



Price Monitoring for Food Security in the Kyrgyz Republic

Annual Review 2017



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Summary

This is an overview of key food commodity¹ price changes during 2017, with comparisons to prices in 2016 and the past five years. This is a secondary data review and therefore limited in scope to the availability of data. During 2017 the prices of key food commodities (wheat flour, meat (beef and mutton), milk, rice, sugar and vegetable oil) were stable in all monitored markets² of the country, with the exception of some vegetables (potatoes, carrots and cabbage).

Wheat and wheat flour are the main consumed staple food for the population of the Kyrgyz Republic.

- The country meets 96.9 percent³ of its needs through domestic production. However, due to the low gluten content of the domestically grown wheat (less than 20 percent), it is not suitable for processing and milling. As a result, imported wheat and wheat flour constituted 48 percent⁴ of the domestic market in 2017. The country relies on the import of wheat and wheat flour from neighbouring Kazakhstan in particular, making the Kyrgyz Republic vulnerable to external price volatility and foreign exchange fluctuations.
- The growing needs of the population are being met by imports rather than increased domestic production. Domestic production is stagnant: in 2017, the country produced 601,000 tons of wheat, nine percent lower than the production in 2016. In contrast, from January to September 2017 the country imported over 338,810 tons of wheat or wheat products⁵ into the country, 54 percent higher than in 2016.
- Global wheat production in 2016/2017 was estimated to be 754 million tons, representing the highest global wheat production of all time, with 736 million tons consumed in the same year. According to the forecast of the International Grain Council⁶, global wheat production should reach the second highest recorded amount in the 2017/18 period with 749 million tons expected to be produced, which would be only one percent lower compared to the 2016/17 period.
- In October 2017 after the Presidential elections in the country on the Kazakh-Kyrgyz border have been observed trade flow issues, which delayed the inflow of goods into the Kyrgyz Republic. However, it didn't affect the prices for wheat flour, bread and "lepeskha"⁷; prices for wheat products were stable on a month-on-month basis during the delay period. The prices for wheat flour increased by 1.19%, bread by 1.12%, diesel prices by 2.21%, petrol (AI-92) by 2 percent on a month-on-month basis⁸. However, the situation stabilized and trade flow has been recovered in November 2017.

Vegetables

¹ Government Decree "On the approval of physiological norms for the consumption of basic food products for the population of the Kyrgyz Republic" #1088-III of June 9, 2006.

² 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 18 markets across the country (Bishkek, Osh, Tokmok, Kara-Balta, Talas, Karakol, Naryn, Kara-Suu, Kyzyl-Kiya, Batken, Balykchy, Kerben, Toktogul, Chaek, Isfana, Nookat, Uzgen, Pokrovka).

³ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration (self-sufficiency based on internal production including import and export and remnants of the last year)

⁴ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration (self-sufficiency based on internal production including import and export and remnants of the last year)

⁵ [Food Security and Poverty in the Kyrgyz Republic, III quarter 2017; National Statistics Committee](#)

⁶ International Grain Council, <http://www.igc.int/en/markets/marketinfo-sd.aspx>

⁷ "Lepeshka" is a type of local wheat bread in the Kyrgyz Republic

⁸ [According to the Ministry of Economy report. The time period of observed prices is 6th of October to 3rd of November 2017](#)

The prices for the vegetables monitored were abnormally high between February and July 2017 due to the rain dominated spring, which delayed the planting season for many vegetables. The prices for potatoes, carrots and cabbage were 60, 32 and 37 percent higher respectively than the average prices in 2016.

Other Food Commodities

- The prices for sugar, meat, milk and vegetable oil were stable across the year, with expected seasonal fluctuations.

Agricultural share of GDP

- Agricultural production accounted for 14.6 percent⁹ of Gross Domestic Product (GDP) between January and September 2017, which is 4 percent lower than the same period in 2016. Despite a significant increase in the prices of certain food products (potatoes, carrots and cabbage), the inflation rate was 3.7 percent¹⁰ in 2017. It had a minimal impact on the overall purchasing power of households and should therefore not have unduly constrained the budgets of the poorest households in the country.

Minimum Subsistence Level

- The minimum subsistence per capita reached 4901 KGS¹¹, which is by 2 percent higher compared to the 2016. The average wage in the country increased by 6.4 percent compared to the same period in 2016 (January to September)¹².

Exchange Rate

- The US dollar, Russian ruble and Kazakh tenge remained relatively stable against the Kyrgyz som (national currency) during 2017¹³. Currency movements are among the main driving forces of the retail prices of imported basic food commodities including wheat, vegetable oil and sugar.

Remittances

- During 2017, the remittances inflow increased substantially reaching a record high (2.030 billion US dollars¹⁴), which is 24 percent higher than in 2016. It is important to note that the poverty rate significantly increases from 25.4 percent to 31.5 percent¹⁵ when household income from remittances are excluded indicating a high dependency on remittances especially among the poorest population.

⁹ [Food Security and Poverty in the Kyrgyz Republic, III quarter 2017; National Statistics Committee](#)

¹⁰ [Ministry of Economy](#)

¹¹ [Minimum subsistence level, 2017; National Statistics Committee](#)

¹² [Food Security and Poverty in the Kyrgyz Republic, III quarter 2017; National Statistics Committee](#)

¹³ [National Bank of the Kyrgyz Republic](#)

¹⁴ [National Bank of the Kyrgyz Republic](#)

¹⁵ [Poverty rate in the Kyrgyz Republic, 2016; National Statistics Committee](#)

1. National and global wheat and wheat flour production

Wheat is one of the key staple foods in the diet of the population of the Kyrgyz Republic, accounting for 1,076 kcal from a recommended¹⁶ minimum kilocalorie consumption of 2,100 kcal per day. Wheat production makes up 96.9 percent¹⁷ of the gross grain production in the country¹⁸ but due to the low content of gluten in the domestic wheat (less than 20 percent) it is not suitable for processing and milling. Therefore, the country relies on the import of wheat and wheat flour from neighbouring Kazakhstan. In 2017 the country produced 601,000 tons of wheat¹⁹, which is nine percent lower than the average production over the last three years. During 2017, the country imported 338,800²⁰ tons of wheat and wheat products into the country, which is 54 percent higher than in 2016. Since 2010, there has not been a significant increase in wheat production in the country despite an increasing domestic demand and domestic wheat production is actually decreasing with additional needs covered by imports. Farmers in the Kyrgyz Republic are not incentivised to grow and process wheat crops due to their low profitability. The country fulfilled its needs by utilising the domestically produced wheat and 48 percent²¹ through imports in 2017.

Additionally the Kyrgyz Government is focusing on improving the wheat milling industry through the implementation of the Programme for Food Industry and Processing Development for 2017-2021²². This programme aims to improve the quality of domestic wheat by improving the availability of better quality seeds, encouraging the use of fortified wheat flour through changes to legislation (including banning the import of unfortified wheat flour), reducing imports of wheat-based products, and applying incentives for farmers to grow wheat domestically.

¹⁶ Government Decree "On the approval of physiological norms for the consumption of basic food products for the population of the Kyrgyz Republic" #1088-III of June 9, 2006

¹⁷ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration (self-sufficiency based on internal production including import and export and remnants of the last year)

¹⁸ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration (self-sufficiency based on internal production including import and export and remnants of the last year)

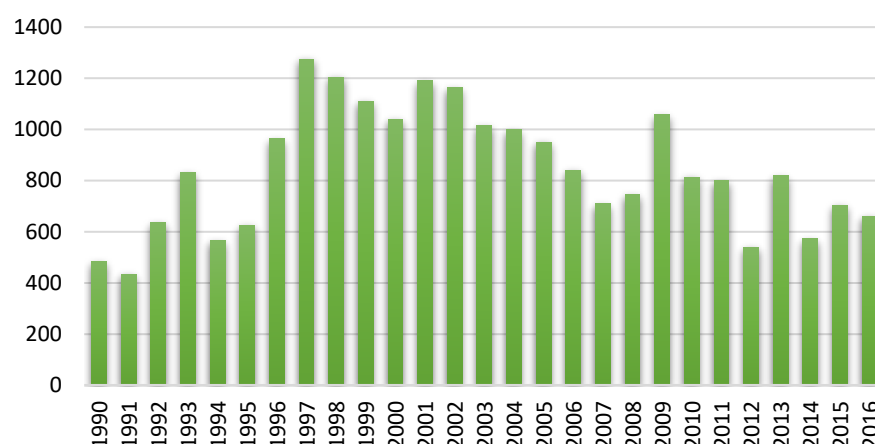
¹⁹ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration (self-sufficiency based on internal production including import and export and remnants of the last year)

²⁰ [Food Security and Poverty in the Kyrgyz Republic, III quarter 2017; National Statistics Committee](#)

²¹ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration (self-sufficiency based on internal production including import and export and remnants of the last year)

²² The Government Programme for Developing Food and Processing Industry for 2017-2021 aims to solve the problems with the development of the food and processing industry. It details financial support, as well as mechanisms for implementing the activities. The program has been developed taking into account the laws of the Kyrgyz Republic and the Decree of the President of the Kyrgyz Republic "On the National Sustainable Development Strategy of the Kyrgyz Republic for the period 2013-2017" dated January 21, 2013 No. 11. This was adopted by the Government of the Kyrgyz Republic in order to develop the processing industry, increase export potential. It also includes the recommended norms for the consumption of food products that meet the healthy eating requirements, and targeted programmes that aim to solve the problems of the development of the country's agro-industrial complex. <http://cbd.minjust.gov.kg/act/view/ru-ru/99895>

Fig. 1. National wheat production (1990 – 2016)



Global wheat production in 2016/2017 was estimated at 754 million tons, which is the highest global wheat production of all time, with 736 million tons consumed in the same year. According to the forecast of the International Grain Council global wheat production will reach the second highest recorded amount in the 2017/18 period with an estimated 749 million tons, which would be one percent lower than during the 2016/17 period²³.

Table 1. Global wheat production forecast 2017/18

Wheat (million tons)	14/15	15/16	16/17	17/18 forecast
Production	730	736	754	749
Trade	153	166	176	174
Consumption	715	719	736	742

1.1. Fortified wheat flour production

According to the 2009 Law on the Fortification of Wheat Flour in the Kyrgyz Republic²⁴, in order to improve the public health situation in the country high quality and first grade wheat flour must be fortified with micronutrients. Based on the latest amendment to the Law on the Fortification of Wheat (27th of September 2017) a penalty was introduced of 50,000 Kyrgyz soms (approximately USD 750) for using unfortified wheat flour in health care, education, and social protection sectors as well as in other state and municipal institutions. The penalty also extends to the import and circulation of unfortified wheat flour in the country and includes its confiscation. However, fortified wheat flour production was estimated at 54,000 tons, which is only 20 percent of the total domestic wheat flour production in 2016. Nevertheless, according to the National Statistics Committee, fortified wheat flour production reached

²³ International Grain Council, <http://www.igc.int/en/markets/marketinfo-sd.aspx>

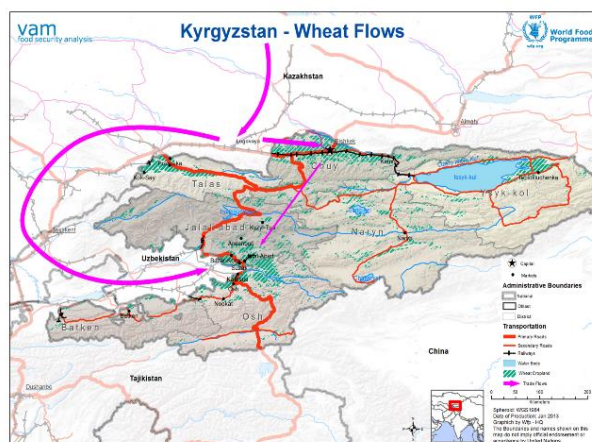
²⁴ [Law in the Fortification of Wheat Flour in the Kyrgyz Republic, #78 or 11st of March 2009](#)

113,000 tons between January and September 2017, which is 53 percent of total wheat flour production in 2017, a marked improvement.

1.2. Wheat and wheat flour supply chain

The Kyrgyz Republic mainly imports wheat and wheat flour from Kazakhstan (88 percent), Russian Federation (11 percent²⁵) and other countries. The wheat and wheat flour is transported via railway from Kazakhstan, directly to the northern capital city (Bishkek) and the northern Talas province, or to the south of the country via Uzbekistan into Jalal-Abad and Osh provinces (Map 1). There have been some concerns on the overdependence on the railway connection through Uzbekistan where there is a risk that rigid custom standards may jeopardize or delay the passing of goods. However, alternative routes from Bishkek to Osh are limited by the restricted loading capacity of trucks and the mountainous terrain to be covered²⁶. Before September 2017, transportation from Kazakhstan to Kyrgyz Republic was not perceived as an issue but during October 2017, after the Presidential elections in the Kyrgyz Republic, political issues led to severe delays on the Kazakh-Kyrgyz border which delayed trade flow. However, despite the delays, which lasted a couple of weeks, the National Statistics Committee and the Ministry of Economy reported that the border issues did not affect the prices for wheat flour and wheat products (bread and “lepeshka”). Price monitoring confirmed this with prices for wheat flour, and wheat products were stable on a month-on-month basis with only a minor increase. Prices for wheat flour increased only by 1.19%, bread by 1.12%, diesel prices by 2.21%, petrol (AI-92) by 2 percent on a month-on-month basis²⁷.

Map 1. Wheat and wheat flour supply chain in the Kyrgyz Republic



1.3. International wheat and wheat flour prices

The Kyrgyz Republic relies on imported wheat and wheat flour to meet its domestic needs, which makes the country vulnerable to external price changes, currency fluctuations and any trade issues that may

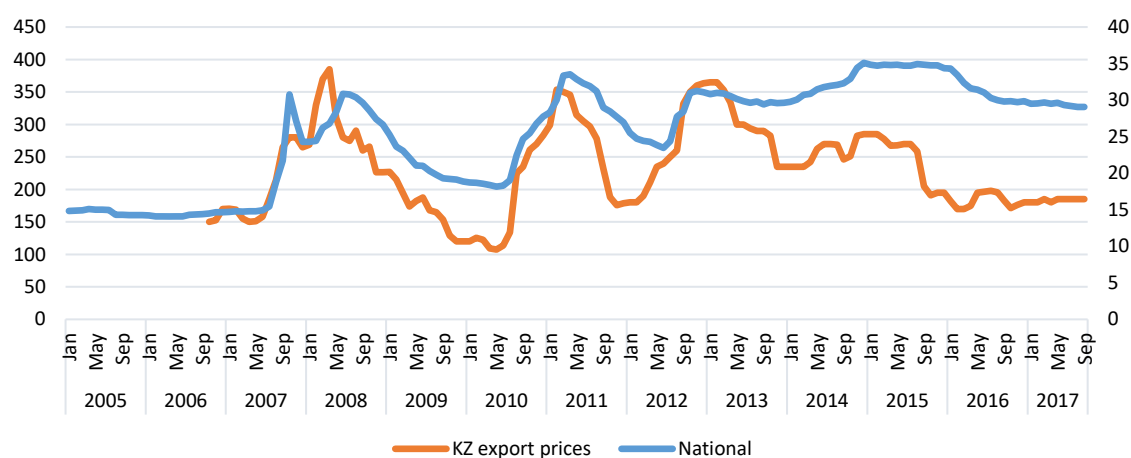
²⁵ National Statistics Committee, 2015

²⁶ [WFP's Market Assessment, 2013](#)

²⁷ [According to the Ministry of Economy report. The time period of observed prices is 6th of October to 3rd of November 2017](#)

arise. This has been demonstrated by the historical correlation between global and national wheat prices and wheat flour prices (Fig. 2). Increases in the prices of imported wheat and wheat flour are usually transmitted to domestic prices, as seen for instance in the extremely high prices witnessed in 2008 during the global financial crisis when Kazakhstan banned wheat flour exports. Additionally, unexpected reductions in domestic production, which result in a greater reliance on imported wheat and wheat flour, have also impacted prices in the domestic market. When a severe drought in the Kyrgyz Republic curtailed domestic supply in 2011 and 2012, the country relied on increased imports to make up the market gap, which pushed up prices significantly in the short term. All these changes in food prices significantly impact the food security of the population particularly the poorest.

Fig 2. Historical correlation between national and Kazakhstan export wheat prices



Alert for price spikes (ALPS)²⁸ analysis for national retail prices for wheat flour also illustrates that prices reliance on export prices (Fig 3). However, since February 2016 prices for wheat flour have gradually decreased (Fig 4).

²⁸ **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. Methodological guidance is available online at http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp264186.pdf

Fig 3. ALPS Analysis for wheat flour prices (2011-2017)

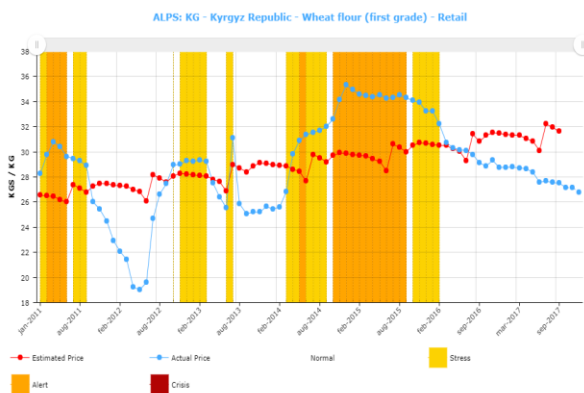
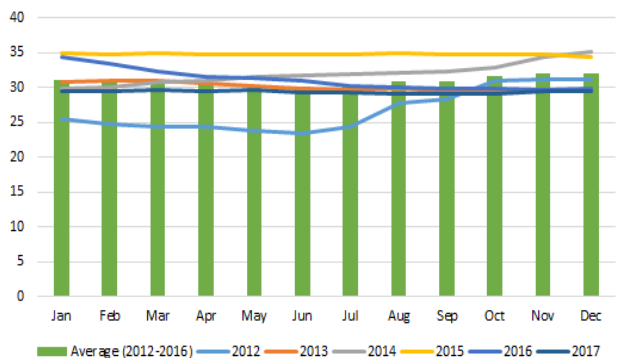


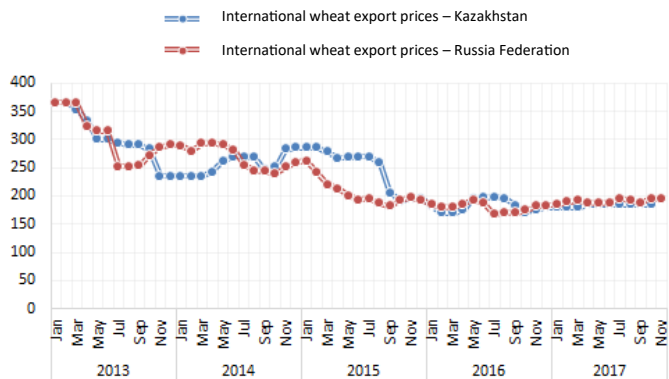
Fig 4. Seasonal price changes for wheat flour (2012-2017)



During 2017, export prices for wheat in the Russian Federation and Kazakhstan were stable and followed expected seasonal changes. The average export price for wheat in Kazakhstan²⁹ from January to October 2017 was the same as the average price of 2016 and 27 percent lower than the average price for the past five years. The record high prices for exported wheat and wheat flour were observed in April 2008, and the average prices for 2017 were 52 percent lower.

Export prices for wheat in the Russian Federation³⁰ in 2017 were 6 percent higher than the average annual prices for 2016, and 25 percent lower than the average price of the past five years. Record high prices were observed in February 2013 and the current average prices for 2017 were 48 percent lower.

Fig. 5 International export wheat prices in Kazakhstan and Russian Federation



1.4. Domestic wheat and wheat flour prices

National wheat flour prices³¹ were stable during 2017 following the seasonal price changes. The average prices during 2017 have been 5 percent lower compared to average price of 2016 and by 4 percent lower compared to the average of the last five years. The prices were also lower 16 percent compared to the record high observed in December 2014.

²⁹ [GIEWS FPMA Tool, monitoring and analysis of food prices; FAO](#)

³⁰ [GIEWS FPMA Tool, monitoring and analysis of food prices; FAO](#)

³¹ 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 18 markets across the country

The highest prices in 2017 were observed in Nookat town (42 Kyrgyz soms per kg) in Osh province and the lowest in Talas town (21 Kyrgyz soms per kg) in Talas province.

1.5. Introducing VAT on imported wheat/wheat flour prices

In November 2017, the Kyrgyz Government signed an amendment for the introduction of Value-Added Tax (VAT) on locally produced wheat and wheat flour, which would add a further 12 percent to prices (according to the Ministry of Economy's reports). There is the risk that the introduction of VAT might decrease the production of domestic wheat and wheat flour, as farmers are already reluctant to grow wheat crops. Additionally the imported wheat flour is cheaper but increasing reliance on imports increases the vulnerability of the country to international price changes, and dependency on the supply available from other countries.

1.6. Safety nets alert platform (SNAP) scenario planning

The WFP's Safety Nets Alert Platform (SNAP)³² is a demand-driven, innovative food price monitoring system aimed at enhancing food security early warning, risk management and social protection in the Kyrgyz Republic.

WFP utilises SNAP to monitor and plan for sudden changes in household economic conditions and food security. In this sense food price changes have a strong impact on the population of the Kyrgyz Republic, particularly the poorest and most vulnerable who already spend up to 70 percent of their household budget on food. This group of the population would be highly impacted by any increase in food prices particularly on staple food.

Utilizing SNAP in and its scenario building model (SISMOD³³), WFP created some scenarios in view of the re-introduction of the Value Added Tax (VAT) on wheat flour and derivatives. The price of cereals was altered from the latest reported data, in order to see how it would affect the population in the country, their poverty status and food security, including the food gap (depth in Kcals³⁴). In this sense WFP generated 3 scenarios and compared the to the estimated current scenario used as baseline (Table 2):

- First scenario - The best-case/forecasted scenario (i.e. cereal price increase by 20 percent, keeping all other factors stable) indicates an increase in the food deficient population (i.e. those consuming less than 2100 kcal/day) by 11 percent (approximately 430,000 people) compared to the current estimated situation.
- Second scenario - In this case, the poverty rate also increases. In response to this scenario, the Government can introduce emergency social transfers (food or cash) or social allowances³⁵ to the affected population and therefore absorb the impact of the food price increases.
- Third scenario – The worst-case scenario where cereal prices increase by 30 percent, shows how food

³² Safety Net Alert Platform: <http://snap.vam.wfp.org/>




³³ The Shock Impact Simulation Model (SISMOD) is food security impact assessment model, which analyse household data (Kyrgyz Integrated Household Survey) using info on income, expenditure and consumption to generate a household consumer behaviour model (Agricultural Household Models), calculate the shock factors and predict its impact on households vulnerability.

³⁴ Kcal depth represents how many Kcals are missing on average in the diet of individuals compared to the minimum threshold of 2100 Kcals per day.

³⁵ Law # 163, 28.07.2017. About social allowance in the Kyrgyz Republic. <http://cbd.minjust.gov.kg/act/view/ru-ru/111670>

security and poverty are sensitive to this price change. In fact, the share of the food deficient population as well as the poor, would increase further.

Table 2. Results of simulation with SNAP. Introduction of VAT on wheat flour and increase of prices

Scenarios	Assumptions	Food Insecurity (with changes from current scenario) 	Depth in Kcal (with changes from current scenario) 	Absolute Poverty (with changes from current scenario) 
Current Scenario	To create the baseline for the purpose of the simulation the publicly available national statistics household data for 2015 and price data for Nov 2017	52.9%	220 Kcal	28.0%
Forecasted Scenario	Increase of 20% on cereal prices against current scenario	64.0% ↑21%	313 ↑42%	30.9% ↑10%
Forecasted Scenario with Govt. Intervention	Increase of 20% on cereal prices against current scenario, compensated by a 20% increase in social allowances	62.3% ↑18%	297 ↑35%	28.3% ↑1%
Worst Case Scenario	Increase of 30% on cereal prices against current scenario	69.3% ↑31%	367 ↑67%	32.5% ↑16%

2. Vegetable production and prices

Vegetables are one of the key food commodities in the diet of the country population, accounting for 72.06 kcal³⁶ of a daily recommended minimum kcal consumption of 2,100 per day. Across the country, the area dedicated to vegetable growing and vegetable production has been increasing over the last ten years. In 2016, vegetable production reached 1,069,000 tons³⁷, which is 15 percent higher than the average production of the last five years. In 2017 vegetable production reached 1,416,000 tons³⁸, which is 24 percent higher than 2016.

The country continues to produce more than its domestic needs (305.3 percent in 2017³⁹), which means that this area can be expanded for export.

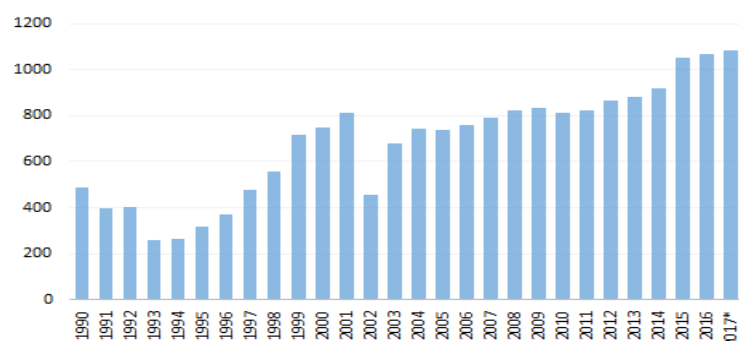
³⁶ Government Decree "On the approval of physiological norms for the consumption of basic food products for the population of the Kyrgyz Republic" #1088-III of June 9, 2006

³⁷ National Statistics Committee

³⁸ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration (including the remnants of the last year)

³⁹ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration (including the remnants of the last year)

Fig 6. Vegetable production in thousand tons (1990-2017*)



2.1. Vegetable prices (carrots, cabbages and potatoes)

Throughout 2017, prices for vegetables were gradually increasing. Between February and July 2017, prices for potatoes, carrots and cabbage were abnormally high as reported by the WFP's Alert for price spikes (ALPS) analysis, which compared the prices against normal seasonal price changes (Fig 8, 10 and 13). The reason for this abnormal increase was the rainy spring season (Fig 11), which led to a delay in the planting season and consequently to a delay in harvest and reaching the market.

2.2. Prices for carrots

Domestic prices for carrots⁴⁰ have been abnormally high compared to the expected seasonal price changes in 2017, with the highest prices between May and September (Fig 8). The highest price was observed in July 2017, which was only 11 percent lower than the record high prices observed in July 2014 and 42 percent higher than the average prices over the past five years. This high increase in prices is linked to the only available produce being the limited numbers of the previous harvest stock due to the delayed planting of the new harvest.

The average prices for carrots during 2017 were 32 percent higher than the average prices in 2016, and 16 percent higher compared to the average prices of the last five years (Fig 7).

Fig 7. Seasonal price changes of carrots (2012-2017)

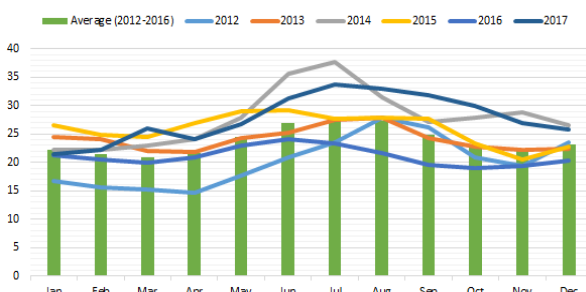
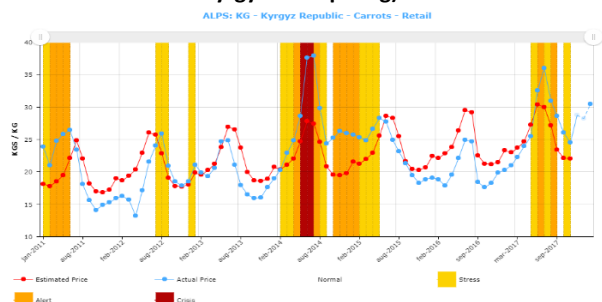


Fig 8. ALPS analysis for carrots prices (national average, Kyrgyz soms per kg)



⁴⁰ 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 18 markets across the country

The highest average prices for carrots in 2017 were observed in Naryn town (31 Kyrgyz soms per kg) in Naryn province and the lowest in Isfana town (19.5 Kyrgyz soms per kg) in Batken province.

2.3. Prices for cabbage

Retail prices for cabbage⁴¹ were also significantly higher in 2017, reaching the highest recorded price of the past five years in April 2017. This was 126 percent higher than the average price for 2016 and 104 percent higher than the average price over the past five years. The average prices for cabbage in 2017 were 37 percent higher than the average prices in 2016, and 23 percent higher compared to the average price for the last five years.

Fig 9. Seasonal price changes of cabbages (2012-2017)

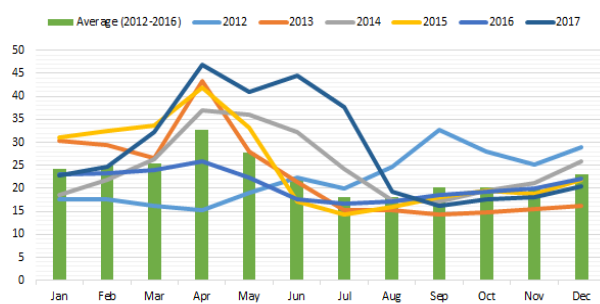
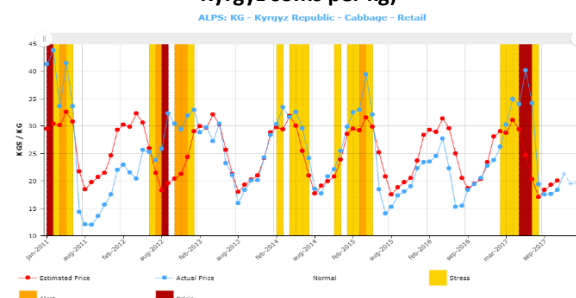


Fig 10. ALPS analysis for cabbage prices (national average, Kyrgyz soms per kg)



ALPS analysis also clearly indicates that prices for cabbages in 2017 were abnormally high between March and July 2017 compared to the normal seasonal price changes over the past three years (Fig 10).

This is directly related to the delay of the new harvest due to the rainy spring and the high prices for the old stock. The highest average prices for cabbages during 2017 were observed in Osh town (37 Kyrgyz soms per kg) and the lowest in Kara-Balta and Tokmok towns in Chui province (19 Kyrgyz soms per kg).

2.4. Potato production and prices

Potatoes are the second most highly consumed food commodity in the country, accounting for 212 of daily kcal⁴² consumption of a recommended minimum kcal consumption of 2100 per day.

Domestic potato production reached 1.3 billion tons⁴³ in 2017. This is 3 percent lower than in 2016. However, the potato production has been increasing over the past ten years. Production of potatoes not

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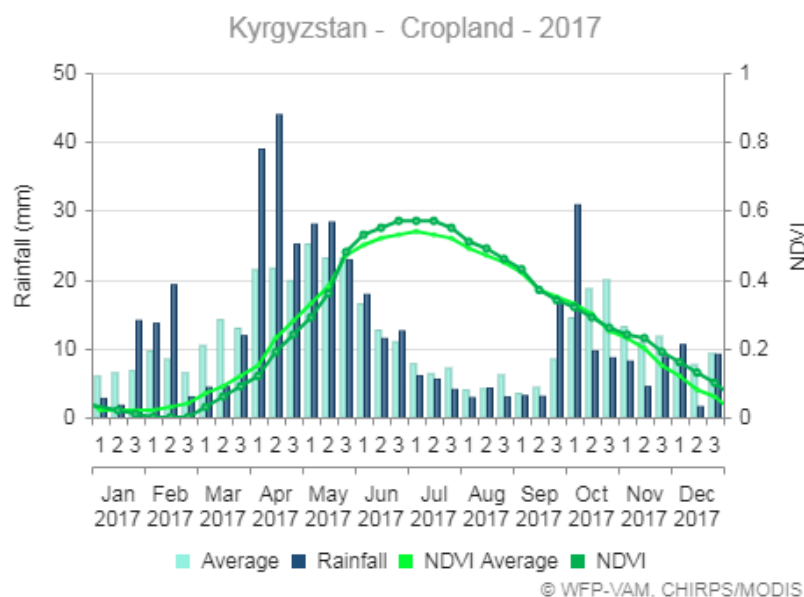
⁴² Government Decree "On the approval of physiological norms for the consumption of basic food products for the population of the Kyrgyz Republic" #1088-III of June 9, 2006

⁴³ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

only fulfils domestic needs but also exceeds them with surplus being available for export. In 2017, total self-sufficiency reached 275.9 percent⁴⁴ with some export to neighbouring countries.

However, in 2017 prices for potatoes⁴⁵ were significantly higher than the average seasonal price changes due to the wet spring and delay of planting season. According to the WFP's seasonal monitor analysis (Fig 11) abnormally high level of precipitation were observed in April 2017 compared to the average amount of precipitation in this period.

Fig 11. Rainfall and Normalized Difference Vegetation Index (NDVI) in crop areas in the Kyrgyz Republic (WFP, 2017)⁴⁶



The average prices for potatoes during 2017 were 60 percent higher than the average price in 2016, and are 35 percent higher than the average price of the past five years. The highest price in June 2017 was only 2 percent lower than the record high observed in June 2014 and 138 percent higher than the average prices for 2016. They were 100 percent higher than the average price for the last five years. The high price increase directly affects the purchasing power of the poor households, who are spending almost 70 percent⁴⁷ of their budget on food.

⁴⁴ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

⁴⁵ 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 18 markets across the country

⁴⁶ WFP's Seasonal Monitor. This plot shows rainfall amounts and NDVI for the selected year (dark blue) and for the long term average (20 years, 1994-2013) in light blue. http://dataviz.vam.wfp.org/seasonal_explorer/rainfall_vegetation/visualizations#

⁴⁷ Food Security and Poverty in the Kyrgyz Republic, III quarter 2017; National Statistics Committee

Fig 12. Seasonal price changes of potatoes (2012-2017)

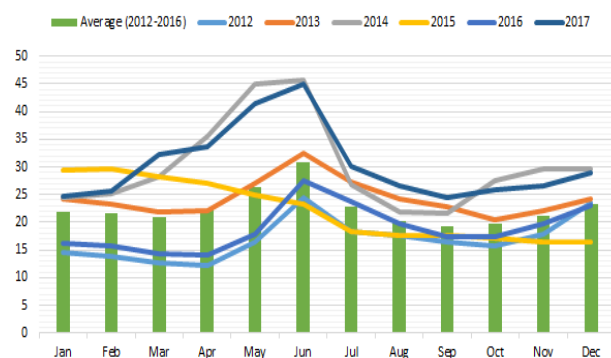
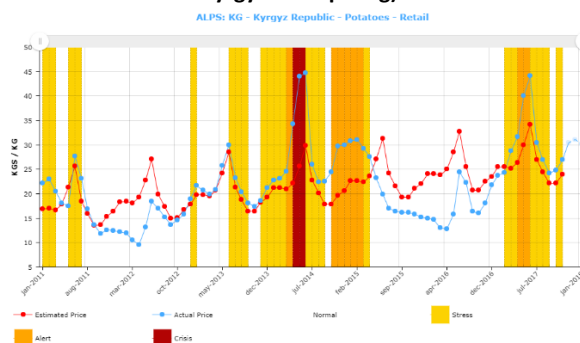


Fig 13. ALPS analysis for potato prices (national average, Kyrgyz soms per kg)



ALPS analysis also clearly indicates that prices for potatoes experienced abnormally high prices between February and September 2017 compared to the normal seasonal price changes over the last three years (Fig 12).

The highest prices for potatoes were observed in Osh and Jalal-Abad towns (33 Kyrgyz soms per kg) Osh and Jalal-Abad provinces and the lowest in Pokrovka town (25 Kyrgyz soms per kg) Talas province in 2017.

3. Sugar production and prices

Sugar is one of the main consumable items in the country, accounting for 265 kcal⁴⁸ of the daily minimum recommended kilocalorie intake of 2100 kcal per day. However, the domestic production of sugar is only 73.8 percent⁴⁹ of the domestic need with the remaining share met by imported sugar.

The planting and production of sugar beet in the country was very high in the ten-year period between 1998 and 2008, when average production was 434,000 tons per year but this significantly decreased between 2008 and 2015. This was due to low interest from farmers and poor infrastructure in factories, resulting in average annual production of only 143,000 tons. However, due to the focus of the Government on improving the domestic sugar industry through the implementation of the Programme for Food Industry and Processing Development 2017-2021, there has been renewed interest and improvement in sugar production infrastructure⁵⁰. Consequently, domestic sugar production had reached 101,200 tons⁵¹ in 2017, which is 67 percent higher than in 2016. The programme includes plans to further increase the area of land designated for planting sugar beet (which already increased by 49 percent⁵² in 2017) and modernizing sugar processing factories with improved equipment.

⁴⁸ Government Decree "On the approval of physiological norms for the consumption of basic food products for the population of the Kyrgyz Republic" #1088-III of June 9, 2006

⁴⁹ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

⁵⁰ [The Government Programme for Developing Food and Processing Industry for 2017-2021](#)

⁵¹ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

⁵² Calculations based on the National Statistics operational data

In 2016, the country imported more than half of its required sugar, highlighting the need to monitor global sugar prices. The Kyrgyz Republic mainly imports sugar from Belarus and the Ukraine⁵³. During 2017, global sugar prices remained stable after significant increases in 2016 when there was low global sugar production due to poor harvests in key sugar producing countries⁵⁴. Consequently, global sugar prices were 12 percent lower than in 2016 and 10 percent lower than the average price of the last five years. The global record high price was observed in February 2012 and the average global price from in 2017 was 34 percent lower.

Domestic sugar prices⁵⁵ were stable throughout 2017 following expected seasonal price patterns for example prices were 10 percent higher in July and August 2017, a normal seasonal flux due to the depletion of the last year stocks. Overall, the annual average price for 2017 was 4 percent lower than the average price for 2016, and 2 percent higher than the average prices of the last five years. The record high prices for sugar were observed in December 2015 and the 2017 average prices was 6 percent lower.

Fig 14. Seasonal price changes for sugar (2012-2017)

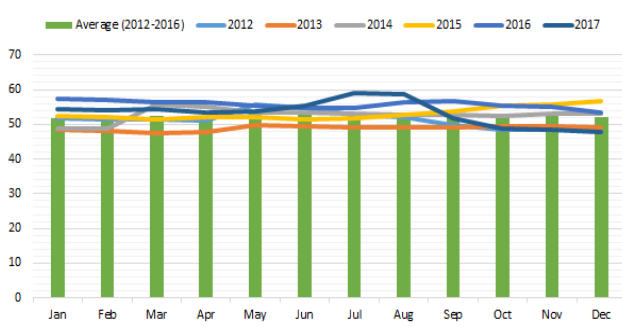
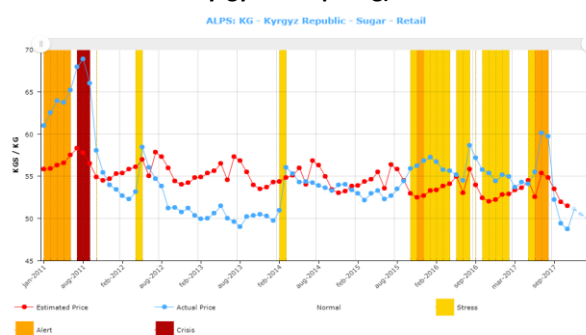


Fig 15. ALPS analysis for sugar prices (national average, Kyrgyz soms per kg)



ALPS analysis for sugar prices clearly indicates that abnormally high prices were observed between May and July 2017 compared to the normal seasonal changes over the last three years.

The highest average prices for sugar in 2017 were observed in Nookat town (60 Kyrgyz soms per kg) Osh province and the lowest in Balykchy, Toktogul and Tokmok towns (52 Kyrgyz soms per kg) Yssyk-Kul, Jalal-Abad and Chui provinces.

4. Vegetable oil production and prices

Vegetable oil is a key food commodity in the country, accounting for 225 kcal of the daily⁵⁶ recommended kilocalorie intake of 2100 kcal. However, in order for the Kyrgyz Republic to meet its domestic needs it

⁵³ National Statistics Committee, 2015

⁵⁴ [International Sugar Organization](#)

⁵⁵ 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 18 markets across the country

⁵⁶ Government Decree "On the approval of physiological norms for the consumption of basic food products for the population of the Kyrgyz Republic" #1088-III of June 9, 2006

relies upon 92.9 percent from domestic production and 47.2 percent⁵⁷ from imports. Refined vegetable oil production is low due to the low availability of oil crop seeds and the limited infrastructure within processing factories. Domestic production of vegetable oil reached 10,800 tons in 2017⁵⁸, of which 400 tons⁵⁹ was refined vegetable oil. Also only, a very small percentage of the total production was refined oil production, which is suitable for food processing.

The Government is focusing on improving vegetable oil production by implementing the Programme for Food Industry and Processing Development from 2017-2021. The programme includes a commitment to increasing the yields of oil crops up to 25 centner per hectare; introduce new types of sunflower and safflower seeds from the Russian Federation and Kazakhstan; and modernize current equipment⁶⁰.

Vegetable oil is mainly imported from Russian Federation, Kazakhstan and Ukraine⁶¹ where due to a high volume harvest in 2016/17 a decrease in prices was observed.

The national retail prices for vegetable oil⁶² were relatively low during 2017, which is clearly indicated in Figure 15. The average prices for vegetable oil in 2017 were 8 percent lower than the average price in 2016, and 6 percent lower than the average prices over the past five years. The record high prices for vegetable oil were observed in June 2008, and the annual average price for 2017 was 19 percent lower.

Fig 16. Seasonal price changes for vegetable oil (2012-2017)

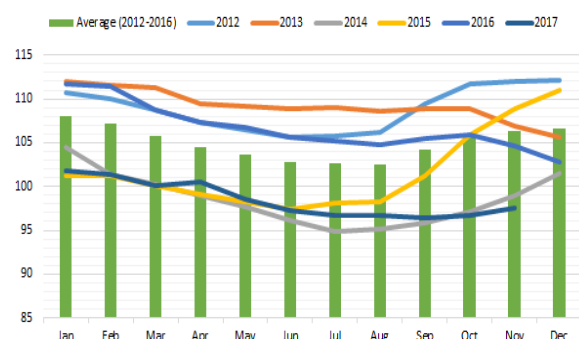
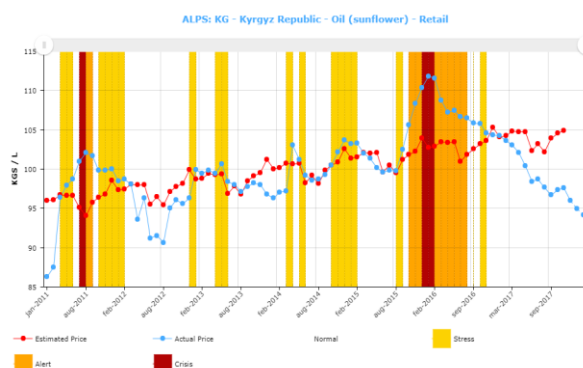


Fig 17. ALPS analysis for vegetable oil prices (national average, Kyrgyz soms per liter)



The highest average prices for vegetable oil in 2017 are observed in Batken town (105 Kyrgyz soms per kg) in Batken province and the lowest in Pokrovka town (90 Kyrgyz soms per kg) in Chui province.

⁵⁷ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

⁵⁸ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

⁵⁹ Preliminary data from January to November 2017, National Statistics Committee

⁶⁰ [The Government Programme for Developing Food and Processing Industry for 2017-2021](#)

⁶¹ National Statistics Committee, 2015

⁶² 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 18 markets across the country

5. Milk production and prices

Milk is one of the key food commodities in the diet of the population, accounting for 556 kcal⁶³ of daily consumption from a recommended kilocalorie intake 2100 kcal. The domestic production of milk reached 121.5 percent in 2017 with only 8.4 percent⁶⁴ of share of import in the local market. Domestic milk production reached 1,556,100 tons⁶⁵ in 2017, which is by 2 percent higher than 2016 production.

While the milk production is high, the dairy industry is not utilising its full capacity. Milk-processing factories are not utilised efficiently due to the poor milk supply chain in the country. Farmers sell milk directly to markets without following hygiene and sanitation requirements and consequently only a very small amount of milk is produced by factories. There are also limited laboratories for ensuring the quality of milk. For this reason, the Government, through the implementation of Programme for Food Industry and Processing Development for 2017-2021, is focusing on supporting milk production and improving processing in the country⁶⁶.

Throughout 2017, the national milk prices⁶⁷ were stable and fluctuated along expected seasonal changes (Fig 17.). The average prices in 2017 were 0.3 percent lower compared to the average prices for 2016, and 1.2 percent higher compared to the average prices over the past five years.

Fig 18. Seasonal price changes for milk (national average, Kyrgyz soms per liter)

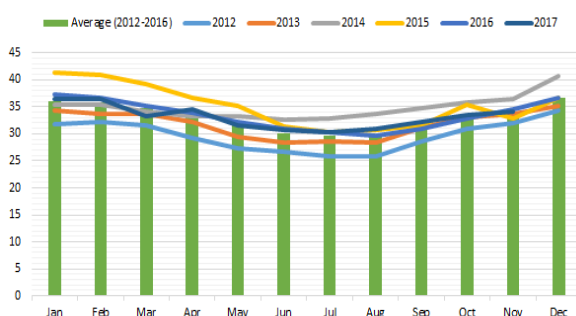
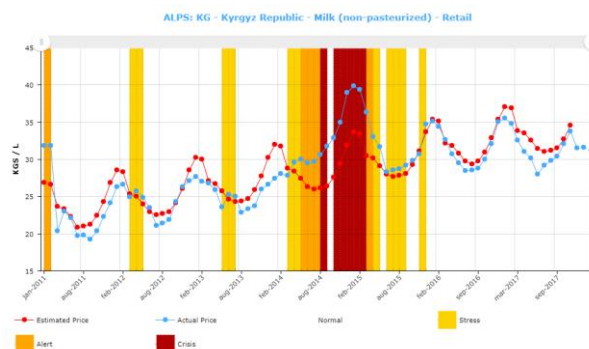


Fig 19. ALPS analysis for milk prices (national average, Kyrgyz soms per liter)



High prices for milk were observed in January and February 2017. The prices were 9 percent higher compared to the average prices in 2017 and 11 percent higher compared to the average prices for the last five years. This can be linked to the increase in costs for the farmers as during the winter livestock require additional of food. The highest average prices for milk in 2017 were observed in Batken town (39 Kyrgyz soms per litre) Batken province and the lowest in Pokrovka town (19 Kyrgyz soms per liter) Chui province.

⁶³ Government Decree "On the approval of physiological norms for the consumption of basic food products for the population of the Kyrgyz Republic" #1088-III of June 9, 2006

⁶⁴ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

⁶⁵ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

⁶⁶ [The Government Programme for Developing Food and Processing Industry for 2017-2021](#)

⁶⁷ 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 18 markets across the country

6. Meat production and prices

Meat is an important source of protein and a major component of the Kyrgyz national diet, accounting for 359 kcal⁶⁸ of the daily recommended kilocalorie intake of 2100 kcal. Annually on average, the country produces 358,862 tons of meat, which has been steadily growing. The increase of meat production is closely correlated with an increase in livestock numbers, which have been growing year-on-year since 2008. The latest figures from the National Statistics Committee in 2015 stated that livestock contributes 51 percent of the gross agricultural output in the country, and domestically produced meat for market meets 65.4 percent⁶⁹ of the country's needs.

According to the Programme for Food Industry and Processing Development analysis⁷⁰, meat and meat products are mainly produced in small factories and shops, and do not meet national veterinary and sanitary standards. More than 93 percent of meat is provided by small shops while large meat processing enterprises are unable to increase their market share due to limited facilities and money to invest.

The prices for meat (beef and mutton)⁷¹ were stable during 2017. The average price of beef was 4 percent higher than the average prices for 2016 and 1 percent lower than the average prices for the last five years.

Fig 20. Seasonal price changes for meat (beef, 2012-2017)

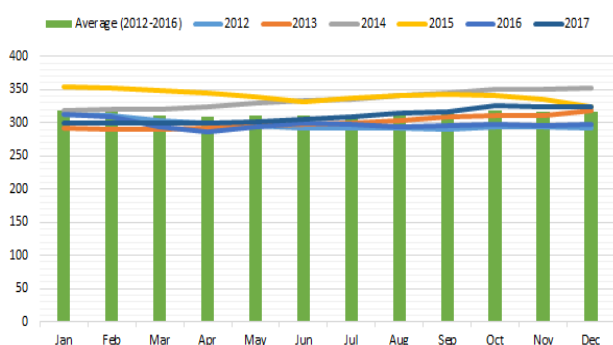
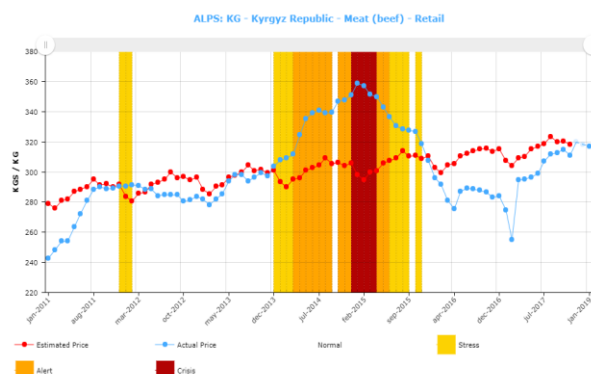


Fig 21. ALPS analysis for meat (beef, national average, Kyrgyz soms per kg)



High prices were observed from October to November 2017, with the highest prices in October 2017. The highest average prices for beef in 2017 were observed in Bishkek town (319 Kyrgyz soms per kg) and the lowest in Kerben town (259 Kyrgyz soms per kg).

⁶⁸ Government Decree "On the approval of physiological norms for the consumption of basic food products for the population of the Kyrgyz Republic" #1088-III of June 9, 2006

⁶⁹ Self-sufficiency indicators for the key food commodities in the Kyrgyz Republic according to the physiological norms of consumption, established by Government 19.02.10r. #111, January – December 2017, Ministry of Agriculture, Food Industry and Melioration

⁷⁰ [The Government Programme for Developing Food and Processing Industry for 2017-2021](#)

⁷¹ 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 18 markets across the country

Fig 22. Seasonal price changes for meat (mutton, 2012-2017)

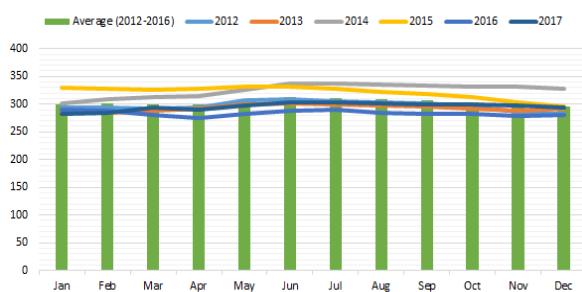
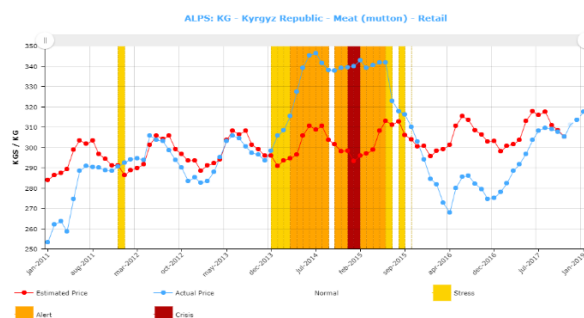


Fig 23. ALPS analysis for meat (mutton, national average, Kyrgyz soms per kg)



High prices for mutton were observed from June to July 2017, which could be related to the Muslim holiday (Ramadan) and the subsequent increased demand. The highest prices were observed in July 2017, which were 3 percent higher compared than the average prices in 2017. The highest prices for mutton in 2017 were observed in Batken town (330 Kyrgyz soms per kg) Batken province and the lowest in Tokmok town (276 Kyrgyz soms per kg) Chui province.

7. Fuel prices (Diesel and Petrol)

Since the prices of diesel and petrol⁷² heavily impact on food prices, the stability of diesel and petrol prices are critical, especially in rural areas. The prices for diesel and petrol fluctuated without significant changes throughout 2017 (Fig 23 and Fig 24)⁷³.

The average prices for diesel in 2017 were 13 percent higher than the average prices for 2016, and 4 percent lower than the average prices for the last five years. The highest average prices for diesel between January and November 2017 were observed in Isfana town (39 Kyrgyz soms per liter) in Batken province and the lowest in Naryn town (35 Kyrgyz soms per liter) Naryn provinces.

The average prices for petrol (octane 92) during 2017 were 10 percent higher than the average prices for 2016 and only 1 percent higher to the average prices for the last five years. The highest prices for petrol for 2017 were observed in Batken town (41 Kyrgyz soms per liter) Batken province and lowest in Naryn town (37 Kyrgyz soms per liter) Naryn province.

⁷² Prices for petrol and diesel collected and provided by National Statistics Committee

⁷³ 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.

Fig 24. Seasonal price changes for diesel (2012-2017)

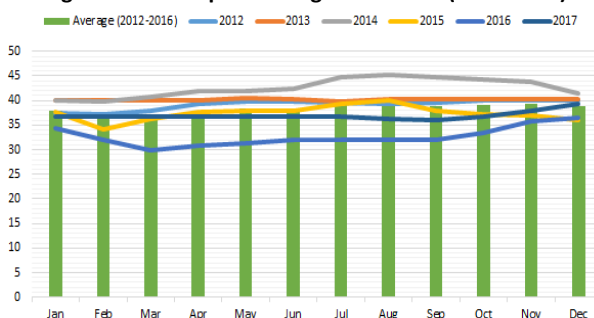
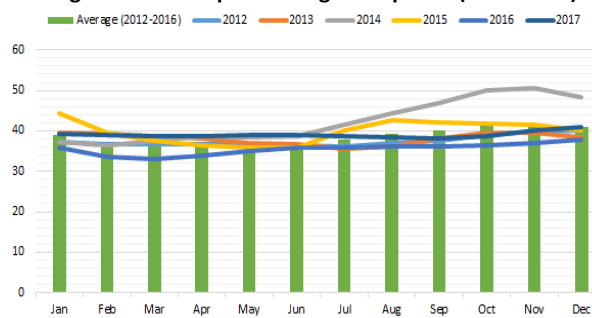


Fig 25. Seasonal price changes for petrol (2012-2017)

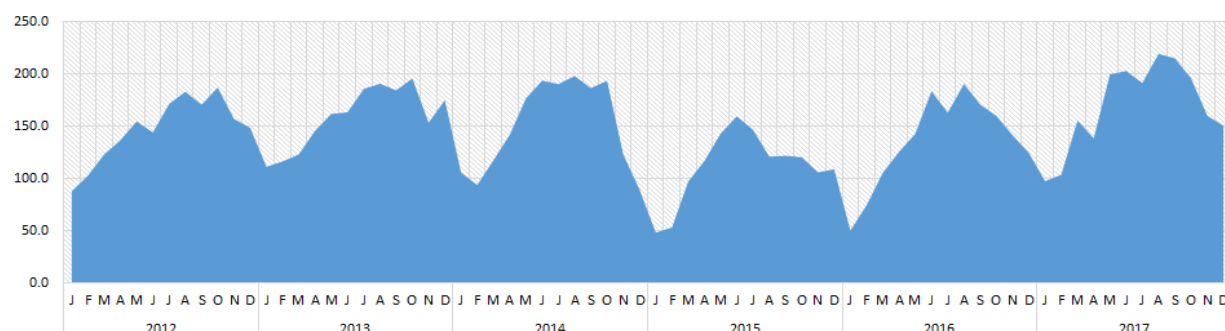


8. Remittances

Remittances have a very important role in the economy of the Kyrgyz Republic as it is estimated that over 1 million Kyrgyz nationals are working abroad and sending money home. There is a strong flow of remittances to the Kyrgyz Republic especially from citizens working in the Russian Federation, which contributes significantly to reducing poverty rates in some of the provinces. The poverty rate significantly increases when household income from remittances is excluded, rising from 25.4 percent⁷⁴ to 31.5 percent at country level. In the south of the country the impact is even greater with the poverty rate estimated to increase from 37 percent to 53.6 percent in Batken province, from 22 percent to 36.3 percent in Osh province and from 32.2 percent to 39.9 percent in Jalal-Abad province.

In 2016, the GDP share of remittances reached 32.7 percent⁷⁵ but this is estimated to be even greater for 2017. This is due to the remittances inflow reaching a record high of USD 2.030 billion in 2017 which is 24 percent higher than the same period in 2016, and 5 percent higher compared to the average volume of the last five years. The monthly record high was observed in August 2017 when it reached USD 219 million.

Fig 26. Remittances inflow by months (2012-2017, million USD)



⁷⁴ Poverty rate in the Kyrgyz Republic, 2016; National Statistics Committee

⁷⁵ National Bank of the Kyrgyz Republic

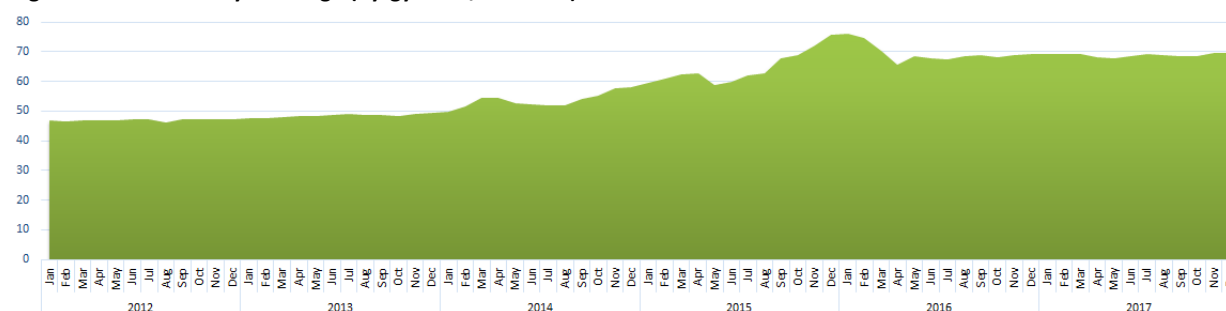
9. Official Currency Exchange rates

The currencies listed below are the main currencies utilised within the Kyrgyz Republic. These 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 is important.

9.1. US dollar

The US Dollar was stable throughout 2017. The average rate for 2017 was 68.87 Kyrgyz soms per US dollar⁷⁶, which is 1 percent lower than the average rate of 2016 but 22 percent higher than the average rate over the past five years. The monthly record high was observed in December 2015, and the average rate for 2017 was 9 percent lower.

Fig 27. Official currency exchange (Kyrgyz som/US dollar)

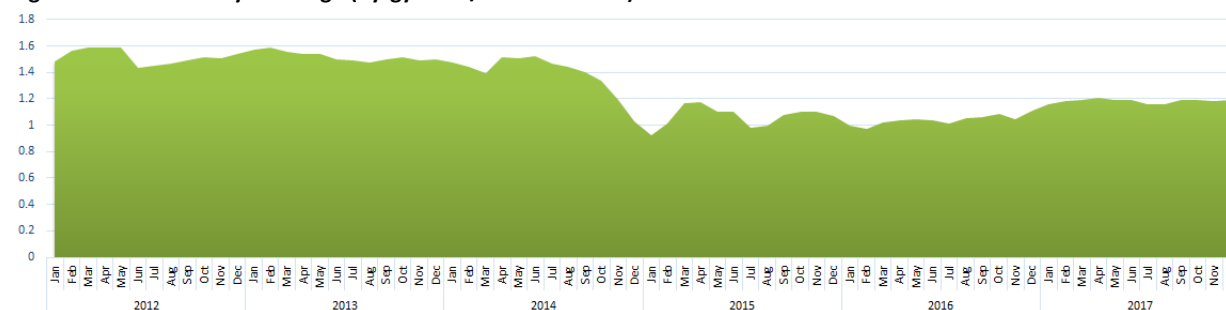


9.2. Russian rouble

After a significant decrease in January 2015, the Russian rouble has appreciated against the Kyrgyz som and remained stable throughout 2017. This is correlated with the recovery of the Russian economy after a significant slowdown during 2015.

The average rate of the Kyrgyz som per 1 Russian rouble during 2017 was 1.18⁷⁷, which is 13 percent higher than the average rate for 2016 and 10 percent lower than the average rate for the last five years. The record high was observed in March 2012 (1.58 Kyrgyz soms per 1 Russian rouble), and the average rate for 2017 is 26 percent lower.

Fig 28. Official currency exchange (Kyrgyz som/Russian rouble)



⁷⁶ National Bank of the Kyrgyz Republic

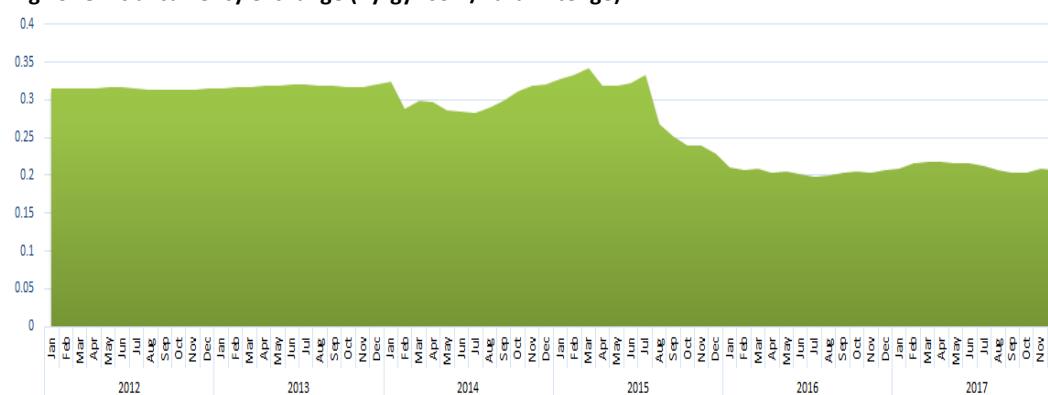
⁷⁷ National Bank of the Kyrgyz Republic

9.3. Kazakh tenge

The currency exchange rate of the Kazakh tenge appreciated against the Kyrgyz som in 2017. Since August 2015 the Kazakh tenge significantly depreciated against the Kyrgyz som due to economic problems in Kazakhstan (high inflation, decrease of production, low prices for internally produced products while imported prices are higher, devaluation of national currency).

The average rate of the Kazakh tenge against the Kyrgyz som in 2017 was 0.2113 Kyrgyz soms per 1 Kazakh tenge⁷⁸, which was 3 percent higher than the average rate for 2016 and 25 percent lower than the average rate for the last five years. The record high rate was observed in September 2012 (0.3138 Kyrgyz soms per 1 Kazakh tenge), and the average rate for 2017 is 33 percent lower.

Fig 29. Official currency exchange (Kyrgyz som/Kazakh tenge)



⁷⁸ National Bank of the Kyrgyz Republic