

MARKET PRICE AND CLIMATE MONITORING BULLETIN



ISSUE NO.6: AUGUST 2022

The World Food Programme carries out market analysis on monthly basis to monitor the market situation in Armenia. Observing foreign currency exchange rates (namely USD and Russian Rouble) and retail market price fluctuations WFP tries to draw possible implications on the overall socio-economic situation and purchasing power of the society. Based on the interest, the bulletin contains descriptive information about the market prices of selected food and non-food items. The bulletin also includes a snapshot of the rainfall and vegetation levels per region.

WFP ARMENIA: VAM



This bulletin focuses on market prices of the period of **July 2021 – July 2022**. Main sources used for the bulletin are the Statistical Committee of RA, Central bank of Armenia and WFP VAM Dataviz.

HIGHLIGHTS

- The exchange rate of USD/AMD keeps decreasing since the end of March 2022, declining 17.4 percent in July 2022. The exchange rate of RUB/AMD has greatly increased since March 2022 and average exchange rate in July is 7.08 AMD per 1 Ruble.
- Armenia continues encountering price increase of both food and non-food items. Consumer Price Index increased by 9.3 percent compared to June 2021. Food inflation was 13.6 percent in Armenia in July 2022 compared to July 2021, hence negatively influencing access to food particularly for vulnerable households. The highest price increase among food groups was for fruits: 21.7% in June 2022. The increase of food and non-food prices in combination with other factors, such as the price increase of agricultural goods, fertilizers, services, etc., is going to affect the population in Armenia, especially the most vulnerable households decreasing their purchasing power.
- The highest rates of food price inflation were seen in Yerevan (10.1%), Kotayk (9.3%), Gegharkunik (9.1%) and Lori (8.8%) regions in July 2022 versus July 2021. The lowest rate of food price inflation was observed in Shirak (7.5%) for the reporting period.
- Price increase of fuel (diesel by 44 percent and petrol by 9 percent) in July 2022 compared to the same month last year (July 2021).
- Factors influencing price hikes continue to be the political situation in the world resulting in changes in cargo and passenger logistics, transportation costs, price increase in countries of import tailored with domestic shocks such as inflation, unavailability of effective irrigation systems, increasing fuel prices globally, limited state regulation mechanisms to curb inflation and weak shock responsiveness.
- Climate changes, in particular the volatility of rainfall, affect agricultural production in Armenia. In July 2022, in all regions the actual rainfall rates were lower than it was expected.



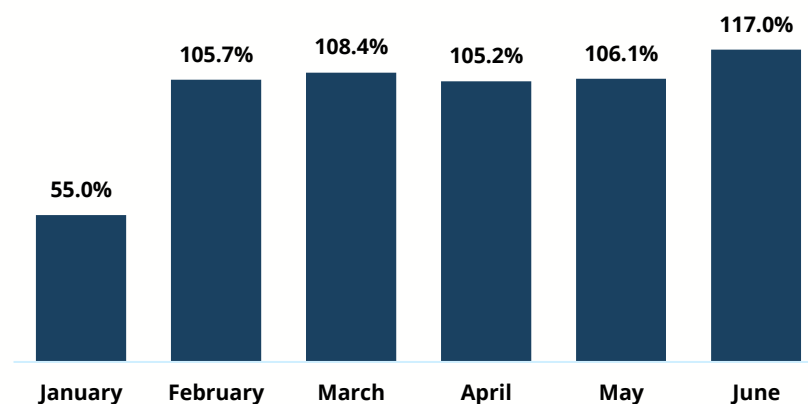
Armenia's food and fuel markets are heavily dependent on imports, basically from Russian Federation. Consequently, the country is exposed to external economic shocks. For example, current situation around Ukraine breeds a fertile ground for economic instability in Armenia, high fluctuation of exchange rates, jeopardizes food security and generates other potential risks and predicaments for Armenia's small economy. Among the members of Commonwealth of Independent States (CIS), the most extensive trade turnover Armenia has with Russia (in 2020 the export to Russia comprised \$680,357.2*, whereas the total amount of imports from Russia in 2020 was \$1 495 201,9). As for exports and imports of Armenia, the share of Russian Federation in 2020 was the biggest among all other trade partner countries comprising 26.8% and 32.6%, respectively. As a consequence, Armenia is sensitive towards shocks impacting the Russian economy.

Potentially fragile situation around Nagorno-Karabakh contributes to the instability in the region. The periodic tensions across the borders destabilize regional situation which adversely impacts overall economic climate in Armenia resulting in for example declining foreign direct investments (FDIs) as business investors classify the country as high-risk (for example, in 2018 FDIs in Armenia counted to be 128 845.8mln AMD, in 2019 they substantially decreased to 48 802.4mln AMD and in 2020 the FDIs in Armenia amounted to 22 813.1mln AMD**).

The economic activity level in Armenia has improved since the beginning of the year by 18.5% compared to June 2021 and 17% compared to May 2022 basically due to the inflow of Russians and Russian companies to Armenia, since here they have an opportunity to operate without restrictions caused by sanctions against Russia. However, the positive influence on the GDP/ economic growth in Armenia is not inclusive, and doesn't have a positive impact on vulnerable people, who are facing increased prices of goods, service and housing.

The inflow of Russians caused rising prices of certain services to increase to a greater extent. Namely, the house rents hiked drastically causing the revenues of the landlords to considerably enlarge. However, the housing market is mostly based on informal relations as parties usually do not have contractual agreements and the generated revenue from the house rents is not officially registered and taxed. The increased rents doesn't have a multiply effect through a redistribution mechanism that taxation would normally entail. Additionally, conditioned with the same reason, the number of business entities operating in Armenia increased leading to more economic activity in Armenia. Nevertheless, it is too early to determine the overall impact of the increased growth rate and changed economic landscape in Armenia and how it will impact all layers of society over time, as these elements cannot be seen in isolation from a forthcoming global recession and continued prices hikes of goods and services.

Figure 1: Economic activity in 2022, compared to previous time period in the same year, %



Source: Statistical Committee of the Republic of Armenia, www.armstat.am

*Armenian Statistical Committee, *External Economic Activity, Share of main trade partners in the exports of the Republic of Armenia*

**Armenian Statistical Committee, *See Net inflows and net stocks of foreign direct investment (FDI) by type of activity of the Republic of Armenia*

EXCHANGE RATE, CONSUMER PRICE INDEX AND FOOD PRICE INFLATION

Exchange rate, AMD vs. USD and AMD vs. RUB

Since the beginning of the situation around Ukraine in late February 2022, the USD kept falling sharply continuing its downward tendency in April, May, June, and in July 2022 it recorded the lowest ever value: 410 AMD per 1 USD.

As for Armenian Dram (AMD) and Russian Ruble, the lowest exchange rate was recorded in March comprising 4.5 AMD per 1 Ruble. However, in a very short period Ruble started to appreciate against Armenian Dram and in July it was 7.1 AMD per 1 Ruble, which is slightly lower than it was in June: 7.5 AMD per 1 Ruble (the highest result for the last couple of months). This appreciation is primarily connected with the request of Russia to pay for its exported fossil fuels exclusively by Russian Rubles, therefore increased demand for Ruble.

On the one hand the appreciation of Ruble might seem beneficial for Armenian population as there are many economic migrants in Russia who then transfer their earnings to their families in Armenia. From this perspective, the higher the exchange rate the bigger the income of these families in Armenia. In June 2022, net inflow of money transfers to individuals in Armenia via banking system from Russian Federation amounted to US\$ 420,545 USD, while from the US was US\$35,353*. On the other hand, however, as the ruble value is increasing the prices of imported goods become more expensive for the Armenian consumer, and as Russia is Armenia's largest trade partner, the appreciation of the Ruble has both a negative and positive impact on the Armenian economy. Similarly, the prices of goods paid in US Dollars are decreasing because of the depreciation of the USD to the Armenian Dram. If shops are adjusting the prices accordingly (lowering them), the consumers may change purchasing behavior and consume more of the cheaper products than the Russian imported ones.

Figure 2: Exchange rate (AMD/USD), July 2021 – July 2022 (in AMD)

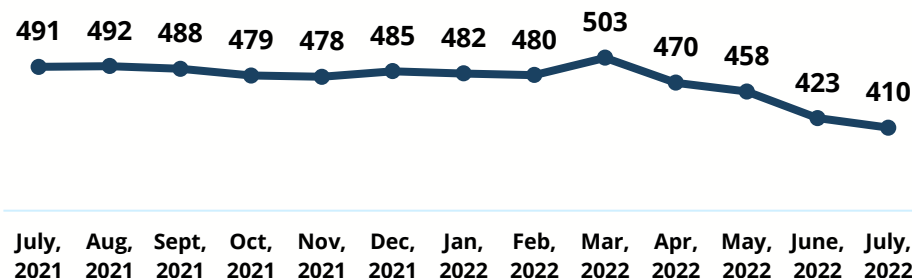
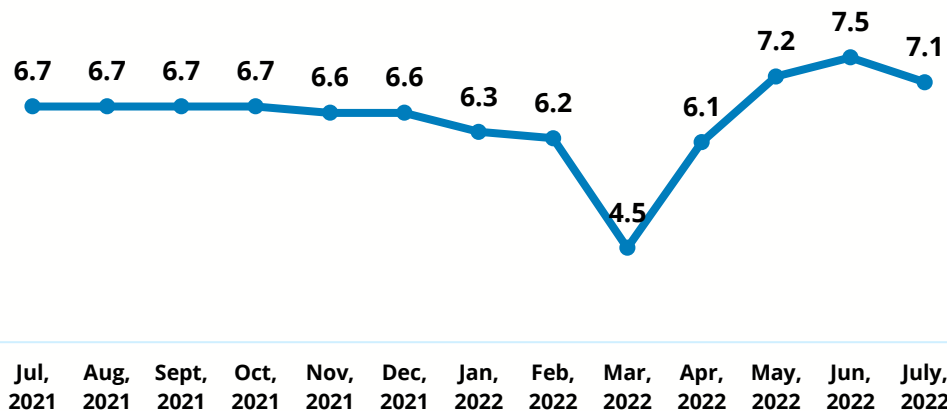


Figure 3: Exchange rate (AMD/Rubble), July 2021 – July 2022 (in AMD)



Source: Central Bank of Armenia

EXCHANGE RATE, CONSUMER PRICE INDEX AND FOOD PRICE INFLATION

Consumer price index and food price inflation

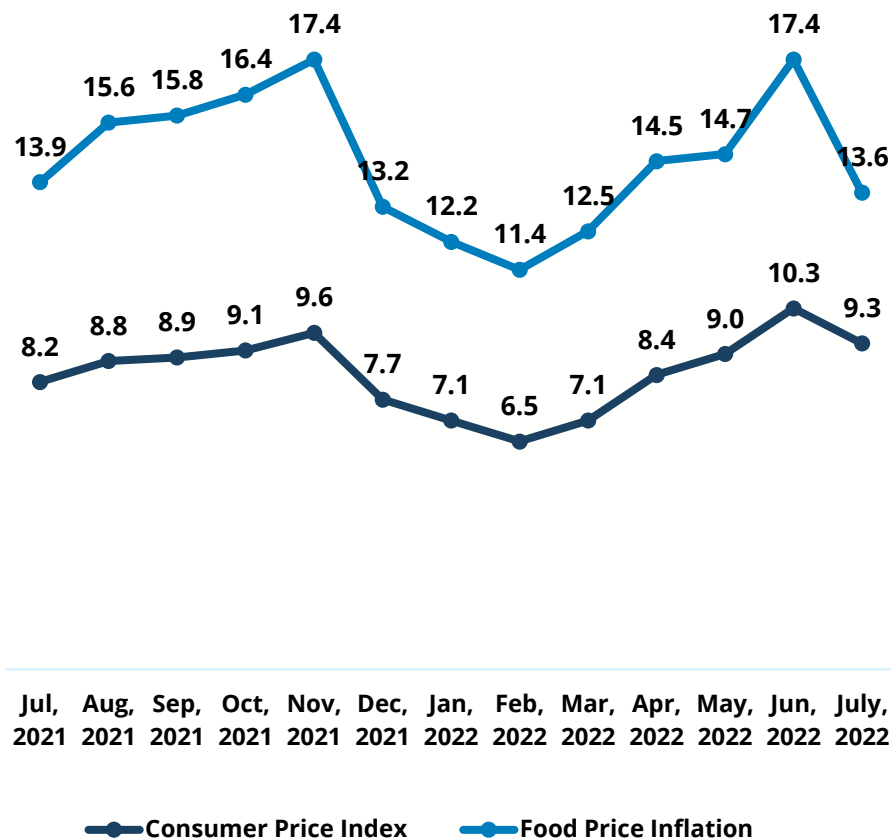
Consumer Price Index (CPI) and food prices in Armenia demonstrated permanent increase since 2020. First, this increase was conditioned by Covid-19 outbreak, however the most striking growth of prices was detected after the escalation of Nagorno-Karabakh conflict (especially in April 2021 – December 2021) and then the prices reached their peak because of the situation in Ukraine.

In July 2022, the Consumer Price Index (CPI) including food and non-food items comprised 9.3 percent compared to July 2021. Compared to June 2022 it demonstrated 1 percentage point decrease. Food price inflation in July 2022 was 13.6 percent compared to July 2021. It showed a decrease by 4.6 percent compared to June 2022. Though a slightly decreasing tendency is observed in prices across the country, they remain relatively high and puts pressure on the already challenged purchasing power of particularly vulnerable households in Armenia lowering their standard of living.

Consumer price index of non-food items in July 2022 comprised 8.2 percent compared to July 2021. It constituted 0.5 percent compared to June 2022.

Monitoring CPIs and prices of food and non-alcohol beverages in urban areas of the regions the highest CPI rate compared to July 2021 was seen in Yerevan (10.1 percent), followed by Kotayk (9.3 percent) and then Gegharkunik regions (9.1 percent). In Lori and Syunik regions this indicator was also comparatively high: 8.8 and 8.5 percent respectively. As for the prices of food and non-alcohol beverages the highest level is again noticeable in Yerevan (14.2 percent), then in Lori (14 percent) followed by Kotayk and Gegharkunik with 13.8 percent each. In Syunik and Tavush, the prices are also high reaching 13.7 and 13.6 percent respectively.

Figure 4: Consumer Price Index and Food Price Inflation, July 2021- July 2022, %



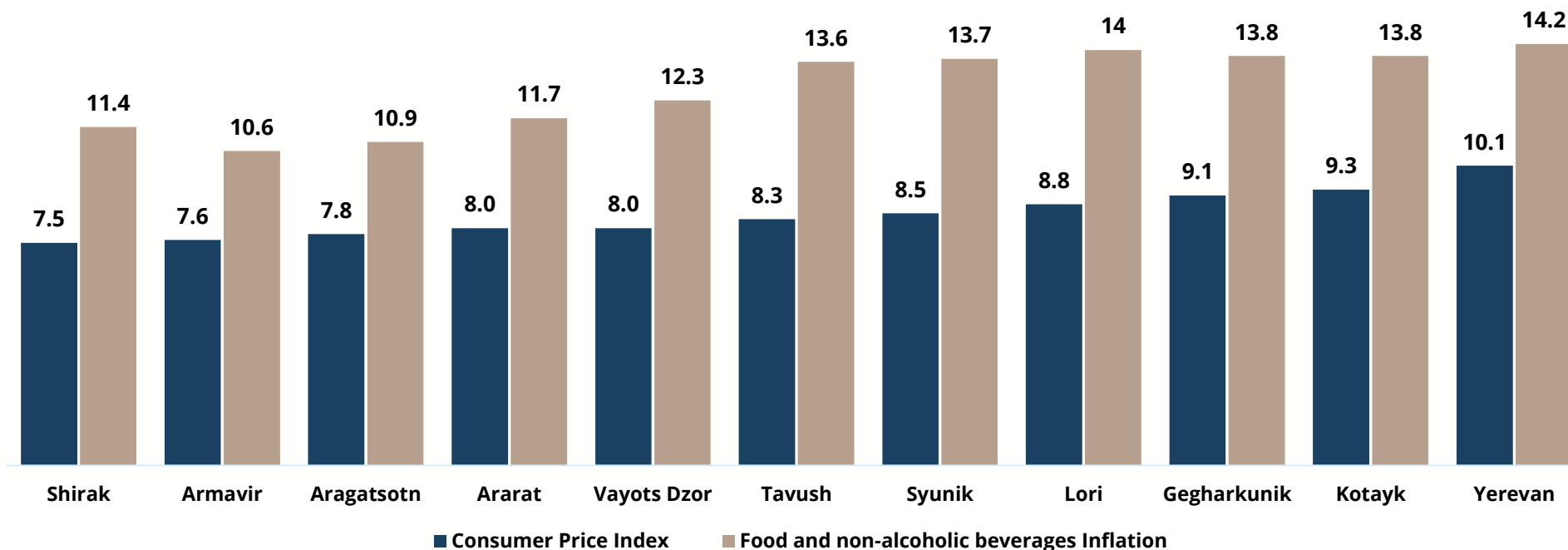
Source: Central Bank of Armenia *Consumer Price Index in the Republic of Armenia January-July 2022*

EXCHANGE RATE, CONSUMER PRICE INDEX AND FOOD PRICE INFLATION

Consumer price index and food price inflation

High and rising prices are unquestionably detrimental for the whole economy as they provoke population to adopt various coping mechanisms such as borrowing money or spending their savings. The latter in particular has further impact on the economy resulting in shrinking supply of money therefore rising interest rates and diminishing investments. As a result, real GDP contraction becomes inevitable. According to the 4th nationwide Food Security and Vulnerability Assessment carried out by World Food Programme in May-June 2022, 40 percent of the households being interviewed mentioned spending their savings as a livelihood coping strategy in case of financial hardships. Three regions where the majority of households mentioned spending savings as the most preferable coping strategy were Yerevan (33.8 percent), Kotayk (9.7 percent), and Gegharkunik (9 percent). Similarly, these are the marzes where the highest CPI and food and non-alcoholic beverages inflation were detected.

Figure 5: Consumer Price Index and Food Price Inflation per region, July 2022, %



Source: Statistical Committee of the Republic of Armenia

MARKET PRICES OF SELECTED FOOD COMMODITIES AND FUEL

Among essential food groups only “vegetable” experienced price decrease compared to July 2021 (-0.9 percent). On the other hand, “fruit” has the highest inflation rate (21.7 percent) compared to July 2021 followed by “Bread and cereals” group (20.6 percent). Comparing the prices of these food groups to the previous month, the following is noted: “vegetable” experienced approximately 33 percent decrease meaning that in July 2022 vegetables were much cheaper than in June 2022. This is the most significant reduction of prices among all the food groups. What’s more, fruits have become cheaper by 8.9 percent compared to June 2022 as well. “Oils and fats” together with “fish and seafood” have recorded minor yet 1.8 and 0.2 percent price reduction. Other food groups compared to June 2022 recorded price increase, particularly bread and cereals increased by 0.9 percent, meat by 2.2 percent, milk, cheese and eggs by 1 percent. Price reduction of “vegetables” and “fruit” groups are likely linked to the seasonal factor as the supply of these commodities is high in summer months which results in price decrease.

As one of the most consumed commodities, lentils, had the highest annual inflation rate (36 percent) compared to July 2021. The second food commodity experiencing remarkable inflation is buckwheat (27 percent) compared to July 2021. Both commodities are heavily imported from Russia, and the increased price is likely tied to the appreciation of Russian Ruble.

Wheat flour prices increased by 13 percent in July 2022 compared to July 2021. However, the prices of above-mentioned commodities should be monitored after the import from Russia in autumn. Rice, on the other hand, registered 11 percent price increase in July 2022 compared to July 2021. Additionally, pasta had relatively high inflation rate (27 percent) compared to July 2021. Cabbage and carrot had annual price reduction by 57 and 47 percent, respectively.

Observation of monthly inflation fluctuations demonstrated that all food commodities experienced price reduction except for pasta which had 2 percent price increase compared to June 2022. The highest monthly price reduction was detected for cabbage, carrot and onion (-56, -38 and -16 percent respectively). These are locally produced.

Figure 6: Consumer prices of selected food groups, July 2022 vs July 2021, %

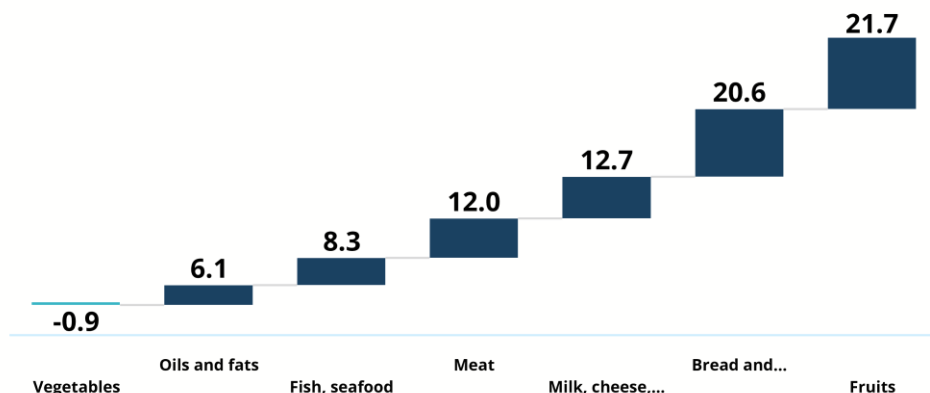
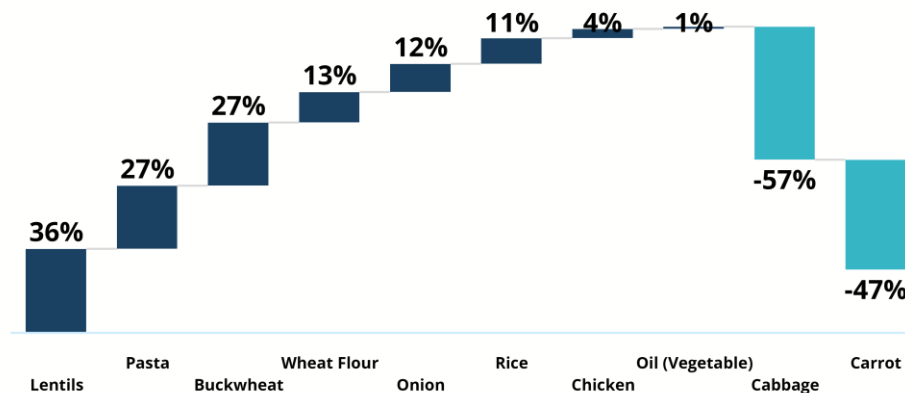


Figure 7: Annual Inflation of selected food items, %



Source: Statistical Committee of the Republic of Armenia

MARKET PRICES OF SELECTED FOOD COMMODITIES AND FUEL

Being highly dependent on the imports of petrol and gasoline (mostly from Russia) means that inner market in Armenia is extremely sensitive towards external shocks. Diesel inflation comprised 44 percent compared to July 2021, whereas petrol-gasoline inflation has been 9 percent for the reporting period. Though it is not heating period and households do not have to pay excessive bills for their utilities, agricultural works are at their peak demanding the biggest share of the production costs to allocate for fuel. Additionally, fuel price increase makes logistics more complicated resulting in high cargo and passenger traffic tariffs. Moreover, high fuel prices are going to disrupt household budgets augmenting the part of transportation costs in their budgets. If remaining constant or further rising, the situation is going to be critical for HHs in Armenia, particularly for vulnerable ones.

The monthly fluctuation for diesel is -1 percent meaning that diesel has become slightly cheaper than in June 2022, and prices for fuel has risen insignificantly compared to June 2022. It is important to note that the import and export of goods to and from Armenia are basically done through Georgia (Lars) and the vehicles use diesel. Thus, this also impacts the increase of food and non-food items prices.

Table 1: Annual and monthly inflation of selected food items

Commodity	July 2021 (in AMD)	July 2022 (in AMD)	% change July 2022 vs July 2021 (+/10%)	June 2022 (in AMD)	July 2022 (in AMD)	% change June 2022 vs July 2022 (+/10%)
Pasta	646	822	27	802	822	2
Lentils	1,074	1,460	36	1,479	1,460	-1
Buckwheat	1,140	1,448	27	1,463	1,448	-1
Rice	936	1,042	11	1,063	1,042	-2
Wheat Flour	445	501	13	511	501	-2
Oil (Vegetable)	1,239	1,246	1	1,293	1,246	-2
Chicken	1,665	1,736	4	1,763	1,736	-2
Fuel (diesel)	456	654	44	660	654	-1
Fuel (petrol-gasoline)	475	516	9	514	516	0

Source: Statistical Committee of the Republic of Armenia

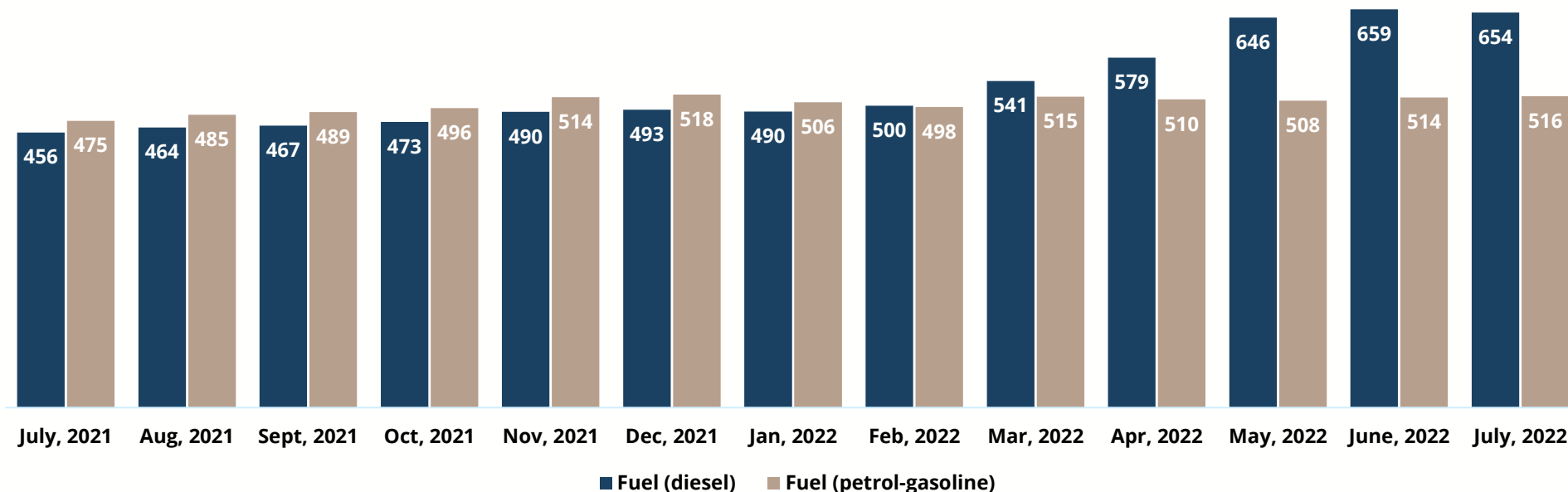
MARKET PRICES OF SELECTED FOOD COMMODITIES AND FUEL

Overall, the self-sufficiency ratio of Armenia for the majority of essential food items is considerably low and for some of them it is even 0. This means that Armenian market is very dependent on external factors (prices, supply, exchange rates, etc.) and is too sensitive towards external shocks which makes the country quite vulnerable. This situation is vital to consider from the perspective of food security as well especially paying attention to food availability and accessibility components of the latter. Namely, disruption of global food systems may jeopardize food availability in the country which may lead to exorbitant prices undermining food accessibility among various groups of population. Considering geopolitical volatile landscape and inclination of Armenia to both internal and external shocks the food security situation here becomes seriously fragile. Above discussed price fluctuations are the evidence of that indicating the urgent need of appropriate measures to enact to lessen the country's exposure to shocks and dependency from external factors.

Table 2: Self-sufficiency ratio of RA per selected food commodities

Food Item	Self - sufficiency ratio
Fish	109.0%
Potato	101.1%
Cabbage	100.5%
Onion	91.4%
Carrot	78.6%
Wheat	24.4%
Chicken	23.9%
Lentils	5.9%
Oil	0.9%
Rice	0

Figure 8: Price of fuel (petrol-gasoline and diesel), AMD



Source: Statistical Committee of the Republic of Armenia

FOOD PRICE INFLATION RATES, RAINFALL AND VEGETATION PER REGIONS

Climate changes, in particular the volatility of rainfall, affect agricultural production in Armenia also considering that there are limited irrigation systems in place and very often crop fields are dependent only on rainfall. As per Climate Risk and Vulnerability Assessment in Armenia, high rainfall can affect the spring planting. Additionally, use of heavy farm equipment on wet soils is detrimental to soil structure and quality of crop yield. On the other hand, cropping environments appear to be most vulnerable to reducing grain yields and increasing erosion risk, if rainfall declines. In most agricultural areas of Armenia summer rainfall does not completely meet seasonal crop water requirements, thus supplemental irrigation is required for maximum productivity, particularly on sandy or compacted soils with low water-holding capacity.

The maps below show the average and actual levels of rainfall and vegetation per region. The monthly monitoring of rainfall and vegetation per region in Armenia showcased that actual levels of rainfall were noticeably lower than it was predicted. Yet, the highest actual rainfall level in July 2022 was recorded in Lori, Tavush, Aragatsotn. In Syunik the level of rainfall decreased compared to June 2022, overall recording a considerable fall from May. Vegetation is the highest in Lori, Tavush and Gegharkunik regions (all three regions are heavily forest-covered).

Average Rainfall in July 2022 (mm)

Actual Rainfall in July 2022 (mm)

Average Normalized Difference Vegetation Index (NDVI) in July 2022

Actual Normalized Difference Vegetation Index (NDVI) in July 2022

