

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Required Report - public distribution

Date: 4/1/2014

GAIN Report Number:

Kazakhstan - Republic of

Grain and Feed Annual

Grain and Feed Annual 2014

Approved By:

Levin Flake

Prepared By:

Zhamal Zharmagambetova and Levin Flake

Report Highlights:

FAS/Astana forecasts Kazakhstan's wheat production in 2014 at 14.5 MMT, up from 13.9 MMT in 2013. Wheat sown area is expected to fall in 2014 for the 5th consecutive year, and this will also reduce harvested area. However, a return to trend yields in 2014 (2013 yields were below trend) would allow for a small increase in production from last year. Kazakh wheat exports are forecast to fall slightly in MY 2014/15 to 7.0 MMT, from 7.5 MMT in MY 2013/14, as smaller carry-in stocks reduce exportable supplies. The Kazakh Ministry of Agriculture released a Master Plan for "The stabilization of the grain market" which sets out goals and projections for grain production, consumption, and trade to 2020.

General Information:

Production

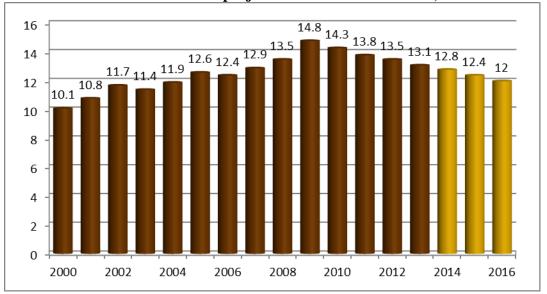
2014 Production

FAS/Astana forecasts Kazakhstan's wheat production in 2014 at 14.5 MMT, up from 13.9 MMT in 2013. Wheat sown area is expected to fall in 2014 for the 5th consecutive year, and this will also reduce harvested area. However, a return to trend yields in 2014 (2013 yields were below trend) would allow for a small increase in production from last year.

FAS/Astana forecasts Kazakhstan barley production at 2.6 MMT in 2014, only slightly higher than in 2013 (2.5 MMT). This higher production is expected because of higher sown and harvested area.

The trend of land shifting from wheat to other grains and to oilseeds is expected to continue in 2014. The government has a long term plan to encourage this diversification (recently wheat accounted for over 80 percent of total grain area, and over 60 percent of total crop area). The primary stated reasons for this shift is the difficulty in getting wheat to export markets due to Kazakhstan's landlocked status, and the desire to increase domestic consumption of grain in Kazakhstan. This increased consumption is primarily for livestock feeding, as the Government has a goal to turn Kazakhstan into an exporter of meat products. The Kazakh Ministry of Agriculture recently estimated that for 2014, wheat sown area will fall to 12.8 million hectares, compared to 13.1 million in 2013; oilseed area will remain largely unchanged at 2.0 million hectares; and feed crops sown area will increase to 3.4 million hectares from 3.1 million hectares in 2013.

Historical wheat sown area and projected sown area 2000-2016, Million Hectares



Source: Ministry of Agriculture

In order to support this diversification strategy, subsidies for "priority" crops such as oilseeds and feed grains (including barley) will increase at the expense of subsides for wheat. In a recent presentation the Minister of Agriculture stated that the per hectare subsidies for barley, corn for grain, rapeseed, soybeans, pasture grasses, and corn for silage would rise dramatically in 2014 (see table below). These subsidies are typically in the form of fuel subsidies, fertilizer and herbicide subsidies, and other items for

spring sowing and harvesting, as well continued lower interest rates for leasing of agricultural machinery.

Subsidies for Priority Crops in Tenge/Hectare

Crop	2013 subsidy	2014 projected subsidy	Change
Barley	727	2,500	+244%
Corn for grain	7,271	30,000	+313%
Rapeseed	4,172	12,000	+187%
Soybeans	3,276	9,000	+175%
Pasture grasses	2,500	9,000	+260%
Corn for silage	2,200	10,000	+355%

Source: Kazakh Ministry of Agriculture (current exchange rate is 182 tenge/\$1 U.S.)

Although still a month before spring planting begins, the official Kazakh weather service, Kazhydromat, has stated that as a result of sufficient fall and winter precipitation, it is expected that by the start of the sowing season soil moisture reserves will be sufficient and "optimal".

Long-term production trends

In 2013, the Kazakh Ministry of Agriculture released a Master Plan for "The stabilization of the grain market". This Plan is in support of their Agribusiness – 2020 program and in it the Ministry sets goals and projections for grain production, consumption and exports between 2013-2020. A few key trends shown in these projections include:

- --The Ministry projects sown area for all grains to stay relatively steady over this period, falling only slightly.
- --There is projected to be a sizeable shift from wheat, with wheat area projected to fall 2 million hectares (14 percent) from 13.5 million hectares in 2012 to 11.5 million hectares in 2020.
- --Most of that reduced area is expected to be replaced with so called "feed crops" primarily feed grains, which are projected to increase 1.5 million hectares (53 percent) from 2.8 million hectares to 4.3 million hectares in 2020.

Overall, the Master Plan projects that the drop in wheat area will be largely compensated by increased yields, and that wheat production between 2014-2020 will fall slightly to a projected 14.4 MMT in 2020. The Plan also forecasts increases in the use of moisture saving technologies in Kazakhstan (including no-till), in the purchase of agricultural equipment, and an increase in the use of mineral fertilizers. This information and more detailed tables on area, yield, and production projections can be found in the Appendix.

Although biotech crop cultivation is not currently allowed in Kazakhstan, in January 2014 Kazakh President Nursultan Nazarbayev instructed the Government to adjust the agricultural development plans to include the use of biotech crops. In his remarks he stressed the dramatic spread of biotech crop cultivation throughout the world, and that Kazakhstan needed to "keep up with the times".

Consumption

Food, seed, and industrial (FSI) consumption for wheat is expected to remain unchanged in marketing year (MY) 2014/15 at 4.8 MMT. Although flour consumption is expected to expand in-line with

population growth, seed use is forecast to continue to shrink as planted area shifts from wheat. Industrial use (primarily for spirit production) is expected to remain steady.

Feed use of wheat in MY 2014/15 is forecast to be flat, while feed use of barley is expected to rise from 1.8 MMT to 2.0 MMT. Although wheat remains the most fed grain in Kazakhstan for livestock, most of the increase in feeding in future years is expected to be in barley and other feed grains and grasses due to the government's strategy to increase area dedicated to these crops.

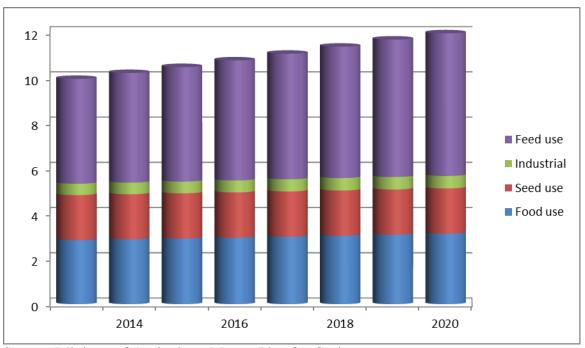
The Government of Kazakhstan has stated it is committed to keeping bread prices stable in Kazakhstan, and the Kazakh Ministry of Agriculture, regional administrations and the Food Contract Corporation signed memoranda aimed to stabilize bread prices for the rest of MY 2013/14. This was in response to the devaluation of the tenge. According to the memorandums, the Food Corporation will provide over 500,000 tons of grain at a reduced price of 30,000 tenge, including VAT per ton (approximately \$163 per ton with the new exchange rate, compared to market prices more than \$20 higher than this). The grain will be sold and transported from February 17, 2014 to August 2014.

Long-term consumption trends

The Master Plan projects that in the next 7 years, per capita grain (primarily wheat) consumption for food will not show any growth, and will remain at an estimated 167 kg per person annually. As a result, the only expected growth in food consumption between 2013 and 2020 will be due to population growth, and both the Kazakh population and total food consumption of grain are projected to increase 10 percent over this period. Meanwhile, seed use of grain is expected to remain unchanged during this period as grain area remains flat. Industrial production is forecast to increase by 10 percent, entirely due to more use for making spirits, as grain use for making beer is not expected to grow.

Feed consumption of grain is expected to see the strongest increase in this period, as Kazakhstan tries to boost its livestock sector and turn into a major exporter of beef. Overall grain consumption is forecast to increase by 36 percent by 2020, and this is directly attributable to expected higher livestock numbers. (For a more detailed breakout of consumption please see Table 9 in the Appendix).

Projected Grain Consumption Growth to 2020, Million Tons

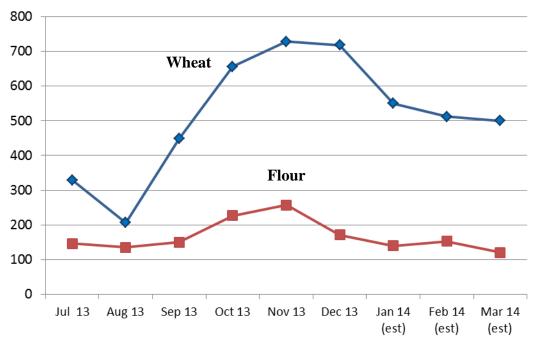


Source: Ministry of Agriculture Master Plan for Grain

Trade

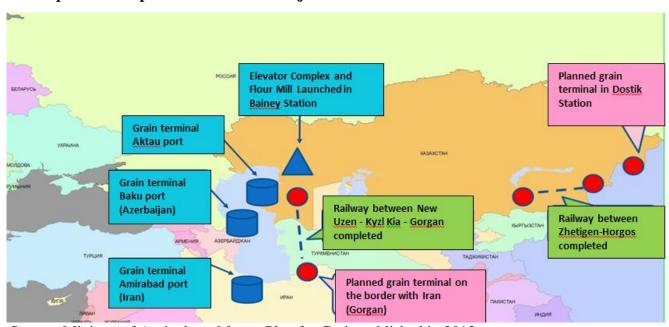
Kazakh wheat exports are forecast to fall slightly in MY 2014/15 to 7.0 MMT, from 7.5 MMT in MY 2013/14, as a result of tighter exportable supplies. Although production is forecast to rise slightly, lower carry-in stocks are expected to result in total supplies still being below last year's level. The difficulty and high costs of getting Kazakh wheat to external markets will continue to constrain exports, and the lion's share of these exports are expected to continue to be sold to nearby regional buyers.

MY 2013/14 wheat exports are estimated at 7.5 MMT, up 20 percent from MY 2012/13. Kazakh exports in recent months have been supported by the devaluation of the tenge, which went from 155 tenge/US\$ to 185 tenge/US\$ in mid-February in an abrupt change. Kazakhstan has also seen larger sales of wheat to Iran and China this marketing year, as well as continued strong sales to Russia. Despite larger harvests in the Urals and Siberia (the main markets for Kazakh wheat in Russia) in 2013, Russia's major railway transportation company, Rusagrotrans, has reported that Kazakh shipments to Russia are actually higher this marketing year than last.



Source: Kazakh Customs, Railway Data and FAS/Astana estimates

Development of Export infrastructure Projects



Source: Ministry of Agriculture Master Plan for Grain published in 2013

The Ministry of Agriculture continues to have a strategy of building export infrastructure to support grain and flour shipments. The Ministry in their 2013 Master Plan reported on the progress of these infrastructure projects, and explained that grain terminals in the ports of Aktau (Kazakhstan), Baku (Azerbaijan), and Amirabad (Iran) are already functioning (wholly or partially financed by the Food Contracting Corporation). In addition, in order to increase grain exports to Central Asia, Afghanistan

and Iran, an elevator complex and flour mill was built in Bainey station, in Southern Kazakhstan (please see map below). The Ministry also reported that two new railroad links were completed, one between South Kazakhstan and the Turkmenistan-Iranian border, and the other between East Kazakhstan and the Chinese border. They also announced future plans for the eventual construction of grain terminals on both the Iranian and on the Chinese borders.

Long term trend in grain and flour trade

The Kazakh Ministry of Agriculture in their Master Plan forecasts grain exports (including flour) to rise by 17 percent between 2014 and 2020, to 9.1 MMT. However, they forecast all of the increase will be in flour exports, and the Ministry foresees no long-term growth in non-flour grain exports.

In terms of export destinations, the Ministry projects the following trends to 2020:

- --Historically traditional buyers of Kazakh grain and flour (Afghanistan, Azerbaijan, Iran, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) are forecast to account for 72 percent of Kazakhstan's exports, unchanged from the average of 2008-2012.
- --China, and to a lesser extent, Southeast Asia, are projected to become larger buyers of Kazakh grains, growing from less than 1 percent of Kazakh grain and flour exports to 12 percent in 2020 (to 800,000 MT and 300,000 MT of exports, respectively).
- --Exports to all other markets are expected to shrink from 27 percent in 2008-2012 to 16 percent of total grain and flour exports by 2020 (see Table 10 in the Appendix for more information).

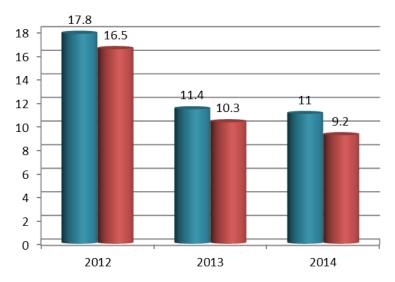
Stocks

MY 2014/15 wheat carry-in stocks are expected to be at 3.0 MMT, nearly 1 MMT lower than MY 2013/14 carry-in stocks. Grain stocks in Kazakhstan as reported by the Kazakhstan Statistical Agency of March 1st, were lower than in the previous two years, and were at 11.0 MMT, down from 11.4 MMT last year. Stocks of wheat were down to 9.2 MMT compared to 10.3 MMT on March 1st last year, while barley stocks were double last year's level at 1.2 MMT, compared to 0.6 MMT.

Grain Stocks as of March 1st

Grain		(1,000 MT)	
	2012	2013	2014
Wheat	16,544	10,314	9,231
Corn	28	30	43
Rice	94	116	121
Barley	827	576	1,180
Rye	17	9	22
Oat	124	87	166
Buckwheat	21	27	56
Millet	24	19	28
Mixed Grains	65	168	n/a
Total Grains	17,830	11 409	10,957

Grain and Wheat Stocks as of March 1st, Million Tons



Source: Kazakhstan Statistical Agency

Long term trend in storage capacity

Currently, the Ministry estimates grain storage capacity in Kazakhstan at 24.1 MMT, including 13.9 MMT in elevators and 10.2 MMT on-farm. Although this capacity would be sufficient for "average" production years, the Ministry estimates that in years of bumper harvests, this capacity is nearly 3 MMT less than necessary, hence the need to increase capacity (see table below).

Projected Grain Storage Capacity Needs, Million Tons

	0 1	,		
	Projected Grain	Projected Grain Production	Grain Storage	Deficit of Grain
	Production by 2020	in "bumper" harvest years	Capacity	Storage Capacity
Kazakhstan	21.068	27.043	24.091	-2.95

Source: Ministry of Agriculture Master Plan for Grain published in 2013

In order to cover this storage deficit, the Ministry of Agriculture's goal and projection in its Master Plan is to increase total grain storage in Kazakhstan by 3.5 MMT by 2020, including an increase of 350,000 tons of capacity owned by the Food Contracting Corporation (FCC) in border regions to help facilitate exports.

Projected Grain Storage Construction by the FCC in Export Directions, tons

Export direction	Grain storage location	Capacity
Northern	North-Kazakhstan region, Novo-Ishimskoye station (near Russian border)	50,000
Western	Mangistau region, Kuryk station (Caspian Sea)	50,000
Southern	South-Kazakhstan region, Arys station (near Uzbek border)	200,000
	Almaty region, Altynkol station (near Chinese border)	50,000
TOTAL	Country-wide	350,000

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Prices

Grain export prices in Kazakhstan have shown relatively little change over the past few months, with prices for 3rd class wheat at the Russian border at \$195 per MT on average, and prices for barley at the Caspian port of Akatu around \$225 per MT on average.

PSD Tables

Wheat Kazakhstan	2012/20	013	2013/20	014	2014/2	015
	Market Year Begi	in: Sep 2012	Market Year Begi	in: Sep 2013	Market Year Beg	in: Sep 2014
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	12,400	12,400	12,954	12,954		12,750
Beginning Stocks	6,176	6,477	2,935	3,840		2,991
Production	9,841	9,841	13,941	13,941		14,500
MY Imports	6	6	10	10		10
TY Imports	6	6	10	10		10
TY Imp. from U.S.	0	0	0	0		0
Total Supply	16,023	16,324	16,886	17,791		17,501
MY Exports	6,288	6,288	6,500	7,500		7,000
TY Exports	6,801	6,801	7,000	7,500		7,000
Feed and Residual	2,000	1,700	2,500	2,500		2,500
FSI Consumption	4,800	4,500	4,800	4,800		4,800
Total Consumption	6,800	6,200	7,300	7,300		7,300
Ending Stocks	2,935	3,840	3,086	2,991		3,201
Total Distribution	16,023	16,328	16,886	17,791		17,501
1000 HA, 1000 MT, M	- Γ/HA	•	•	•		

Barley Kazakhstan	2012/2	013	2013/2	014	2014/2	015
	Market Year Beg	jin: Jul 2012	Market Year Beg	jin: Jul 2013	Market Year Be	gin: Jul 2014
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1,600	1,600	1,837	1,837		2,000
Beginning Stocks	195	195	162	152		301
Production	1,500	1,490	2,539	2,539		2,600
MY Imports	6	6	10	10		10
TY Imports	10	10	10	10		10
TY Imp. from U.S.	0		0	0		0
Total Supply	1,701	1,691	2,711	2,701		2,911
MY Exports	164	164	300	300		300
TY Exports	151	151	400	300		300
Feed and Residual	1,150	1,150	1,800	1,800		2,000
FSI Consumption	225	225	300	300		300
Total Consumption	1,375	1,375	2,100	2,100		2,300
Ending Stocks	162	152	311	301		311
Total Distribution	1,701	1,691	2,711	2,701		2,911
				Ì		
1000 HA, 1000 MT, M	T/HA	•	•	-		•

APPENDIX

Table 1 Forecast planted area of primary crops to 2020, in 1000 hectares

Table I Fuled	asi pianicu	arta or p	i iiiiai y Ci	սիջ ւս ⊿ս⊿	,0, 111 1000) nectales			
Crops	2012				Fore	cast			
	actual	2013	2014	2015	2016	2017	2018	2019	2020
Total crop area	21,494.7	21,523.1	21,771.0	22,013.7	22,260.2	22,385.6	22,616.7	22,846.6	22,969.5
Grain	16,244.0	16,119.2	16,117.0	16,120.0	16,025.7	16,002.0	16,002.1	16,002.1	16,002.0
Including wheat	13,463.2	13,213.7	12,999.1	12,631.2	12,272.6	12,000.0	11,800.0	11,600.0	11,500.0
Rice	92.9	87.2	85.7	84.6	84.1	83.0	82.0	81.0	80.0
Corn	101.9	113.6	119.6	125.6	133.0	133.0	134.0	134.0	135.0
Other grains	2,586.0	2,704.7	2,912.6	3,278.6	3,536.0	3,786.0	3,986.1	4,187.1	4,287.0
Oilseeds	1,842.7	1,819.9	1,884.3	1,937.9	1,983.8	2,000.0	2,020.0	2,040.0	2,050.0
Including sunflower	791.2	858.8	834.5	801.2	776.2	770.0	767.0	764.0	760.0

Soybeans	82.2	99.6	115.4	131.3	147.2	148.0	148.0	149.0	150.0
Safflower	272.3	261.5	261.4	263.4	266.6	267.0	268.0	269.0	270.0
Rapeseeds	227.8	228.8	278.2	327.4	369.3	380.0	385.0	390.0	400.0
Flax	419.3	342.1	365.0	381.2	391.0	405.0	426.0	444.0	450.0
Other oilseeds	49.9	29.1	29.8	33.4	33.5	30.0	26.0	24.0	20.0
Sugar beats	19.1	20.9	21.4	21.7	21.9	22.0	22.0	22.0	22.0
Cotton	147.8	140.0	130.0	125.0	120.0	120.0	120.0	120.0	120.0
Tobacco	1.3	0.8	0.8	0.8	0.8	0.6	0.6	0.5	0.5
Potato	189.8	189.3	193.1	197.2	200.6	202.0	203.0	204.0	205.0
Vegetables and	209.7	198.3	200.8	205.1	208.9	211.0	215.0	219.0	225.0
horticulture									
Including	128.0	132.0	133.8	137.6	140.3	141.0	142.0	143.0	145.0
vegetables									
Horticulture	81.7	66.3	66.9	67.5	68.6	70.0	73.0	76.0	80.0
Feeding crops	2,840.3	3,034.7	3,223.6	3,405.9	3,698.5	3,828.0	4,034.0	4,239.0	4,345.0
Including silage	8.8	129.8	176.0	209.0	242.8	243.0	244.0	244.0	245.0
Annual grasses	286	451.8	474.6	514.6	582.2	585.0	590.0	595.0	600.0
Permanent grasses	2,437.6	2,453.1	2,573.0	2,682.3	2,873.5	3,000.0	3,200.0	3,400.0	3,500.0

Table 2 Forecast for moisture saving and no-till technology, 1,000 hectares

	2012 actual		Forecast									
		2013	2014	2015	2016	2017	2018	2019	2020			
Moisture saving technology	12,433	12,480	12,518	12,575	12,623	12,668	12,716	12,765	12,800			
No-till	2,496	2,783	3,071	3,358	3,546	3,934	4,222	4,512	4,800			

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Table 3 Forecast purchase of agricultural machinery for moisture saving technology under budget program on subsidized interest rate on financial leasing, units

Title	2013	2014	2015	2016	2017	2018	2019	2020	TOTAL
Combines	569	700	720	1850	1775	1201	665	665	8,145
Sowing complex	173	318	400	490	340	288	2500	179	2,438
Sprayers	95	115	140	220	354	157	100	93	1,274
Harvesters	320	650	770	710	650	497	209	200	4,006
Seeders	950	1,200	1,200	987	800	980	600	600	7,317
TOTAL	2,107	2,983	3,230	4,257	3,919	3,123	1,824	1,737	23,180

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Table 4 Forecast purchase of agricultural machinery under budget program on subsidized interest rate of ag machinery leasing, units

Title	2013	2014	2015	2016	2017	2018	2019	2020	TOTAL
Combines	1,263	1,840	1,820	1,860	1,906	1,878	1,132	1,132	12,833
Sowing complex	173	318	400	490	340	350	250	179	2,500
Sprayers	95	252	257	272	286	288	129	129	1,708
Harvesters	239	373	370	385	413	407	230	230	2,647
Seeders	813	1,282	694	1,182	1,324	1,408	730	801	8,234
TOTAL	2,583	4,065	3,541	4,189	4,271	4,331	2,471	2,471	27,922

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Table 5 Volume of mineral fertilizers, covered with subsidies, 1000 tons

Title	2013	2014	2015	2016	2017	2018	2019	2020
Country total	126,669	162,731	165,187	187,030	205,276	218,745	231,954	245,769

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Table 6. Agricultural crops yields analysis (centners/hectare)

Tuble of right	Tuble of fighteured at the fields analysis (continers/nectate)											
Crops	Avera	I	ast 3 years	Forecast for 2020								
	10 years (2003-2012)	5 years (2008-2012)	2010	2011	2012							
Grain crops	11.1	11.2	8.0	16.9	8.6	13.2						
Including wheat	10.6	10.7	7.3	16.6	7.9	12.5						

Rice	35.1	36.7	39.7	37.2	37.7	45.1
Corn	46.3	48.3	48.3	49.9	51.9	55.5
Other grains	11.0	11.2	9.5	17.1	9.0	13.0
Oilseeds	6.4	6.0	5.0	6.7	6.1	9.7
Sugar beats	202.5	183.7	174.3	188.2	168.6	230.0
Cotton	21.3	20.7	17.9	21.8	26.2	27.0
Potato	151.2	156.0	143.0	167.2	165.9	175.0
Vegetables	205.0	220.7	214.4	222.9	238.6	249.0
Horticulture	168.6	178.0	177.0	186.1	206.8	220.0
Berries	48.7	51.6	40.2	53.9	62.5	60.0
Grapes	52.4	55.3	57.3	57.0	65.2	62.0

Table 7. Yield forecast (centners/hectare)

Crops	2013	2014	2015	2016	2017	2018	2019	2020
Grain crops	11.5	11.7	11.9	12.2	12.4	12.7	12.9	13.2
Including wheat	11.0	11.2	11.5	11.7	11.9	12.1	12.3	12.5
Rice	38.1	39.1	40.1	41.1	42.1	43.1	44.1	45.1
Corn	52.0	52.1	52.3	52.4	53.0	53.6	54.6	55.5
Other grains	11.1	11.3	11.5	11.7	12.0	12.3	12.7	13.0
Oilseeds	7.0	7.3	7.7	8.0	8.4	8.8	9.2	9.7
Sugar beats	200.0	204.0	208.0	212.0	216.0	220.0	225.0	230.0
Cotton	23.0	23.5	24.0	24.5	25.0	25.5	26.0	27.0
Potato	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
Vegetables	235	237	238	240	242	244	246	249
Horticulture	208	210	212	214	216	218	219	220
Feeding crops								
Including silage	115	116	118	120	123	125	127	130
Annual grasses	12	12	13	13	14	14	15	15
Permanent grasses	15	15	16	16	16	16	17	17
Berries	55	56	56	57	57	58	59	60
Grapes	57	58	58	59	59	60	61	62

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Table 8. Forecast for production (1,000 tons)

Tuble of Tolecus	P	uucuom ,	(2,000 00.					
Crops	2013	2014	2015	2016	2017	2018	2019	2020
Grain crops	18,510	18,875	19,254	19,526	19,863	20,247	20,644	21,067
Including wheat	14,584	14,622	14,485	14,336	14,256	14,254	14,242	14,383
Rice	332.6	334.7	339.0	345.6	349.7	353.7	357.4	360.9
Corn	590.9	623.4	656.7	696.7	704.2	718.1	731.2	748.7
Other grains	3,003	3,294	3,773	4,147	4,552	4,920	5,318	5,574
Oilseeds	1,274	1,374	1,489	1,587	1,682	1,782	1,883	1,997
Sugar beats	418.0	436.6	451.4	464.3	475.2	484.0	495.0	506.0
Cotton	322.0	305.5	300.0	294.0	300.0	306.0	312.0	324.0
Tobacco	1.8	1.8	1.8	1.8	1.3	1.3	1.1	1.1
Potato	3,180	3,265	3,353	3,429	3,467	3,506	3,545	3,584
Vegetables	3,101	3,166	3,280	3,369	3,409	3,465	3,518	3,612
Horticulture	1,382	1,405	1,432	1,466	1,512	1,593	1,668	1,762
silage	1,493	2,041	2,466	2,913	2,989	3,050	3,098	3,185
Annual grasses hay	542.2	583.8	648.4	756.9	789.8	826.0	862.8	900.0
Permanent grasses hay	3,679	3,911	4,157	4,511	4,800	5,216	5,644	5,950
Berries	247.5	260.9	274.4	288.2	302.1	319.0	336.3	360.0
Grapes	85.5	89.1	92.8	96.5	100.3	108.0	115.9	124.0

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Table 9. Domestic consumption volumes calculation for 2013-2020

	2013	2014	2015	2016	2017	2018	2019	2020		
Food grain										
Population, 000 people	16,912	17,132	17,362	17,602	17,852	18,112	18,382	18,662		
Grain consumption per 1	167	167	167	167	167	167	167	167		
person, per year, kg										

Grain demand, 000 tons	2,824	2,861	2,899	2,940	2,981	3,025	3,070	3,117			
		G	rain for seed	ls							
Grain crops area, 000	16,119	16,117	16,120	16,025	16,002	16,002	16,002	16,002			
hectares											
Seeds per 1 hectare, kg	124	124	124	125	125	125	125	125			
Seeds demand, 000 tons	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000			
Forage grain											
Livestock population, 000	10,784	11,280	11,779	12,342	12,912	13,509	14,135	14,790			
conditional heads											
Consumption per 1	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3			
conditional head of livestock,											
00 kg											
Demand, 000 tons	4,637	4,850	5,065	5,307	5,552	5,809	6,078	6,308			
		Grain for	industrial p	rocessing							
For spirit production, 000	350	3560	370	380	390	400	400	400			
tons											
For beer production, 000 tons	150	150	150	150	150	150	150	150			
Total, 000 tons	500	510	520	530	540	550	550	550			
Total domestic consumption,	9,961	10,221	10,484	10,777	11,073	11,384	11,698	11,975			
000 tons											

Table 10. Forecasted Kazakh exports to traditional and other markets by 2020

Country	Average annual	Average annual	Population	Grain and flour	Grain and
	grain and flour	population growth	growth forecast	Imports growth	flour imports
	imports during	during 9 years	for 2013-2020,	forecast by	forecast by
	2008-2012, 000	(2003-2001 years),	%	2020, 000 tons	2020, 000
	tons	%			tons
Afghanistan	747.7	0.66	5.28	39.5	787.2
Azerbaijan	1,055.5	2.36	18.88	199.3	1,254.8
Iran	676.2	1.72	13.76	93.0	769.2
Kyrgyzstan	461.8	1.37	10.96	50.6	512.4
Tajikistan	979.5	1.47	11.76	115.2	1,094.7
Turkmenistan	169.1	0.64	5.12	8.7	177.8
Uzbekistan	1,802.4	1.03	8.24	148.5	1,950.9
Total by	5,892.2	1.37	10.96	654.8	6,547.0
traditional grain					
importers					
Share in total	71.8				71.6
exports, %					
Other importers	2,319.4				2,595.0
Including: China	51.7				800.0
South-East Asia	2.0				300.0
Other countries	2,265.7				1,495.0
Total grain and	8,211.6				9,142.0
flour exports					

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Table 11. Forecast grain balance for 2013-2020 (000 tons)

				(
Indicator	2013	2014	2015	2016	2017	2018	2019	2020
Grain production	18,511	18,875	19,255	19,526	19,864	20,247	20,644	21,067
Grain imports	50	50	50	50	50	50	50	50
Total supply grain	18,561	18,925	19,305	19,576	19,914	20,297	20,694	21,117
Domestic consumption	9,961	10,221	10,484	10,777	11,073	11,384	11,698	11,975

Including: food	2,824	2,861	2,899	2,940	2,981	3,025	3,070	3,117
Seeds	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Forage	4,637	4,850	5,065	5,307	5,552	5,809	6,078	6,308
Food processing	500	510	520	530	540	550	550	550
Exports	8,599	8,704	8,820	8,800	8,840	8,914	8,997	9,142

Table 12. Grain exports and revenue forecasts revenues

Grain and flour exports, 000 tons	8,599	8,704	8,820	8,800	8,840	8,914	8,997	9,142
Including grain, 000 tons	5,599	5,604	5,620	5,500	5,440	5,514	5,497	5,643
Price for 1 ton, USD	218	218	218	218	218	218	218	218
Revenues, million USD	1,220	1,221	1,225	1,199	1,186	1,202	1,198	1,230
As a flour, 000 tons	2,100	2,170	2,240	2,310	2,380	2,380	2,450	2,450
Price for 1 ton, USD	305	305	305	305	305	305	305	305
Revenues, million USD	640	662	683	705	725	726	747	747
Total revenues on grain and flour exports, million USD	1,861	1.883	1,908	1.904	1,912	1,928	1.946	1.977

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Table 13. Prospects for grain storage capacity, 1000 tons

Regions	Production forecast by 2020	Production forecast in good harvest year	Grain storage capacity			Missing storage capacity	Storage capacity construction forecast during 2013-2020
			Total	Including			
				Elevator	On-farm		
AKMOLA	5,108	6,624.1	5,657.1	3,789.7	1,867.4	967.0	967
AKTOBE	423.1	542.3	912.3	573.0	339.3	-370.0	
ALMATY	1,293.8	1,643.6	728.4	243.2	485.2	915.2	720
ATYRAU	0.9	1.3				1.3	
EAST-KAZ	848.4	1,069.7	1,137.2	574.8	562.4	-67.5	
ZHAMBYL	458.3	584.8	339.0	23.0	316.0	245.8	160
WEST-KAZ	349.8	444.5	790.6	624.8	165.8	-346.1	
KARAGANDA	662.1	843.3	599.1	202.8	396.3	244.2	244
KYZYLORDA	323.9	364.5	275.8	223.7	52.1	88.7	80
KOSTANAY	5,166.5	6,635.2	6,576.5	3,880.3	2,696.2	58.7	59
MANGISTAU	0.0		122.0	122.0		-122.0	
PAVLODAR	519.4	649.8	875.5	185.3	690.2	-225.7	
NORTH-KAZ	5,468.9	7,073.4	6,003.7	3,409.8	2,593.9	1,069.7	1,070
SOUTH-KAZ	443.6	565.3	73.9	73.9		491.4	200
TOTAL	21,067.6	27,042.9	24,091.1	13,926.3	10,164.8	2,951.8	3,500

Source: Ministry of Agriculture Master Plan for Grain published in 2013

Commodities:

Select