

# Price Monitoring for Food Security in the Kyrgyz Republic

## Monthly monitoring and outlook of basic food prices in the Kyrgyz Republic



### Highlights and outlook for the next few months

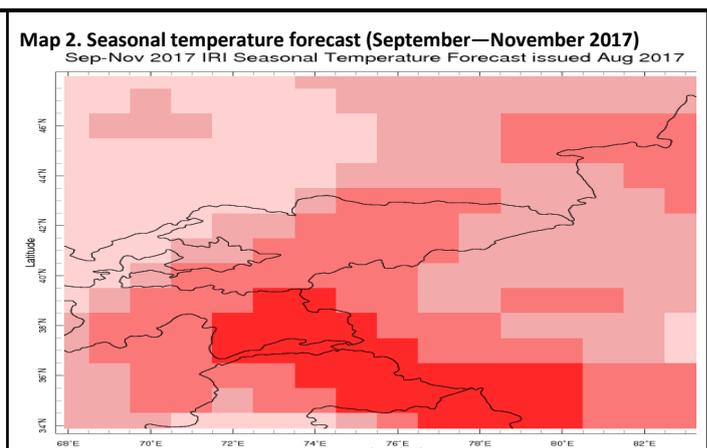
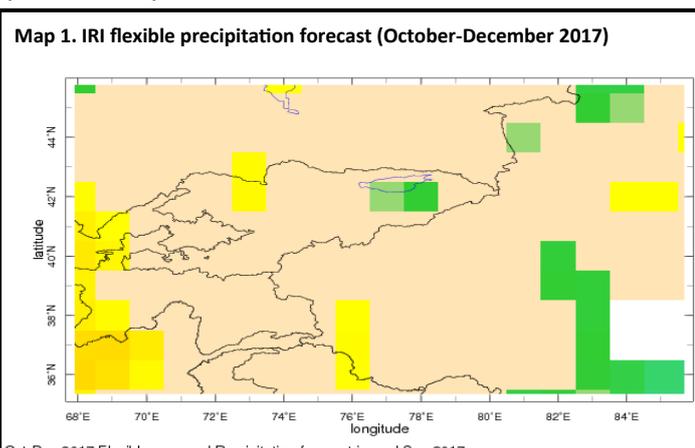
- Domestic wheat flour prices remain stable since May 2017 in all markets around the country. Export prices for wheat from Russian Federation (RF) decreased by 2 percent and export prices from Kazakhstan remain stable on a month-on-month basis in August 2017. Close monitoring of import dependent commodities is important throughout the president’s elections in the country.
- In August 2017 prices for vegetables were decreasing: prices for potatoes, cabbages and carrots decreased by 12, 49 and 3 percent respectively on a month-on-month basis after significant increase since beginning of 2017 due to the harvest delay.
- The US dollar and Russian ruble stayed stable, while the Kazakh tenge depreciated by 3 percent against the national currency on a month-on-month basis in August 2017. Currency movements are among the main driving forces of the retail prices of imported basic food commodities including wheat, vegetable oil and sugar.
- In July 2017 the aggregate volume of remittances decreased by 6 percent on a month-on-month basis but still remain high by 17 percent higher compared to July 2016. The record high of the inflow of remittances was observed in June 2017 at all of the time and it reached USD 203 million. Share of remittances in GDP reached 32.7 % in 2016.
- GDP per capita reached 32803 Kyrgyz som (~477.6 USD) during January-June of 2017, which is by 5 percent higher compared to the same period of previous year.
- The minimum subsistence reached 5052 Kyrgyz som (~74 USD) during January - June of 2017, which is by 4 percent higher compared to the same period of 2016. The average salary in the country reached 14691 Kyrgyz som (~214 USD) during January—June of 2017, which is by 6 percent higher compared to the same period of 2016.

### Trends of retail prices of the nine main food security commodities<sup>1</sup> (1 month, 3 months and 1 year)

	Jul 2017	May 2017	Aug 2016		Jul 2017	May 2017	Aug 2016
<b>Wheat flour</b> (1-st grade)	0%	-2%	-3%	<b>Vegetable (carrot)</b>	-3%	23%	52%
<b>Rice</b>	-1%	-2%	-8%	<b>Vegetable (potato)</b>	-12%	-36%	35%
<b>Meat (beef)</b>	2%	4%	7%	<b>Vegetable (cabbage)</b>	-49%	-53%	12%
<b>Meat (mutton)</b>	-1%	1%	6%	<b>Fruit (apple)</b>	-8%	14%	1%
<b>Milk</b>	2%	-2%	4%	<b>Sugar</b>	-1%	9%	4%
<b>Eggs</b>	-1%	-6%	1%	<b>Vegetable oil</b>	0%	-2%	-8%

### Agroclimatic context

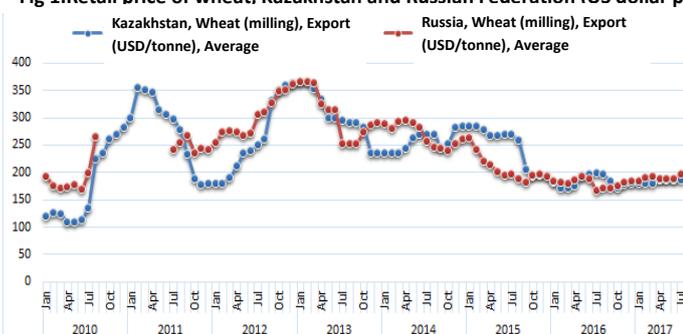
According to the IRI<sup>2</sup> flexible precipitation forecast for October-December 2017 it is expected that precipitation will stay normal in all the areas of the country, except southern-west part of Issyk-Kul province, where is 60 percent probability for precipitation increase, in Talas district of Talas province and Toktogul district of Jalalabad province there is 40 percent probability of precipitation decrease (Map 1). Besides that, there is 60 percent of probability of temperature increase during September-November 2017 in central part of KR and 40 percent probability in western part of Issyk-Kul province and eastern part of Talas province.



Global wheat production and prices

Wheat is the main staple food in the KR. However, due to the low quality of domestically produced wheat, the Kyrgyz Republic imports wheat flour, which makes the country more vulnerable to international price volatility and therefore close monitoring of the wheat market in exporting countries is important. The key export countries are the Russian Federation (11 percent) and Kazakhstan (88 percent). Since 2015, the prices for wheat from both countries have been fluctuating without any significant changes<sup>14</sup>. In August 2017, wheat export prices from the Russian Federation decreased by 2 percent on a month-on-month basis but increased by 3 percent over three months. The current export prices are 3 percent higher compared to the same month in 2016, and 47 percent lower than the record high reached in February 2013. Export prices of wheat from Kazakhstan<sup>6</sup>

Fig 1. Retail price of wheat, Kazakhstan and Russian Federation (US dollar per

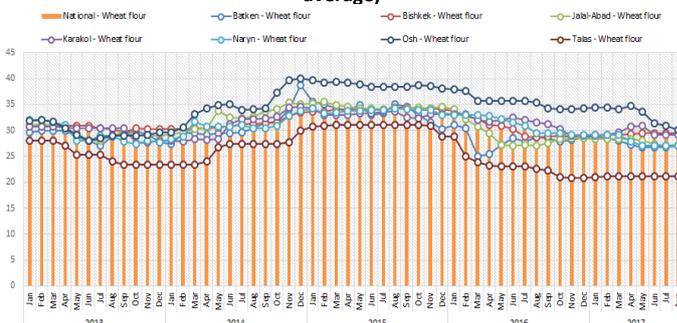


remained stable on a month-on-month basis and over three months. Prices are 5 percent lower than the same month in 2016 and 52 percent lower than the record high reached in April 2008.

National retail prices of wheat flour

In August 2017, the domestic retail price of wheat flour was stable on a month-on-month basis at 29.07 Kyrgyz som per kg. Domestic prices remained 3 percent lower than the same month in 2016 and 6 percent lower compared to average price of the last five years. The highest recorded prices for domestic wheat flour were observed in December 2014, but current prices are 17 percent lower. The highest prices in August 2017 were observed in Nookat town (43 Kyrgyz som per kg) and the lowest in Talas town (21 Kyrgyz som per kg).

Fig 2. ALPS for price of wheat flour (first grade, kyrgyz som per kg, national average)



Vegetable prices

Vegetable prices (cabbages, carrots, potatoes)

As a result of seasonal price changes and a protracted wet spring, which resulted in a delay for crop sowing, domestic prices for vegetables have been increasing since the beginning of 2017. ALPS<sup>13</sup> analysis for vegetable prices illustrates that potato, carrot and cabbage prices have experienced an alarmingly higher than normal seasonal trend between February and August 2017 as a result of the delayed new harvest.

Prices for cabbages

In August 2017 prices for cabbages decreased by 49 percent on a month-on-month basis and 53 percent over the last three months. However, prices are by 12 percent higher compared to August 2016. The highest prices were observed in Kara-Suu (47 Kyrgyz som per kg) town and the lowest in Karakol (11 Kyrgyz som per kg) town.

Prices for carrots

In August 2017 prices for carrots started to decrease; it decreased by 3 percent on a month-on-month basis. But still remain high by 23 percent over the last three months and by 52 percent compared to August 2016. The highest prices for carrots were observed in Bishkek (35 Kyrgyz som per kg) town and the lowest in Isfana and Batken (23 Kyrgyz som per kg) town.

Prices for potatoes

Potato are the second most consumed staple food in the Kyrgyz Republic, and according to physiological norms each person should consume 270 grams of potatoes per day. Since the beginning of 2017 potato prices have significantly<sup>14</sup> increased. But from July 2017, as expected with the new harvest, prices started to decrease. In August 2017 prices decreased by 12 percent on a month-on-month basis and still remain high by 49 percent over the last three months. However, prices are 35 percent higher than in August 2016 and 18 percent higher than the average price over five years. The prices of potatoes are the highest in Jalal-Abad town (32 Kyrgyz som per kg) and the lowest in Pokrovka town (15 Kyrgyz som per kg).

Fig.3 ALPS for national average of cabbages prices (Kyrgyz som per kg)

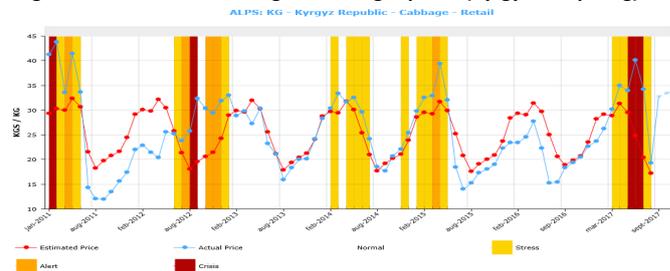


Fig.4 ALPS for national average of carrots prices (Kyrgyz som per kg)

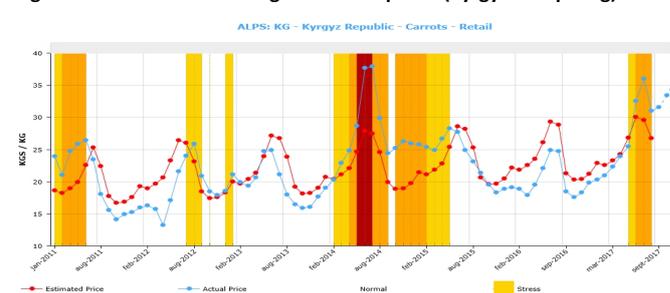
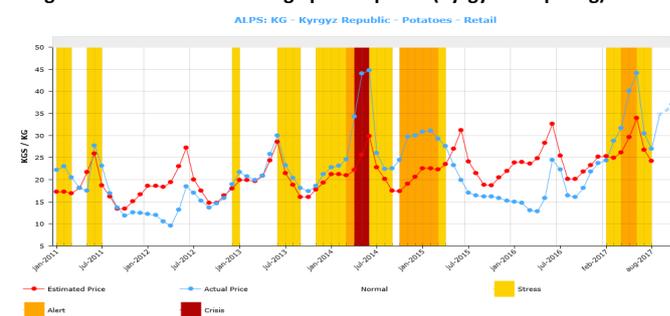


Fig.5 ALPS for national average potato prices (Kyrgyz som per kg)



## Other basic food commodities

### International and domestic sugar prices

Since the beginning of 2017 global sugar prices have been decreasing. However, in August 2017, global sugar<sup>9</sup> prices were stable on a month-on-month basis and decreased by 10 percent over three months. The prices are 27 percent lower than in August 2016, and 22 percent higher than the 5-year average. The Kyrgyz Republic imports sugar from Ukraine and Belarus, due to the low domestic production (in 2016 only half of required sugar for internal consumption was produced), which makes the country vulnerable to international price volatility. However, prices for sugar from both exporting countries increased in 2017. According to the National Statistics Committee of Belarus, the country produced 42.6 percent less compared to the same period from January to July 2016. The prices are also increasing in Ukraine due to the devaluation of the national currency (hryvnia) and lower than expected sugar yield (National Agrarian University). In August 2017, the domestic prices for sugar decreased by 1 percent on a month-on-month basis and increased by 9 percent over the last three months. However, in 2017

domestic sugar production could increase due to an increase in the sugar beet production area which, based on national data, has already increased by 49 percent in 2017 compared to 2016, and the modernization of domestic sugar processing factories in 2017. The highest domestic prices of sugar were observed in Kerben and Nookat (65 Kyrgyz som) town and the lowest in Bishkek (57 Kyrgyz som) town. ALPS<sup>13</sup> analysis illustrates that sugar prices are experiencing a higher than normal seasonal trend from June to August 2017.

### Vegetable oil

Vegetable oil is also one of the key staple food, with requiremost of 30 grams to be consumed per person per day. Due to the low domestic production (only 11.5 thousand tons in 2016), Kyrgyz Republic depends on the import of vegetable oil. In August 2017, the national prices of vegetable oil were stable on a month-on-month basis but lower by 2 percent over three months. The prices were 8 percent lower than the same month last year. The retail prices were the highest in Kara-Suu (105 Kyrgyz som) town and the lowest in Jalal-Abad town (90 Kyrgyz som).

Fig 5. ALPS for national average sugar price (Kyrgyz som per kg)

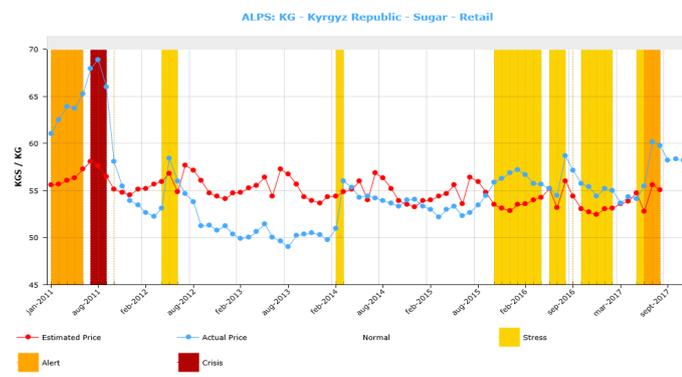
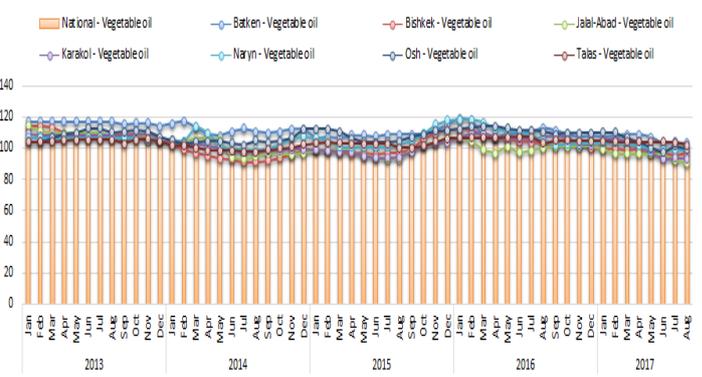


Fig 6. Average prices for vegetable oil by markets (Kyrgyz som per liter)



### Meat (beef and mutton)

Meat is also one of the key staple foods in the Kyrgyz Republic and according to physiological norms each person should consume 170 grams per day. Prices for beef and mutton have been stable since 2016. In August 2017 prices for mutton decreased by 1 percent on a month-on-month basis and increased by 1 percent over the last three months. The prices are 6 percent higher compared to August 2016. However, the prices of beef increased by 2 percent on a month-on-month basis and by 4 percent over the last three months. The prices were 7 percent higher than in August 2016. The prices of both beef (330 Kyrgyz som per kg) and mutton (350 Kyrgyz som per kg) were the highest in Batken town and the lowest in Pokrovka town (mutton—282 Kyrgyz som per kg, beef—258 Kyrgyz som per kg).

### Milk

According to physiological norms each person should consume 560 grams of milk and dairy products per day. However, domestic prices for milk have been stable since the beginning of 2016 with some seasonal variations<sup>14</sup>. In August 2017, the domestic price of milk increased by 2 percent on a month-on-month basis and decreased by 2 percent over the last three months. The prices are 4 percent higher compared to August 2016. The retail prices of milk were the highest in Batken (40 Kyrgyz som per liter) and the lowest in Pokrovka (18 Kyrgyz som per liter) town. The highest recorded price of milk was reached in January 2015 and current prices are 12 percent lower.

Fig 7. Retail price of meat (beef and mutton, kyrgyz som per kg)

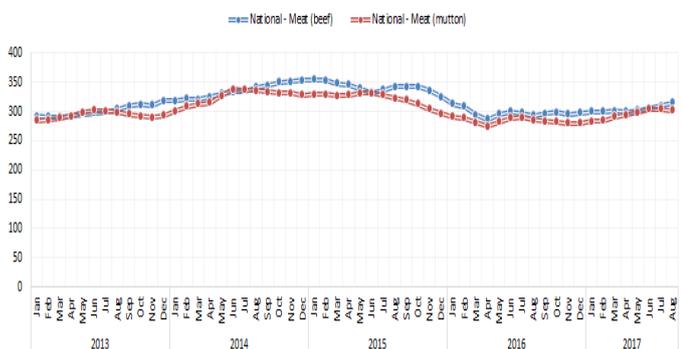
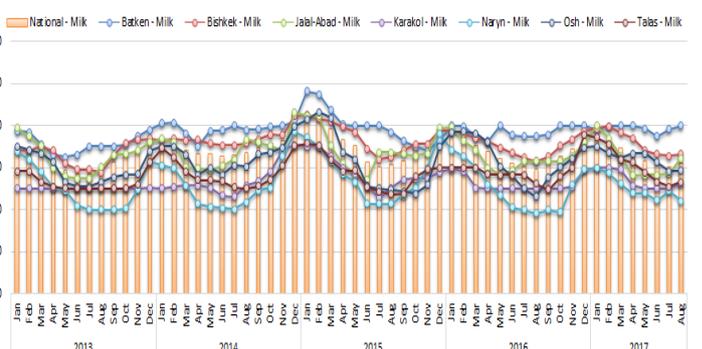


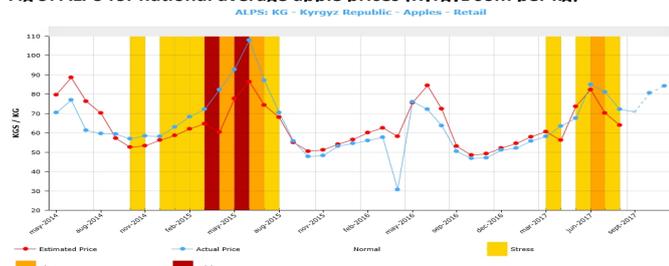
Fig 8. Average prices for milk by markets ( kyrgyz som per liter)



Apples

Apples are the most consumed and available fruit in the country. In August 2017, prices for apples decreased by 8 percent on a month-on-month basis but still remain high by 14 percent over the last three months. As it was expected with new harvest, prices for apples started to decrease. The current prices are 32 percent lower than the record high reached in June 2015 and 11 percent higher than the 5-year average. The prices for apples are the highest in Tokmok (96 Kyrgyz som per kg) and the lowest in Isfana (25 Kyrgyz som per kg).

Fig 9. ALPS for national average apple prices (Kyrgyz som per kg)



Remittances

According to the NSC the poverty rate reached 25.4 percent in 2016. However, poverty rate is much higher excluding the income from remittances and reaches 31.5 percent (specifically high in Batken province 53.6 percent). That shows country's vulnerability to the economy of RF from where most of the remittances originate. In July 2017 the aggregate volume of remittances decreased by 6 percent after significant increase and record high in June 2017 at all time.

Fig 10. Aggregate amount of remittances by months (in mln.USD)



Fuel prices (petrol and diesel)<sup>15</sup>

Since the prices of diesel and petrol heavily impact on food prices, the stability of diesel and petrol prices are critical, especially for rural areas. In August 2017, prices for diesel decreased by 1 percent on a month-on-month basis and by 2 percent over the last three months. The prices are 13 percent higher compared to August 2016. Prices for petrol also decreased by 1 percent on a month-on-month basis and by 2 percent over the last three months. Current prices are 6 percent higher than in August 2016. Prices for diesel are the highest in Batken, Isfana, Kara-Suu and Chaek towns (37 Kyrgyz som) and the lowest in Naryn (34.2 Kyrgyz som). Prices for petrol are the highest in Batken and Kerben (40 Kyrgyz som) and the lowest in Naryn town (36 Kyrgyz som).

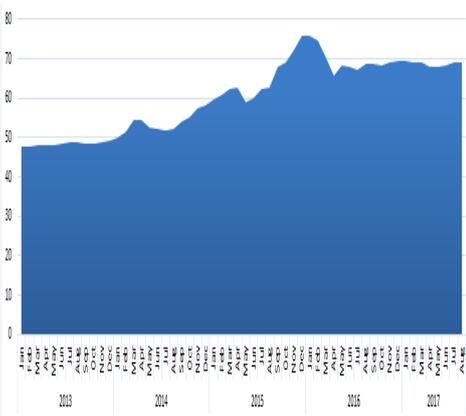
Fig 11. Retail prices of petrol (92 octane) and diesel (Kyrgyz som / litre)



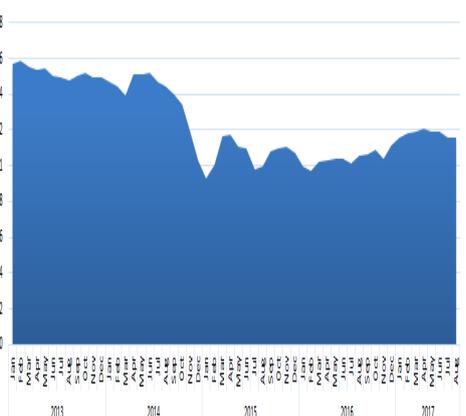
Currency exchange rate (Kyrgyz som versus US dollar, Russian ruble, Kazakhstan tenge)

In August 2017, the US dollar was stable against the national currency on a month-on-month basis (68.89 Kyrgyz som to 1 USD) and by 2 percent higher over the last three months. It remains stable compared to August 2016. The highest rate of the US dollar against the Kyrgyz som was observed in December 2015, and in comparison the current rate is 9 percent lower. Since the beginning of 2017, the Russian ruble has been appreciating, which is a sign of the economic recovery of the Russian Federation. In August 2017, the Russian ruble was stable against the Kyrgyz som on a month-on-month basis (1.1550 Kyrgyz som per 1 Russian ruble) and by 2.9 percent lower over the last three months. It appreciated by 9.3 percent compared to the same month in 2016. The Kazakh tenge depreciated by 3 percent on a month-on-month against the Kyrgyz som (0.21 Kyrgyz som per 1 Kazakh tenge) and by 4 percent over the last three months. It appreciated by 4 percent compared to August 2016. Currency movements are among the main driving forces of the retail prices of imported basic food commodities including wheat, vegetable oil and sugar. With this in mind, close monitoring of currency exchange rates are required.

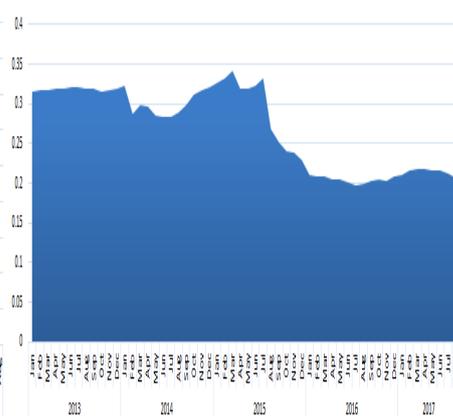
Official currency exchange (US Dollar/Kyrgyz Som)



Official currency exchange (Russian Ruble/Kyrgyz Som)



Official currency exchange (Kazakh Tenge/Kyrgyz Som)





KERBEN																	
	Fruit (apple)	25	-38%	-35%	-	▼	▼	-		Milk	28	-15%	-11%	-	▼	▼	-
	Vegetable (cabbage)	35	-13%	21%	-	▼	▲	-		Potato	62	-2%	-1%	-	▶	▶	-
	Vegetable (carrot)	34	-3%	-4%	-	▶	▶	-		Rice	58	0%	13%	-	▶	▲	-
	Diesel	75	0%	-8%	-	▶	▶	-		Sugar	99	0%	-1%	-	▶	▶	-
	Egg	36	-1%	-2%	-	▶	▶	-		Cooking oil	27	0%	0%	-	▶	▶	-
	Petrol (Octane rating 92)	323	-1%	0%	-	▶	▶	-		Wheat flour (1st quality)	-	0%	0%	-	▶	▶	-
	Meat (beef)	316	-1%	-3%	-	▶	▶	-									
	Meat (mutton)	22	-10%	-7%	-	▼	▶	-									
NARYN																	
	Fruit (apple)	91	-12%	16%	17%	▼	▲	▲		Milk	22	-10%	-7%	16%	▼	▶	▲
	Vegetable (cabbage)	25	-38%	-35%	10%	▼	▼	▶		Potato	28	-15%	-11%	49%	▼	▼	▲
	Vegetable (carrot)	35	-13%	21%	47%	▼	▲	▲		Rice	62	-2%	-1%	-4%	▶	▶	▶
	Diesel	34	-3%	-4%	7%	▶	▶	▶		Sugar	58	0%	13%	5%	▶	▲	▶
	Egg	75	0%	-8%	1%	▶	▶	▶		Cooking oil	99	0%	-1%	-6%	▶	▶	▶
	Petrol (Octane rating 92)	36	-1%	-2%	4%	▶	▶	▶		Wheat flour (1st quality)	27	0%	0%	-8%	▶	▶	▶
	Meat (beef)	323	-1%	0%	8%	▶	▶	▶									
	Meat (mutton)	316	-1%	-3%	9%	▶	▶	▶									
NOOKAT																	
	Fruit (apple)	58	-6%	-5%	-	▼	▶	-		Milk	30	0%	0%	-	▶	▶	-
	Vegetable (cabbage)	21	-46%	-31%	-	▼	▼	-		Potato	27	-8%	-41%	-	▼	▼	-
	Vegetable (carrot)	27	-18%	-3%	-	▼	▶	-		Rice	83	1%	-1%	-	▶	▶	-
	Diesel	37	-2%	-2%	-	▶	▶	-		Sugar	65	2%	9%	-	▶	▶	-
	Egg	86	-3%	-5%	-	▶	▶	-		Cooking oil	106	6%	5%	-	▲	▶	-
	Petrol (Octane rating 92)	39	-3%	-3%	-	▶	▶	-		Wheat flour (1st quality)	43	0%	0%	-	▶	▶	-
	Meat (beef)	280	0%	0%	-	▶	▶	-									
	Meat (mutton)	300	0%	0%	-	▶	▶	-									
OSH																	
	Fruit (apple)	76	-	-	-	▲	▲	-		Milk	29	1%	-12%	-	▶	▼	-
	Vegetable (cabbage)	26	-43%	-47%	-	▼	▼	-		Potato	31	-9%	-28%	-	▼	▼	-
	Vegetable (carrot)	33	-4%	23%	-	▶	▲	-		Rice	95	-1%	-4%	-	▶	▶	-
	Diesel	37	-4%	-3%	-	▶	▶	-		Sugar	65	5%	12%	-	▲	▲	-
	Egg	65	0%	-9%	-	▶	▶	-		Cooking oil	99	-2%	-1%	-	▶	▶	-
	Petrol (Octane rating 92)	39	-2%	-2%	-	▶	▶	-		Wheat flour (1st quality)	30	-2%	-10%	-	▶	▼	-
	Meat (beef)	317	0%	7%	-	▶	▶	-									
	Meat (mutton)	320	0%	7%	-	▶	▶	-									
POKROVKA																	
	Fruit (apple)	55	-15%	-7%	-	▼	▶	-		Milk	18	-10%	-10%	-	▼	▶	-
	Vegetable (cabbage)	19	-26%	-39%	-	▼	▼	-		Potato	15	-54%	-58%	-	▼	▼	-
	Vegetable (carrot)	25	-10%	-2%	-	▼	▶	-		Rice	43	0%	0%	-	▶	▶	-
	Diesel	36	0%	-2%	-	▶	▶	-		Sugar	59	2%	10%	-	▶	▲	-
	Egg	83	0%	0%	-	▶	▶	-		Cooking oil	91	0%	0%	-	▶	▶	-
	Petrol (Octane rating 92)	39	0%	-1%	-	▶	▶	-		Wheat flour (1st quality)	27	-1%	-1%	-	▶	▶	-
	Meat (beef)	257	-4%	-8%	-	▶	▶	-									
	Meat (mutton)	282	-5%	1%	-	▼	▶	-									
TALAS																	
	Fruit (apple)	79	-20%	20%	86%	▼	▲	▲		Milk	27	4%	-8%	2%	▶	▶	▶
	Vegetable (cabbage)	15	-51%	-43%	-30%	▼	▼	▼		Potato	24	-20%	-40%	27%	▼	▼	▲
	Vegetable (carrot)	35	-8%	40%	67%	▼	▲	▲		Rice	65	0%	2%	1%	▶	▶	▶
	Diesel	36	0%	-1%	21%	▶	▶	▶		Sugar	59	-3%	8%	6%	▶	▶	▶
	Egg	83	-4%	-6%	3%	▶	▶	▶		Cooking oil	102	-2%	-2%	-1%	▶	▶	▶
	Petrol (Octane rating 92)	38	0%	0%	12%	▶	▶	▶		Wheat flour (1st quality)	21	0%	0%	-7%	▶	▶	▶
	Meat (beef)	286	0%	2%	6%	▶	▶	▶									
	Meat (mutton)	292	0%	1%	9%	▶	▶	▶									
TOKMOK																	
	Fruit (apple)	97	-27%	8%	130%	▼	▶	▲		Milk	25	0%	0%	0%	▶	▶	▶
	Vegetable (cabbage)	15	-34%	-25%	47%	▼	▼	▲		Potato	24	-14%	-41%	61%	▼	▼	▲
	Vegetable (carrot)	31	-16%	41%	79%	▼	▲	▲		Rice	54	0%	0%	-10%	▶	▶	▶
	Diesel	35	-1%	-1%	15%	▶	▶	▶		Sugar	57	0%	11%	0%	▶	▶	▶
	Egg	72	-2%	-2%	4%	▶	▶	▶		Cooking oil	102	-1%	-3%	-6%	▶	▶	▶
	Petrol (Octane rating 92)	37	-1%	-1%	7%	▶	▶	▶		Wheat flour (1st quality)	31	0%	0%	-5%	▶	▶	▶
	Meat (beef)	290	0%	2%	7%	▶	▶	▶									
	Meat (mutton)	290	0%	6%	15%	▶	▶	▶									
TOKTOGUL																	
	Fruit (apple)	84	-30%	68%	-	▼	▲	-		Milk	25	0%	7%	-	▶	▶	-
	Vegetable (cabbage)	26	-30%	31%	-	▼	▲	-		Potato	25	-13%	-27%	-	▼	▼	-
	Vegetable (carrot)	32	-7%	114%	-	▼	▲	-		Rice	81	0%	1%	-	▶	▶	-
	Diesel	36	0%	0%	-	▶	▶	-		Sugar	58	4%	14%	-	▶	▶	-
	Egg	82	0%	5%	-	▶	▶	-		Cooking oil	91	0%	1%	-	▶	▶	-
	Petrol (Octane rating 92)	38	0%	0%	-	▶	▶	-		Wheat flour (1st quality)	30	0%	3%	-	▶	▶	-
	Meat (beef)	307	-4%	2%	-	▶	▶	-									
	Meat (mutton)	308	-4%	3%	-	▶	▶	-									
UZGEN																	
	Fruit (apple)	47	-23%	-29%	-	▼	▼	-		Milk	22	12%	12%	-	▲	▲	-
	Vegetable (cabbage)	31	-18%	-22%	-	▼	▼	-		Potato	27	0%	-33%	-	▶	▼	-
	Vegetable (carrot)	28	-4%	13%	-	▶	▲	-		Rice	55	0%	2%	-	▶	▶	-
	Diesel	36	-3%	-4%	-	▶	▶	-		Sugar	60	-1%	13%	-	▶	▲	-
	Egg	73	5%	5%	-	▶	▶	-		Cooking oil	91	-2%	-2%	-	▶	▶	-
	Petrol (Octane rating 92)	38	-1%	-3%	-	▶	▶	-		Wheat flour (1st quality)	25	0%	0%	-	▶	▶	-
	Meat (beef)	300	0%	1%	-	▶	▶	-									
	Meat (mutton)	300	0%	1%	-	▶	▶	-									
NATIONAL																	
	Fruit (apple)	72	-8%	14%	1%	▼	▲	▶		Milk	31	2%	-2%	4%	▶	▶	▶
	Vegetable (cabbage)	19	-49%	-53%	12%	▼	▼	▶		Potato	26	-12%	-36%	35%	▼	▼	▲
	Vegetable (carrot)	33	-3%	23%	52%	▶	▲	▲		Rice	70	-1%	-2%	-8%	▶	▶	▶
	Diesel	36	-1%	-2%	13%	▶	▶	▶		Sugar	59	-1%	9%	4%	▶	▶	▶
	Egg	67	-1%	-6%	1%	▶	▶	▶		Cooking oil	97	0%	-2%	-8%	▶	▶	▶
	Petrol (Octane rating 92)	38	-1%	-2%	6%	▶	▶	▶		Wheat flour (1st quality)	29	0%	-2%	-3%	▶	▶	▶
	Meat (beef)	315	2%	4%	7%	▶	▶	▶									
	Meat (mutton)	301	-1%	1%	6%	▶	▶	▶									

▲ Price increase above normal price fluctuation  
▶ Normal price fluctuation  
▼ Price decrease below normal fluctuation

Price fluctuation is considered normal if change within:  
5% for 1 month, 10% for 3 months, 15% for 1 year

## Data sources and methodologies

- <sup>1</sup>**Data for retail prices of 9 food security commodities** are collected by the National Statistics Committee of the Kyrgyz Republic on a daily basis from 10 markets across the country (Bishkek, Osh, Tokmok, Kara-balta, Talas, Karakol, Naryn, Kara-su, Kyzyl-kiya and Batken).
- <sup>2</sup>**International Research Institute (IRI)**, The mission of the IRI is to enhance society's capability to understand, anticipate and manage the impacts of climate in order to improve human welfare and the environment, especially in developing countries. The IRI conducts this mission through strategic and applied research, education, capacity building, and by providing forecasts and information products with an emphasis on practical and verifiable utility and partnership.
- <sup>3</sup>**Sea Surface Temperature (SST)** forecast model
- <sup>4</sup>**El Niño** - refers to the large-scale ocean-atmosphere climate phenomenon linked to a periodic warming in sea-surface temperatures across the central and east-central equatorial Pacific. Typical effects of El Niño include dry weather in Australasia and heavy rain in South America. **La Niña**- is characterized by unusually cold ocean temperatures in the Equatorial Pacific, compared to El Niño. La Niña and El Niño are the "cold" (La Niña) and "warm" (El Niño) phases of the El Niño-Southern Oscillation (ENSO). ENSO is series of linked weather- and ocean-related phenomena.
- <sup>5</sup>**Normalized Difference Vegetation Index (NDVI)**-provides the alternative measures of the relative vegetation health. These indices can be used to monitor areas where vegetation may be stressed, as a proxy to detect potential drought. [http://www.fao.org/giews/earthobservation/asis/index\\_2.jsp?lang=en](http://www.fao.org/giews/earthobservation/asis/index_2.jsp?lang=en)
- <sup>6</sup>**Data for export price of wheat in Kazakhstan** is Free on Board [FOB] price for milled wheat at Aktau port. The FAO Global Information and Early Warning System (GIEWS) updates this data on a monthly basis. Methodological details are available online at <http://www.fao.org/giews/pricetool/>
- <sup>7</sup>**NSC**– National Statistical Committee
- <sup>8</sup>**Commodity Markets Outlook**, April 2016. World Bank Quarterly Report. **Agricultural Information Market System (AMIS)** -is an inter-agency platform to enhance food market transparency and encourage coordination of policy action in response to market uncertainty. AMIS focuses on four crops that are particularly important in international food markets, namely wheat, maize, rice and soybeans.
- <sup>9</sup>**International grain Council (IGC)**-**Intergovernmental organization promoting the international cooperation in grains trade.** <http://www.igc.int/en/Default.aspx>
- <sup>10</sup>**Currency exchange rate** used is the official daily exchange rate provided by the National Bank of Kyrgyz Republic. The monthly average rate was calculated for the bulletin.
- <sup>11</sup>**International price of sugar** refers to the International Sugar Agreement (ISA) daily price for raw sugar, obtained from the International Sugar Organization. The price data is widely used by global market monitoring publications such as the World Bank's Commodity Markets Outlook (<http://www.worldbank.org/en/research/commodity-markets>).
- <sup>12</sup>**The deviation of the observed prices and estimated seasonal prices** are provided by WFP's Alert for Price Spikes (ALPS) in units of standard deviations. In July 2015, for example, the standard deviation of observed prices of wheat flour price and estimated seasonal prices was 0.74 in Osh, indicating that the market experienced unusually high price levels during this month. Seasonal prices were estimated using the price data for the last 10 years. Methodological guidance is available online at [http://documents.wfp.org/stellent/groups/public/documents/manual\\_guide\\_proced/wfp264186.pdf](http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp264186.pdf)
- <sup>13</sup>**Alert for Price Spikes (ALPS)** provides early warning of rising food prices by detecting abnormally high levels of local food prices. The ALPS calculates the difference between the latest observed price available and the corresponding seasonal price trend. Colour-shaded bar indicate the periods where the actual price (black line) was above the estimated trend (blue dotted line). The ALPS attributes colour codes according to the severity of the gap between the two lines.
- <sup>14</sup> Seasonality refers to periodic fluctuations that occur regularly based on a particular season. **Price fluctuations is considered normal** if change within **5% for 1 month, 10% for 3 months, 15% for 1 year.**
- <sup>15</sup>**Data for fuel prices** are provided by the National Statistics Committee on a monthly basis for 95-octane petrol, 92-octane petrol, 80-octane petrol and diesel. This bulletin reports the prices of 92-octane petrol and diesel which are the most commonly used for food transportation and agricultural machinery.

This bulletin is prepared by the Technical Working Group on Price Monitoring for Food Security (TWG-PMFS) which is chaired by the Ministry of Economy and attended by the Ministry of Agriculture, Food Industry and Melioration, the National Bank, the National Statistics Committee and the National Institute for Strategic Studies. Technical support is provided by the United Nations World Food Programme (WFP) and the Food and Agriculture Organization of the United Nations (FAO). The bulletin aims to provide timely information and analysis on the domestic prices of basic food and non-food items, complemented by analysis of international markets. It also provides early warning on high food prices. The August 2017 edition is the 21st issue of the bulletin.

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