japan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Kazakhstan	11.8	11.9	12.7	12.9	14.3	13.1	13.7	12.4	13.0	11.9	11.6
Mexico	0.6	0.6	0.7	0.8	0.8	0.7	0.7	0.6	0.6	0.7	0.8
Morocco	3.0	3.1	2.6	2.9	3.0	2.9	3.1	3.1	3.2	3.1	3.2
Nigeria	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pakistan	8.4	8.4	8.6	8.6	9.0	9.1	8.9	8.7	8.7	9.1	9.2
Russia	24.6	23.0	23.5	26.1	26.7	21.8	24.8	21.3	23.4	23.6	25.6
South Korea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turkey	8.6	8.6	7.7	7.7	7.8	8.0	7.7	7.8	7.7	7.7	7.9
Ukraine	6.6	5.5	6.0	7.1	6.8	6.3	6.7	5.6	6.6	6.3	7.1
United States	20.3	18.9	20.6	22.7	20.2	19.0	18.5	19.7	18.3	18.8	19.1
Uzbekistan	1.5	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Rest of world	17.3	16.6	16.7	15.8	17.5	16.5	16.6	17.0	18.0	18.1	17.5
World total	217.5	212.3	216.9	224.1	225.6	216.9	221.0	215.8	219.6	221.7	225.0

Wheat Area Harvested

	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
						(Million hectares)					
Algeria	1.3	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1
Argentina	4.9	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Australia	13.0	13.0	13.1	13.2	13.3	13.2	13.2	13.1	13.2	13.2	13.2
Brazil	2.1	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.2
Canada	8.9	8.6	8.4	8.4	8.5	8.7	8.9	9.0	9.1	9.2	9.2
China	24.2	23.6	23.2	22.5	22.0	21.6	21.4	21.2	21.0	20.7	20.5
Egypt	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
EU-28	27.0	26.8	26.9	26.6	26.7	26.6	26.8	26.7	26.7	26.7	26.7
India	30.2	30.3	30.3	30.6	30.7	30.8	30.9	31.0	31.0	31.0	31.0
Iran	6.8	6.8	7.0	7.1	7.2	7.3	7.3	7.3	7.2	7.2	7.1
Japan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Kazakhstan	12.0	11.7	11.9	12.1	12.4	12.6	12.8	13.0	13.2	13.3	13.5
Mexico	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Morocco	2.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0	3.0	3.0	2.9
Nigeria	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pakistan	9.2	9.1	9.2	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.4
Russia	27.1	25.9	25.6	25.7	25.8	25.8	25.8	25.8	25.8	25.9	25.9
South Korea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turkey	7.8	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Ukraine	6.5	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.6	6.6	6.6
United States	17.8	16.0	16.2	16.4	16.5	16.5	16.4	16.3	16.3	16.2	16.1
Uzbekistan	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3
Rest of world	17.1	16.2	16.6	17.1	17.4	17.5	17.6	17.5	17.5	17.5	17.5
World total	221.6	217.5	217.5	218.3	219.3	219.7	220.1	220.0	219.9	219.8	219.7

Wheat Trade

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
					(Thousand metric tons)						
Net exporters											
Argentina	9,632	10,715	11,185	6,768	5,096	9,481	12,921	3,548	2,248	5,266	9,588
Australia	15,930	8,634	7,371	14,632	14,706	18,478	24,533	18,504	18,458	16,431	15,974
Canada	15,735	19,114	15,720	18,493	18,640	16,132	16,864	18,470	22,822	23,678	21,643
EU-28	8,903	8,767	5,627	17,722	16,935	18,465	9,366	17,510	28,056	29,443	27,761
India	760	-6,627	-1,913	16	-160	-200	876	6,808	6,028	3,358	659
Kazakhstan	3,906	8,125	7,879	6,028	8,207	4,855	11,838	6,282	8,088	4,939	7,534
Pakistan	-324	634	707	-1,049	130	1,288	1,025	830	364	-50	591
Russia	9,343	9,862	11,780	18,190	18,392	3,894	21,077	10,136	17,747	22,472	24,728
Ukraine	6,393	3,285	902	12,964	9,309	4,261	5,352	7,145	9,687	11,242	17,404
United States	25,077	21,408	31,298	24,179	20,704	32,509	25,527	24,161	27,317	19,401	18,021
Total net exports	95,355	83,917	90,556	117,943	111,959	109,163	129,379	113,394	140,815	136,180	143,903
Net importers											
Algeria	5,471	4,860	5,883	6,307	5,155	6,516	6,496	6,455	7,462	7,242	8,139
Brazil	5,802	8,010	6,003	6,008	5,996	4,158	5,302	5,773	6,986	3,683	5,686
China	-268	-2,395	-2,786	-242	502	-14	1,955	1,991	5,884	1,123	2,747
Egypt	7,761	7,288	7,657	9,806	10,325	10,375	11,418	8,223	9,955	11,006	11,371
Indonesia	4,909	5,409	5,006	5,275	5,152	6,392	6,235	6,910	7,090	7,196	9,841
Iran	257	950	150	6,750	4,400	-170	708	6,491	4,685	5,115	3,260
Japan	5,046	5,330	5,362	4,884	5,206	5,577	6,058	6,323	5,854	5,616	5,457
South Korea	3,790	3,352	3,000	3,277	4,365	4,636	5,057	5,295	4,144	3,789	4,243
Mexico	3,018	3,059	1,881	1,936	2,357	2,583	4,230	3,094	3,317	3,372	3,237
Morocco	2,272	1,669	4,077	3,642	2,218	3,847	3,543	3,572	3,713	3,848	4,311
Nigeria	3,679	3,265	2,633	3,020	3,440	3,482	3,421	3,918	4,080	3,844	4,010
Turkey	-3,089	-641	438	1,230	-1,074	663	405	183	-411	1,888	-1,152
Uzbekistan	523	890	790	1,240	1,277	1,118	2,048	1,513	1,924	2,030	2,454
Rest of world	50,554	45,206	47,486	58,372	59,223	59,435	64,548	61,470	68,675	71,098	77,583
Total net imports	89,725	86,252	87,580	111,505	108,542	108,598	121,424	121,211	133,358	130,850	141,187
Residual	5,630	-2,335	2,976	6,438	3,417	565	7,955	-7,817	7,457	5,330	2,716
					(Dollars per metric ton)						
US SRW Gulf Port Price	138	171	310	206	187	282	261	309	268	223	196

Wheat Trade

	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
					(Thousand metric tons)						
Net exporters											
Argentina	8,536	7,417	7,635	7,815	7,981	8,098	8,153	8,246	8,368	8,508	8,655
Australia	24,305	18,772	17,770	18,076	18,150	18,006	17,966	17,985	18,056	18,136	18,211
Canada	20,514	17,560	17,290	17,495	17,974	18,496	19,056	19,487	19,869	20,219	20,540
EU-28	19,165	25,036	27,812	27,350	27,622	27,532	28,023	27,777	27,777	27,952	28,466
India	-3,293	2,143	1,913	1,994	2,014	1,947	1,838	1,804	1,816	1,834	1,814
Kazakhstan	8,466	7,168	7,015	7,200	7,481	7,784	8,070	8,337	8,586	8,826	9,062
Pakistan	883	1,818	1,817	1,783	1,716	1,612	1,537	1,452	1,388	1,340	1,295
Russia	28,454	22,678	21,522	22,183	22,828	23,527	24,065	24,670	25,209	25,747	26,330
Ukraine	15,683	13,661	13,992	14,163	14,534	14,796	14,967	15,071	15,209	15,376	15,548
United States	23,161	20,809	20,453	20,838	20,749	20,497	19,983	19,853	19,627	19,455	19,100
Total net exports	145,875	137,062	137,220	138,896	141,050	142,296	143,657	144,681	145,905	147,393	149,022
Net importers											
Algeria	8,192	7,718	7,704	7,822	7,961	8,151	8,308	8,470	8,590	8,706	8,802
Brazil	5,091	6,203	6,232	6,136	6,000	5,875	5,773	5,713	5,679	5,660	5,655
China	2,600	2,502	2,115	2,097	2,155	2,240	2,349	2,399	2,445	2,487	2,546
Egypt	11,180	11,082	11,591	12,072	12,601	13,076	13,517	13,890	14,266	14,639	15,026
Indonesia	8,532	7,516	7,600	7,705	7,804	7,898	7,989	8,075	8,158	8,239	8,318
Iran	825	2,597	1,900	1,463	1,103	822	641	538	459	401	375
Japan	5,470	5,440	5,440	5,440	5,440	5,440	5,440	5,440	5,440	5,440	5,440
South Korea	4,794	4,487	4,374	4,257	4,225	4,216	4,232	4,232	4,240	4,253	4,285
Mexico	3,104	3,243	3,055	2,992	2,954	2,909	2,874	2,847	2,831	2,825	2,835
Morocco	4,945	4,820	4,951	5,072	5,197	5,319	5,434	5,543	5,645	5,739	5,826
Nigeria	4,106	4,160	4,259	4,378	4,511	4,657	4,809	4,962	5,119	5,278	5,442
Turkey	-584	-346	-339	-495	-541	-595	-649	-720	-817	-914	-998
Uzbekistan	2,473	2,262	2,347	2,411	2,492	2,571	2,650	2,715	2,758	2,787	2,801
Rest of world	80,063	70,294	70,908	72,461	74,063	74,634	75,205	75,495	76,007	76,769	77,586
Total net imports	140,791	131,978	132,136	133,812	135,966	137,212	138,573	139,597	140,821	142,309	143,938
Residual	5,084	5,084	5,084	5,084	5,084	5,084	5,084	5,084	5,084	5,084	5,084
					(Dollars per metric ton)						
US SRW Gulf Port Price	157	182	199	209	212	212	210	210	209	208	206