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# The food price situation in Central Asia

The COVID-19 pandemic has had serious implications for food security around the world. The Russian-Ukrainian military conflict led to another surge in food prices. Central Asia, despite its diverse levels of economic development, has undoubtedly experienced a tangible shock from the food crisis of recent years. Food inflation in the region has many aspects to it. It was initially determined by global food price trends and the depreciation of national currencies during the pandemic period. Several national factors affected the local food situation: a series of adverse weather conditions, the different fiscal consequences of pandemic, and national strategic policies in support of agri-food exports. The countries of the region used all regulatory measures to protect their markets - export restrictions and export quotas, import subsidies and VAT zeroing, as well as subsidies for production and support to consumers. The forecasts for food prices in the region in 2023/2024 are not optimistic: prices will remain relatively high, and future changes largely depend on the still volatile geopolitical situation. The impact of COVID-19 may have long-term consequences for Central Asia. Over the coming 10-20 years, the development of agriculture in the region will be dictated by the need to address the growing threats of resource shortages (thereby ensuring that urgent needs can still be met during a crisis situation), the modernisation of the currently prevalent models of food systems, and growing problems relating to biosafety and nutrition.

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## Introduction

The COVID-19 pandemic that emerged in 2019 had a huge impact on food security all over the world, something which has extensively been discussed in the literature. At the very end of the pandemic, just when hopes for an easing of the global food crisis had begun to appear, military conflict between two significant suppliers to the world agricultural market - Russia and Ukraine - broke out, leading to a renewed surge in food prices. Since that initial shock, food price inflation has subsided significantly, but prices remain above pre-pandemic levels.

Food inflation affects different regions and strata of the population in different ways: households who spend a higher share of their budget on budget normally suffer deeper and take longer to recover. Central Asia, despite its diverse levels of economic development, has undoubtedly experienced a tangible shock from the food crisis of recent years. In this article, we shall investigate the main drivers of food price inflation in the region; we shall also describe the major government actions that have been taken to mitigate the consequences of crisis. An attempt to describe the price outlook for 2023/24 will be made at the end of the paper.

## General description of the region

Central Asia is a vast landlocked region of Asia. Precise definitions of the region vary between institutions. FAO describes the region as including Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Turkey, and Uzbekistan (FAO, 2023). For the World Bank, Central Asia comprises the countries of Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan<sup>1</sup>. OECD also

includes in Central Asia such countries as Afghanistan and Mongolia<sup>2</sup>. In the Soviet Union, the term "Middle Asia" was used to define the region, which was deemed to include Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan as well as Kazakhstan. Since Turkmenistan presents statistical data on its development at the international level rather poorly, for the purposes of this article we shall exclude this country from consideration. Thus, the article deals mainly with four major countries: Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan.

The region is rather diverse in terms of its economic development: Kazakhstan belongs to the group of middle-income countries, while Tajikistan and Kyrgyzstan belong to the poorest countries of the world. The level of poverty and state of undernourishment vary considerably across the region. According to WDI data, Kazakhstan's per capita GDP in 2021 was \$28,684, while Tajikistan's was \$4,288 (in PPP, current international \$). The poverty headcount ratio at national poverty lines (% of population) in 2018-2021 in Kazakhstan was around 4.8-5.2%, while in Tajikistan it was more than 27% (World Bank, 2023). In 2022, Global Food Security Index scores for the economies of the region ranged from 56.7 (Ranked 75 out of 113 countries) in Tajikistan to 72.1 (Ranked 32) in Kazakhstan (The Economist Group, 2022).

Nevertheless, there is a commonality in the region's development. The states of the region have made significant progress in their development since 2000 and have real growth prospects. The total GDP of the countries has increased 8.6 times, the accumulated volume of incoming foreign investments has grown 17.2 times, and the foreign trade turnover of goods is now 8.4 times greater (Vinokurov *et al.*, 2023). The growing population of the region represents a capacious sales market and an increase in available labour resources. The population of 77 million people

<sup>1</sup> See e.g. <https://www.worldbank.org/en/region/eca/brief/central-asia>

<sup>2</sup> See e.g. <https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-central-asia-5305f172>

continues to grow at a rate of almost 2% annually. Over the past 20 years, the number of residents in the region has increased 1.4 times. According to UN estimates, this growth will continue at least until 2040, and a large proportion of the young population will ensure a stable supply of labour resources. Due to the dynamic rate of economic growth, the income level in Central Asian countries is now starting to converge with the levels of developed countries. In Kazakhstan, GDP in PPP per capita lags behind the level of developed countries twice, in Turkmenistan the ratio is three times, and in other Central Asian countries the gap separating them from developed economies is greater, ranging from 7 to 14 times (Vinokurov *et al.*, 2023).

The main part of the population of the countries of Central Asia is still the rural population. In 2021, the share of the rural population in Tajikistan was 72%, in Kyrgyzstan 63%, in Uzbekistan 50% and Kazakhstan 42% (Figure 1).

Since domestic production of basic foods fails to meet overall demand, these countries must rely on agricultural imports (2), leaving them vulnerable to global price fluctuations and impacting their export revenues.

It is also important to note that these countries depend significantly on supply of food from Russia (25-55%) and to a smaller extent, from Ukraine (5-10%). This import dependence is especially noticeable in the case of wheat. Consequently, these countries are exposed not only to global food price fluctuations, but also to price inflation in Russia. The Russian-Ukrainian conflict could, in theory, seriously affect them. Moreover, dependence on food imports from Russia can affect domestic food prices in the Central Asia countries due to exchange rate fluctuations in Russia, which have been marked since the beginning of COVID-19 pandemic, and especially so since the commencement of military operations in Ukraine.

Furthermore, at the beginning of pandemic there were serious concerns at the international level about the worsening of the fiscal situation in the Central Asia due to (i) the sudden surge in governmental gross debts and (ii) the sudden fall in remittances which normally comprise the lion's share of national finance in countries such as Tajikistan, Kyrgyzstan and Uzbekistan. It was feared in some quarters that this situation could hamper the ability of governments

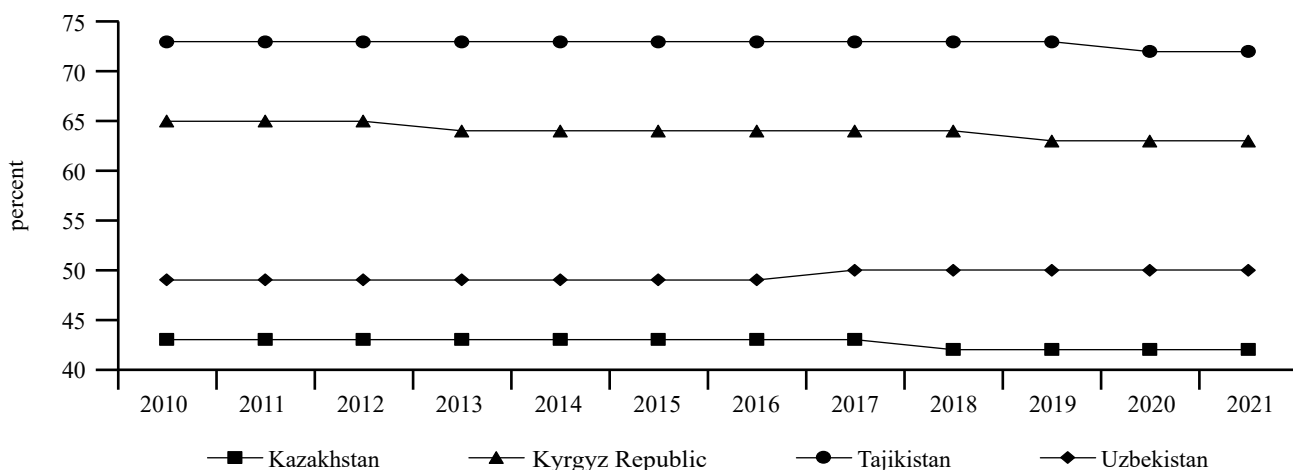


Figure 1: Share of rural population in total population in Central Asia.

Source: Own composition based on FAOSTAT (2023).

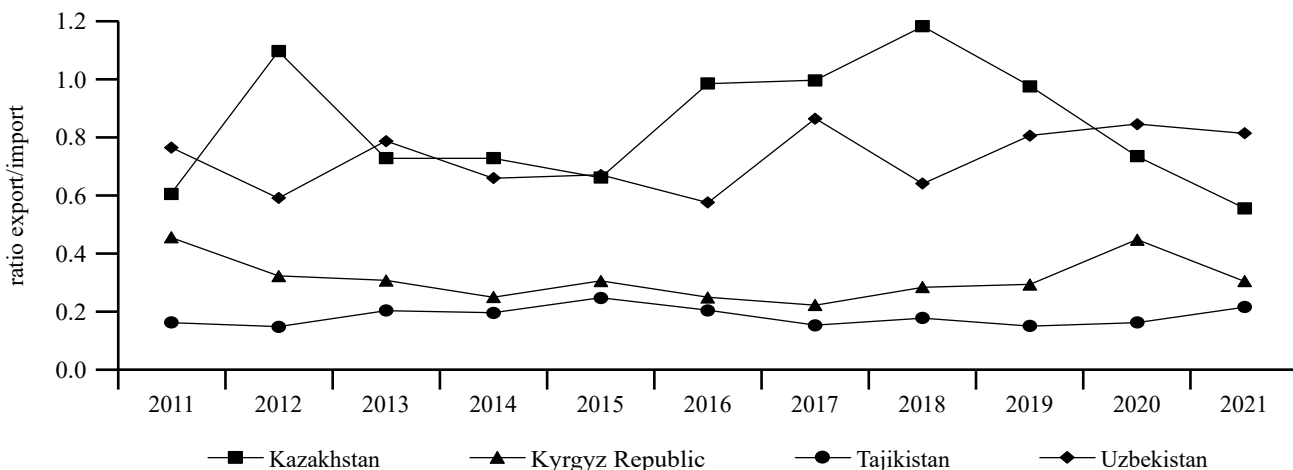
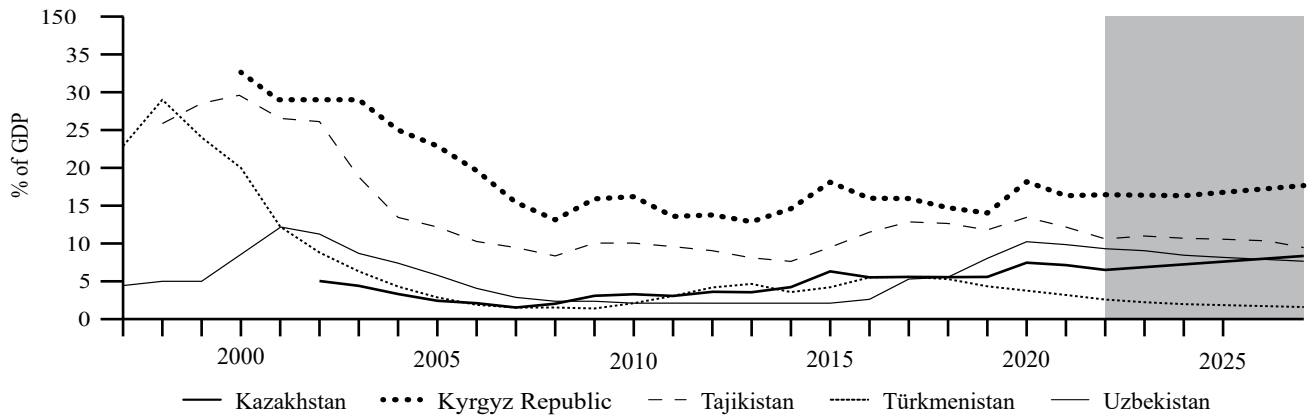


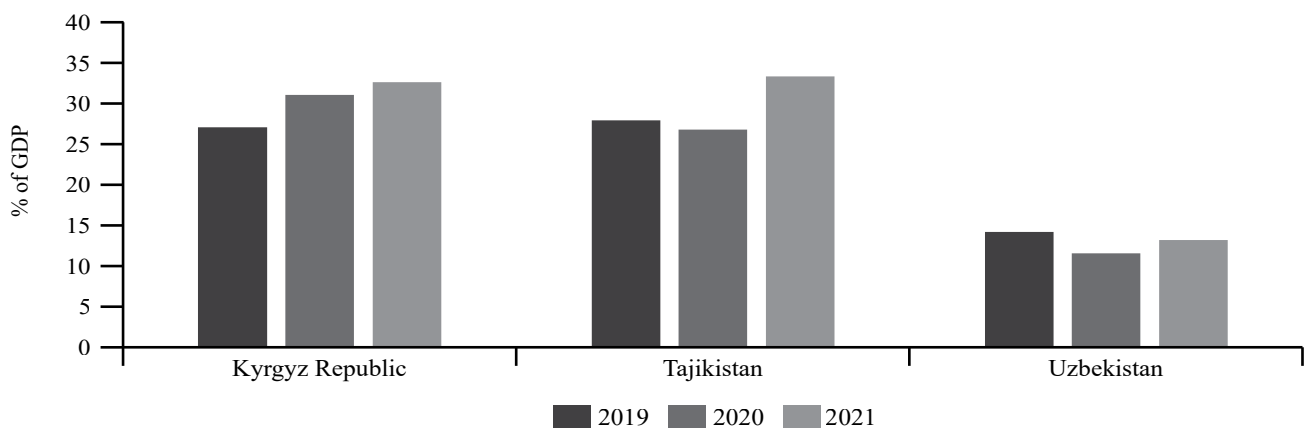
Figure 2: Share of agricultural export in import in Central Asia.

Source: Own composition based on FAOSTAT (2023).



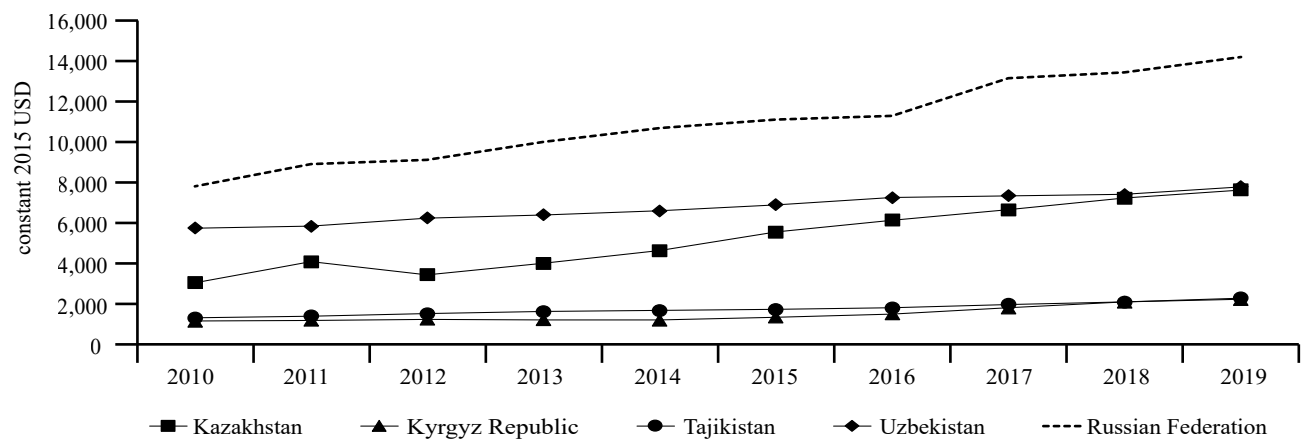
**Figure 3:** General government gross debt in Central Asia, % of the GDP.

Source: IMF (2023)



**Figure 4:** Personal remittances received in Central Asia (% of GDP).

Source: Own composition based on World Bank (2023) data.



**Figure 5:** Value added per worker in agriculture, forestry, and fishing in Central Asia (constant 2015 USD).

Note: Russia's data is provided for benchmarking.

Source: Own composition based on World Bank (2023) data.

and the private sector to cope with food inflation and food security risks in Central Asian countries. However, neither of these feared outcomes ultimately happened (Figure 3 and 4).

The agri-food sector plays an important role in the economy of the Central Asian countries. Agriculture accounts for a large share of GDP in percentage terms. Uzbekistan and Tajikistan are at the top in this respect, with 25.0% and 24.0%, respectively. Kyrgyzstan has 14.7% and Kazakhstan

5.0% (World Bank, 2023). Agriculture is very labour intensive in most of the countries of the region. Productivity in the sector is not very high and apart from in Kazakhstan, is not growing significantly (Figure 5). The low productivity of the food sector, coupled with a high dependence on food imports from a limited number of countries, increases the vulnerability of the food security system, as well as the risks of price fluctuations.

## Food price inflation

Contrary to initial expectations, food inflation in Central Asia in general has not been so dramatic. In each of the four countries analysed, price dynamics over the last 4½ years have been very different. In Kazakhstan, there was a spike in prices immediately after the beginning of the Russian-Ukrainian conflict, but then prices reverted to previous levels. In Tajikistan, food prices reacted by growing in response to the pandemic and to the start of the war, but since then, the country has been experiencing deflation. Food prices in Uzbekistan are subject to very high seasonal fluctuations, but the trend has remained stable throughout the years under consideration. It is only Kyrgyzstan that has demonstrated a noticeable increase in food prices: it reacted both to the start of the pandemic and to the war (Figure 6). However, the prices of individual food may have spiked significantly during this period without being reflected in the overall average trend. Thus, for instance, it is worth pointing out that in Uzbekistan in May-June 2022, sugar prices increased by 45%, and later prices returned to their previous level. Meanwhile, in 2023 right across the whole region onion prices are surging due to the poor yield outlook.

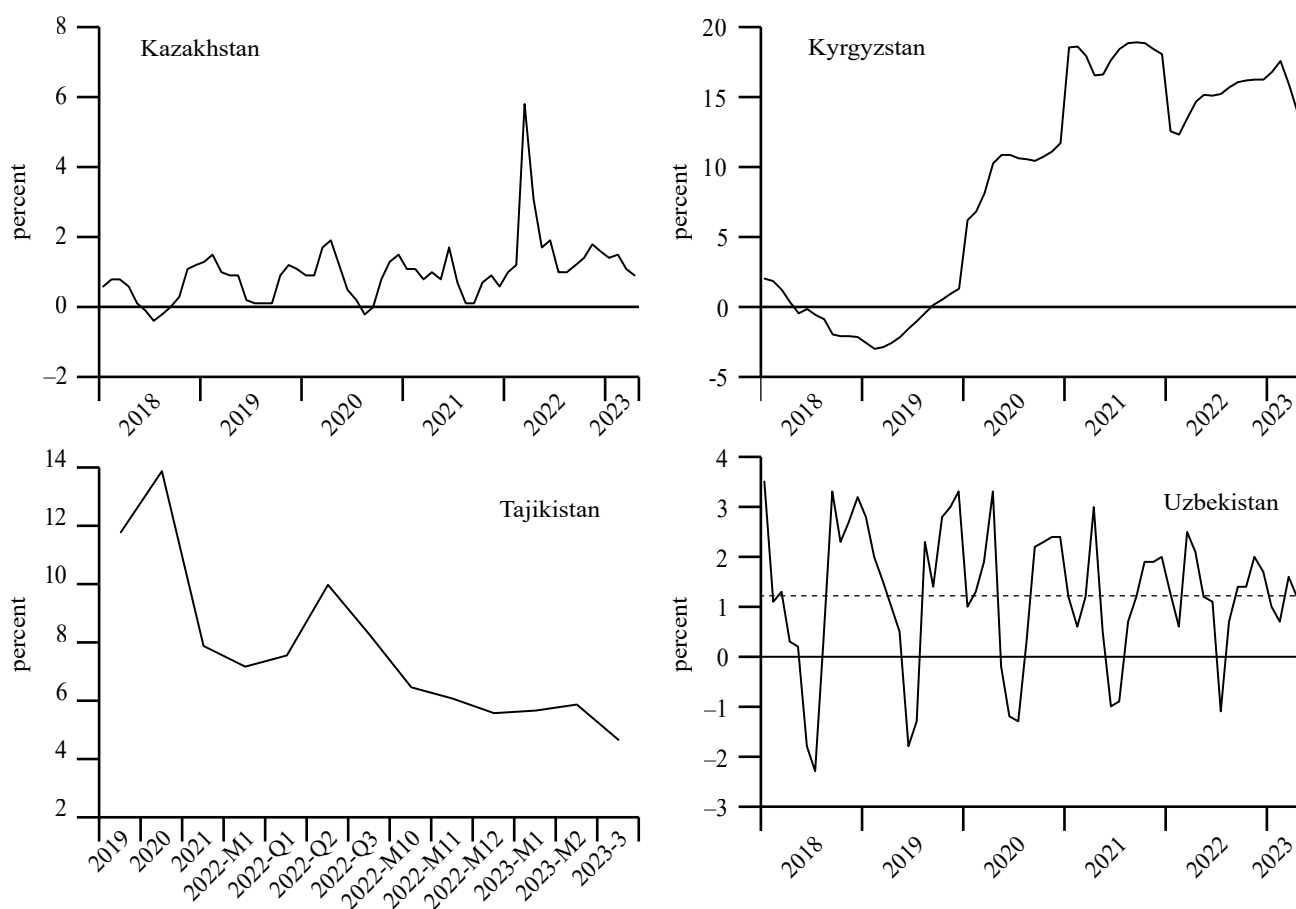
Russian food prices did not affect the markets of the economies of Central Asia despite Russia being the main supplier of food to the region. Also, there is no direct cor-

relation between inflation in the economies of Central Asia and the exchange rate of the Russian rouble.

## Factors behind food inflation

We can identify several factors behind food inflation in Central Asia. The first and main driver of food prices in the region is **global price trends**, which are well described in the literature (growth in prices for inputs, mainly for energy and fertilisers, disruption of food chains, restrictive measures for exports, decline in production due to quarantine restrictions and limitations for migration, etc.). The economies of Central Asia are relatively open to global markets, so global trends influence their own food price situation directly. Moreover, they are also heavily dependent on supplies of food from Russia; thus, the situation on the Russian food market also affects food prices in the region.

The next driver is **depreciation of national currencies**. The damage wrought by international sanctions on the rouble is sowing varying levels of alarm in currency markets in Kazakhstan, Kyrgyzstan, and Tajikistan, whose economies are all strongly tied to that of Russia. However, Uzbekistan appears to be holding firm. The graphs clearly show that the two global events under consideration led to the depreciation of the national currencies in all these countries.



**Figure 6:** Monthly food prices indices in Central Asia.

Note: Kazakhstan data are not seasonally adjusted

Source: Own composition based on Corresponding National Statistic Agencies.

Third, there are purely **national factors behind food inflation**. The long-term regional factor in the growth of food prices is undoubtedly population growth coupled with a slow increase in the efficiency of local production. In recent years, as uncertainty in the food markets has risen, buying panic has also been driving up prices in these countries, as in the example of sugar in Uzbekistan described previously. It was a global trend during the COVID-19 pandemic: researchers noted a type of herd behaviour, whereby consumers started to buy uncommonly huge amounts of products because of a perception of scarcity. However, regionally speaking, this phenomenon needs to be understood within a much broader context: over the last 40-50 years all post-Soviet countries, including Central Asia, have experienced food shortages. Panic buying has become part of social psychology.

During the COVID-19 pandemic, as a reaction to the fall in incomes of the population, many countries, including some of those that are considered in this paper, introduced additional monetary payments to the population. The Kyrgyz government, for instance, increased the salaries of state employees and pensions. Kazakhstan launched a broad programme of support for vulnerable groups within the population, which included direct subsidies to the unemployed, food support to households, etc. In Uzbekistan, a large cross-section of the population was granted a tax exemption; subsidies were given to the unemployed, and so on. Such monetary injections into the economy could also have had an inflationary effect, although the degree of this influence has not yet been quantitatively assessed.

Another factor of uncertainty that pushed prices for certain food products in the region upward is a **series of adverse weather conditions** in 2020-2023. In 2021, severe drought in Central Asia caused a mass loss of livestock and a lack of irrigation water. In spring of the same year, late frost in Uzbekistan affected orchards. In winter at the start of 2023, there was extreme cold and snowfall across all the region: the temperature in Astana fell below  $-30^{\circ}\text{C}$ , and even Turkmenistan, typically the warmest country in the region, was blanketed in white. All of these events have affected the agricultural production of the current calendar year.

Lastly, all countries of the region not long ago adopted **national strategies for support of agricultural export**. In 2018, Kyrgyzstan notably approved a state programme of export development for 2019-2022 intended to provide support to some priority sectors, including dairy production and processing of fruits and vegetables. In Tajikistan, the Agency for Export was established under the direction of the country's government, its mission being to enhance the country's export potential and to assist exporters in promoting their products to foreign markets. In Uzbekistan a decision was made to establish the UzAgroExportBank joint-stock commercial bank, one of whose goals is to finance investment projects for the development of production and exports of agricultural goods. Among the export support measures, partial reimbursement for the costs of exporters' participation in international specialised exhibitions was made. It is one of the most frequently practised measures of financial support in the countries of the region.

The main goal of the national export strategy of Kazakhstan is the creation of conditions for increasing the volume of

non-resource exports by 1½ times by 2022, as well as diversifying sales markets and exports of goods and services. The programme is aimed at creating a unified and holistic policy that provides the right conditions for growth of non-commodity exports to double by 2025 and triple by 2040 in line with the Kazakhstan-2050 Strategy. The programme defines a promising export basket and priority markets, and features both specific measures promoting Kazakhstani exports and a system of measurable target outcomes enabling the effectiveness of its implementation to be monitored. Its main objectives are: (1) Strengthening the institutional framework supporting exporters; (2) Provision of financial and non-financial support measures for exporters; (3) Removal of barriers hindering the development of exports; (4) Improving the conditions for the development of exports of services.

Similar goals have been introduced in other Central Asian countries. All such programmes aim to bring into existence an institutional structure that increases the speed and efficiency of solving both operational and long-term issues related to the activities of exporters.

At the same time (coinciding with the onset of the COVID-19 pandemic), export restrictions were introduced in many countries to contain food prices, but already in 2021, it was apparent that exports of basic agri-food products had begun to grow. This development can also contribute to food inflation. Another poignant moment arose from the threat of sanctions from the European Union for helping to circumvent sanctions against Russia. Despite statements by European Council President Charles Michel at the EU-Central Asia summit that "the EU is not going to impose sanctions on Central Asian countries for circumventing restrictions on Russia," such a threat remains. In the final communiqué of the summit, the fact that this is so is expressly spelled out in one key paragraph. "The leaders stressed the importance of further expanding mutual trade and investment mechanisms to accelerate the socio-economic development of all parties," the communiqué said. "They also stressed the importance of close dialogue in the context of the European Union sanctions regime." Only time will tell how this difficult situation will ultimately affect food inflation.

## National and private sector measures taken to fight food inflation

Both national and private sector measures have been taken in the region. The Government of the Republic of Tajikistan has created an Interdepartmental Headquarters, which has developed an action plan to prevent the impact of possible risks on the national economy. This Anti-Crisis Action Plan includes the issues of providing consumer markets with essential goods, including flour, butter, meat, sugar, eggs, vegetables, increasing their production and stocks, preventing unreasonable price increases, supporting vulnerable segments of the population, labour migrants and entrepreneurship, ensuring the timely fulfilment of the state's social obligations, and preventing possible risks in the banking system.

The measures involve support for vulnerable segments of the population, labour migrants and entrepreneurship;

providing loans to industrial entrepreneurs at low interest rates; and timely provision and fulfilment of the state's social obligations. Several measures aimed at improving the investment climate, postponing non-tax audits, attracting additional financial assistance, etc. were also carried out. In the sphere of trade, the country has temporarily imposed a ban on the export of onions, carrots, potatoes until prices stabilise in the market.

A contradictory policy was adopted in Kyrgyzstan. On one hand, the government increased salaries to education and health workers and pensions, and subsidised both loans and public investments, thereby fuelling demand and inflationary pressures. Instead of exporting gold as in the past, in 2022 the NBKR purchased it, thereby accumulating reserves and injecting money in the economy - this was the main instrument of monetary expansion. On the other hand, to contain the inflation, the NBKR's key policy rate was increased from 8.5% to 14% during 2022 but lowered to 13% at the end of November 2022. In an attempt to limit imported inflation, the government exempted imports of sugar and vegetable oil from VAT. It also introduced a temporary ban on exports of wheat and some other food products and is now considering a ban on fertiliser exports: these all are products that are traditionally imported, not exported by the country.

With a view to the stabilisation of prices for socially significant food products, two key mechanisms were implemented in Kazakhstan: the financing of business entities within the framework of the "circulating scheme" and commodity interventions of regional stabilisation funds. According to the first mechanism, local executive bodies allocated about 57.6 billion tenge to stimulate production and contain prices in the retail segment. The key principle of this mechanism is the allocation of working capital to business entities at a rate of zero interest; in return, manufacturers and retail entities undertake to sell goods at below-market prices. According to the second mechanism, food stocks are formed due to the allocation of stabilisation funds. Formed stocks will be released to the domestic market, also at below-market prices, especially during the off-season, or in the event of an increase in prices on the domestic market.

The issue of food prices in Uzbekistan is under special control. Daily monitoring of prices in dekhkan (farmer) markets is carried out by different government bodies. The data of such monitoring is generally open and published on the websites of ministries and departments. For example, the Ministry of Economy publishes daily food prices at the largest wholesale market in Tashkent.

Government measures taken in Uzbekistan included the zeroing of customs duties and VAT, the diversification of supplies and a search for new logistics routes. There is a gradual phasing out of import restrictions and a reduction in export bans. The customs rates for specific types of fruits that Uzbekistan is not able to produce have been reset to zero. This measure enabled a significant reduction in the price of bananas in the domestic market, which in turn led to a significant increase in their consumption. Given that children make up most of the population, and that there are practically no local fruits in the off-season, this was a very necessary measure for Uzbekistan.

To sum up, the countries of the region used all regulatory measures to protect their markets: export restrictions and the introduction of export quotas, import subsidies and VAT zeroing on imported goods, subsidies for agricultural production, and various measures to support consumers, especially from low-income groups, etc. From this, it can be concluded that the trading system that has been built within the WTO for decades is experiencing a large-scale crisis.

## Outlook for 2023/24

The outlook for 2023/2024 in terms of food prices in the countries of the region is not so optimistic. Experts note that prices in the region will remain at a relatively elevated level, future changes largely depend on the geopolitical situation in the region. Over the past three years, we have seen several "black swans" that have completely changed the situation in the food markets.

It is most likely that there will be continued growth in prices for such important food products as sugar, butter, flour, meat products and for those foodstuffs where a given country significantly depends on imports; in practice, this means primarily imports from Kazakhstan and Russia. It is possible that there will be a geographical diversification of food imports into the country; if so, the importance of Turkey, Iran, and a few other Central Asian countries will increase in this regard.

As global food inflation goes down, inflation in the countries of the region can be expected to go down, too. In some countries, inflation may have its own dynamics as the effects of salary and pension increases ought still to be felt strongly in 2023, only gradually declining in 2024. However, an importance caveat needs to be observed: this prediction is based on the assumption that there will be no major exogenous shocks in the coming years.

Currently, it is difficult to talk about upcoming sharp rise in prices in the food market. Everything will depend primarily on the volume of a country's own production, which in the Central Asian countries is increasing every year in line with population growth. But it must also be acknowledged that the volume of agricultural production depends directly on unpredictable weather conditions, which will, in turn, affect the pricing chain if they turn adverse.

The tendency of governments to take short-term measures aimed at strengthening state support for domestic producers so as to stimulate production and saturate the domestic market, as well as reduce the level of import dependence, can be expected to continue.

A couple more general considerations should be noted about challenges that Central Asian countries can expect to face soon, if not already. The availability of natural resources such as fresh water and productive arable land is becoming increasingly constrained. Climate change and ongoing urbanisation constrains these already limited resources. Central Asian countries are still seeking a sound and coherent land and water resources policy. Despite declaring adherence to following United Nations SDGs, most of them still treat nature in a manner that is far from sustainable. Agriculture is seen as an important source of exports or as the main

livelihood for a significant share of rural population, while environmental regulation at a national level lags behind. Consequently, the pressure on land continues to grow, and agricultural practices remain far from efficient. The resilience of farmers and the rural population, when viewed in terms of their preparedness for emergencies and disaster risk management, is decreasing.

Climate change is a global issue, but evaluation of its impact on the Central Asia countries is complicated and need not always be negative. Melting glaciers in the mountains of Central Asia increases river flow and provides more water for irrigation. However, the regional drive to increase self-sufficiency in terms of food supply may also be increasing the impact of agriculture on the environment. Efforts to mitigate climate-related risks are being undermined by budget constraints and prioritising of funding for producers' subsidies, a trend which raises concerns for mid-term productivity growth in the Central Asian countries with high climate risks. The reduction of food losses and waste in the region is also very important in minimising environmental damage and increasing the efficiency of agricultural and food systems.

Innovation and digitalisation in the region is the new paradigm of agricultural development. The countries with larger economies such as Belarus, Kazakhstan, Russia, and Ukraine are already implementing digitalisation in various sectors of agriculture, developing e-commerce, together with various platforms for tracking product quality, using precision farming and drones. But outside of Kazakhstan, Central Asia has very limited capacity for public and private investment in digital agriculture. The development of scientific potential and the introduction of innovative solutions is becoming critically important to ensuring the sustainability and further development of agriculture in the Central Asia region.

Agriculture is no longer the main source of employment and income in rural areas for most countries, yet Uzbekistan, Tajikistan and Kyrgyzstan are still exceptions to this global trend. Extreme rural poverty is not an acute issue in Central Asia countries, with the exception of Tajikistan, which reports slightly more than half of its rural population as being relatively poor. International remittances play an important role in the economies of some Central Asia countries. Labour migration, chiefly to Russia, has become a typical strategy for a significant part of the working-age population of several countries in Central Asia. The main countries that are dependent on remittances are Tajikistan and the Kyrgyz Republic.

One of the most evident drivers of the food systems is the rapid development of Global value chains (GVCs) which account for almost 50% of the global trade today. They have become longer and more technologically advanced, and they employ smart and sophisticated practices and solutions. The GVC participation index of ECA countries is still not very high – it was around 10% for Russia and Kazakhstan in 2016 and much lower for other Central Asia countries.

The inclusiveness of the food chains in the region is the important factor affecting their stability. The small farmers, processors, logistic companies, and other smaller players of the food systems face a severe problem as regards integra-

tion in the value chains, in their endeavour to obtain a fair share of the final food cost and to comply with key food safety requirements. In those countries where small farmers dominate the agrarian structure, non-inclusive value chains cause poverty to grow in rural areas. In contrast, where countries have a dualistic agrarian structure, non-inclusive chains result in the marginalisation of small players and the concentration of production in the hands of the big players. This compromises the sustainability of food systems. The inclusion of smallholder farmers and other rural entrepreneurs in agriculture value chains means that their access to finance, inputs, services, and markets is demonstrably improved. This can be achieved through various activities that include the establishment and strengthening of producer organisations, cooperatives, and other forms of farmer groups; the branding of locally produced products and products with traditional specificities; plus, the extension of advisory services to farmers etc.

Infrastructure development, including access to the Internet, in rural settlements remains one of the preconditions for rural development and the return migration of part of the population to rural areas in the long term. Nevertheless, the level of house improvement in rural areas still lags far behind what is seen in urban areas. With the development of online technology, telemedicine, e-schools, e-commerce it may yet be possible to reduce this infrastructure gap between urban and rural areas.

The impact of COVID-19 may have long-term consequences for the Central Asia countries. Slow economic recovery, and the bankruptcy of some employers will likely lead to a slow recovery in terms of jobs for migrant workers, reductions in their wages, and a greater prevalence of wage abuse on the part of employers. The likely decline in labour migrants' incomes will have an immediate impact on people's livelihoods back in their countries of origin.

Economic contraction due to COVID-related lockdown measures has threatened the smaller players of the value chain the most. Closures of farmers' markets dramatically affected their ability to sell their products directly to consumers. However, at the same time, new niches and opportunities are appearing for the small farms. New direct supply chains from farmers to consumers are being built on online platforms.

While export restrictions and other trade measures introduced in response to COVID-19 are most likely to be temporary and some have already been lifted, shifting the policy focus towards greater self-sufficiency in food production will remain a long-term trend, and will most likely result in higher subsidies to producers in the region.

Over the next 10-20 years, the development of agriculture in the region will be dictated by the need to address the growing threats of resource shortages (thereby ensuring that urgent needs can still be met during a crisis situation), modernisation of the prevailing models of food systems, and growing problems relating to biosafety and nutrition. Regional food production should in future depend more than ever on technologies capable of increasing yields, improving productivity and preventing losses, but less than ever on the impact of external climatic and biological factors.

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