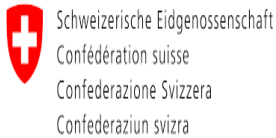


POLICY DIALOGUE ON AGRICULTURE MODERNIZATION IN UZBEKISTAN

**ANALYSIS OF REGIONAL DYNAMICS OF WHEAT AND FLOUR
SECTORS IN CENTRAL ASIA, AND THEIR IMPACT ON
UZBEKISTAN¹**

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Executive Summary

Uzbekistan has been actively involved in wheat and flour trade in Central Asian region, and the role of trade in this region will be increasing eventually. Since Uzbekistan has been pursuing the aim of liberalizing the wheat and flour markets in 2021, an understanding of the regional trade dynamics and its impact on Uzbekistan is critical for designing effective policies to ensure smooth grain market operation, achieve food security, and create preconditions for the income of farmers and flour millers to rise. This report provides information and analysis on various aspects of the regional wheat and flour markets.

Regional wheat and flour trade dynamics relevant for Uzbekistan should be considered in a broader geographical area than that confined with Central Asian region. Aside from five countries of Central Asia, it should also include Afghanistan, Pakistan, and Iran. These eight countries cumulatively produce 9 percent of the global wheat output, and they are actively engaged in trade among them, which affect price and supply dynamics.

Wheat trade in the region is quite localized and any wheat production shortages in the countries of the region are largely compensated by imports from Kazakhstan, the largest net exporter. Afghanistan is the key importer, with flour prevailing in its import structure. However, over the past five seasons, the region has shown a growing tendency of wheat imports and flour import diversification, primarily by Uzbekistan. Pakistan is another net exporter in the region, while Iran, Kyrgyz Republic, Tajikistan, and Turkmenistan are net importers of both wheat and flour. Uzbekistan is a net importer of wheat but is a net exporter of flour.

The net importers buy wheat and flour due their insufficient production and due to the product quality differences. Kazakhstan produces a lot of durum (hard) wheat, which is used for high-grade flour and pasta production. Durum wheat varieties are rare in the region; all other countries grow soft wheat, so the demand for Kazakh wheat remains high.

The region consumes more food wheat per capita than the world average. The average consumption in the region is estimated at 178 kg/person/year compared to 78 kg/person/year in the world on average. The maximum rate of pastries consumption per capita, approximately 500 g/person/day, is registered in Uzbekistan, compared to 249 g/person/day in Kazakhstan. Such a high demand for pastries in Uzbekistan may be a result of the long-lasting artificially low bread and flour prices due to the state order system, which is expected to be eliminated in 2021.

The trend in the region has been towards increase in buying wheat and decrease in buying flour from Kazakhstan. This is particularly relevant for Afghanistan, Tajikistan, and Uzbekistan. Uzbekistan has even managed to attain a surplus in the foreign flour trade from 2018. The current trends create some trade tension in the region, increasing the likelihoods of introducing export tariff and non-tariff measures. Export restrictions imposed by Kazakhstan in April 2020 due to the COVID-19 pandemic may escalate into more permanent measures with the aim to promote exporting flour rather than wheat in the future.

The current trends need to be assessed in terms of further development prospects, primarily for Uzbekistan, as an emerging flour supplier in the region. Having a common borderline with Kazakhstan, Uzbekistan has used its advantage by promoting development of the flour milling industry through lower milling costs, the state support, and the use of non-tariff barriers such as higher tariffs for transportation of Kazakh grain cargoes via Uzbekistan to Afghanistan and Tajikistan compared to the tariffs for transportation of the same cargoes originating from Uzbekistan: the cost of transit in Uzbekistan is almost three times higher than the cost of domestic transportation for the same distance.

As a result of such a regulation, a tolling system was developed. Importers from Afghanistan buy Kazakh wheat in Uzbekistan at the average price of 19 percent lower than in Afghanistan, milling it in Uzbekistan, where energy costs are 60-95 percent lower than in Kazakhstan, and then transport the finished products to Afghanistan using domestic tariffs of Uzbekistan. As a result, since September 2017, Uzbekistan shows an instant growth of flour export. In 2018/19, the volume of flour export was estimated at 364 thousand tons. In 2019/20, Uzbekistan's export is expected to reach 400 thousand tons.

The future prospects for trade will be supported by the population growth in the region, estimated at 19 percent in the coming decade. The largest population increase is projected for Afghanistan (+26 percent by 2030), which gives the country a status of the key importer of both flour and wheat. In Uzbekistan, a population growth is expected at 13 percent, which would require a proportional increase in wheat supply originated from domestic production and import. It is worth noting that the flour consumption per capita may slow down in the future, because today's high consumption per capita could eventually decline and lead to the decrease in total demand. Unfortunately, there are no systematic assessments and forecasts available of wheat and flour consumption in the region to provide an accurate outlook in this regard.

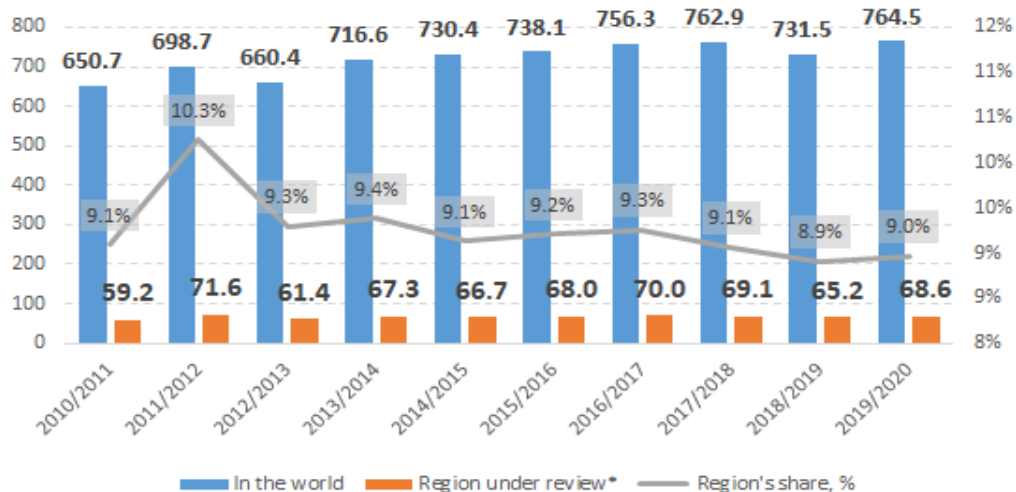
The key risk for both Uzbekistan and the region as a whole can be a possible introduction of more stringent tariff and non-tariff regulation measures by Kazakhstan. That would escalate wheat and flour prices for the key buyers and reduce profitability of the milling industry in Uzbekistan, given that an alternative supply of wheat from Russia could be constrained by Kazakhstan, through which a transit needs to take place. This risk is exacerbated by the lack of systematic construction and monitoring of the wheat and flour balances, especially of their ending stocks, and coordination (sharing information) between the countries, which is important for smoother market operation, especially during emergencies. More regional collaboration in this area would be highly desirable to mitigate the tensions.

1. Global Analysis

1.1. Role of Central Asian Countries in global wheat production and distribution with a focus on food wheat consumption

1 The countries under review include Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Kyrgyz Republic, Afghanistan, Pakistan and Iran. They constitute the Region, within which the regional trade in wheat and flour largely takes part. The Region accounts for 9.3 percent of the global wheat production on the average over the past decade. This indicator has remained relatively stable during last 8 years (Figure 1). The average annual wheat production growth in the Region does not exceed 2 percent and corresponds to the average annual benchmark of the world.

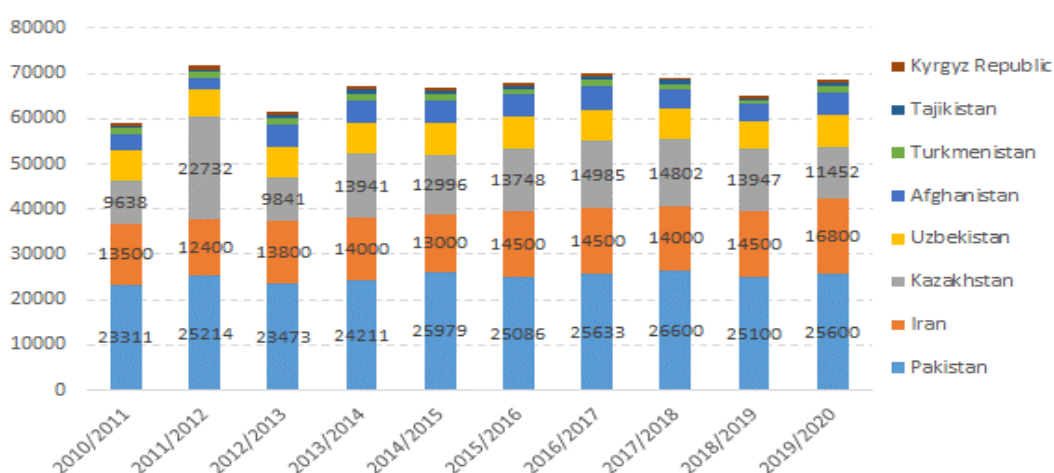
Figure 1: Wheat production in the world and in the Region*, million tons



Source: USDA.

2 The majority of wheat output in the Region is grown in three countries: Pakistan, Iran, and Kazakhstan (Figure 2).

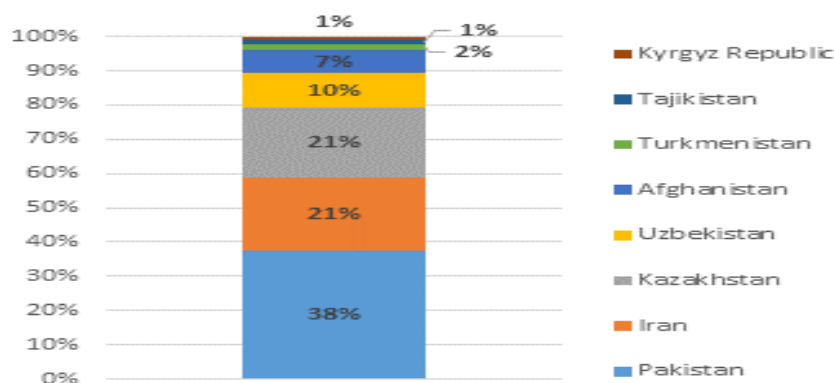
Figure 2: Wheat production structure by country in the Region, thousand tons



Source: USDA.

3 In the Region under review, over the last decade 38 percent of wheat was produced by Pakistan, while 21 percent was produced by Iran and Kazakhstan (Figure 3). Uzbekistan accounts for only 10 percent of wheat production in the Region.

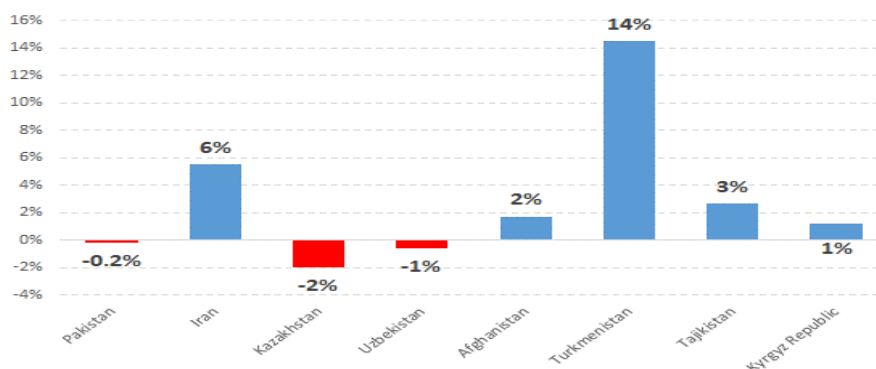
Figure 3: Shares of countries in wheat production, %



Note: Ten-year average.
Source: USDA.

4 The wheat production in the Region shows large fluctuations, largely due to the changes in yields. Over the past 5 years Pakistan, Kazakhstan, and Uzbekistan had a downward trend in average annual yield (Figure 4). At the same time, Iran and Turkmenistan had a fairly significant increase in production for the same period, mainly due to the higher yield in 2019. Furthermore, Turkmenistan restored some cultivated areas for 2019 crop season after their shrinkage in the previous season.

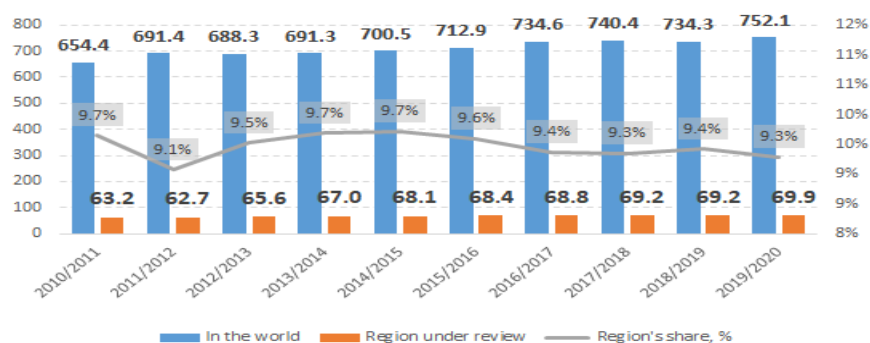
Figure 4: Average annual production growth in the Region, %



Note: Five-year average.
Source: USDA.

5 The average annual wheat consumption has been around 67 million tons over the past decade, with an upward trend (Figure 5). This is 9.5 percent of the global wheat consumption. In general, the consumption volume, in absolute terms, corresponds to the volume of wheat production in the region.

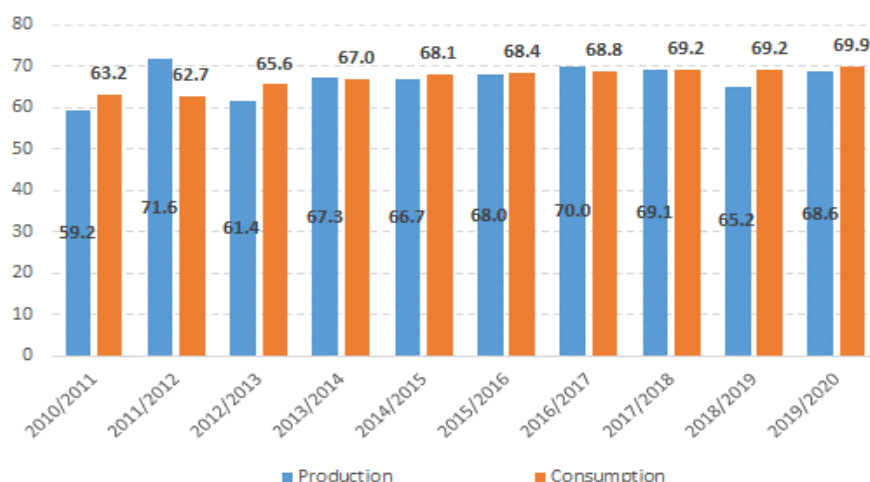
Figure 5: Wheat consumption in the Region, million tons



Source: USDA

6 The comparison of wheat production and consumption in the Region over the past decade shows that a surplus of wheat production was recorded during three seasons only (2011/12; 2013/14 and 2016/17). Accordingly, during other periods, the region had to import wheat (Figure 6).

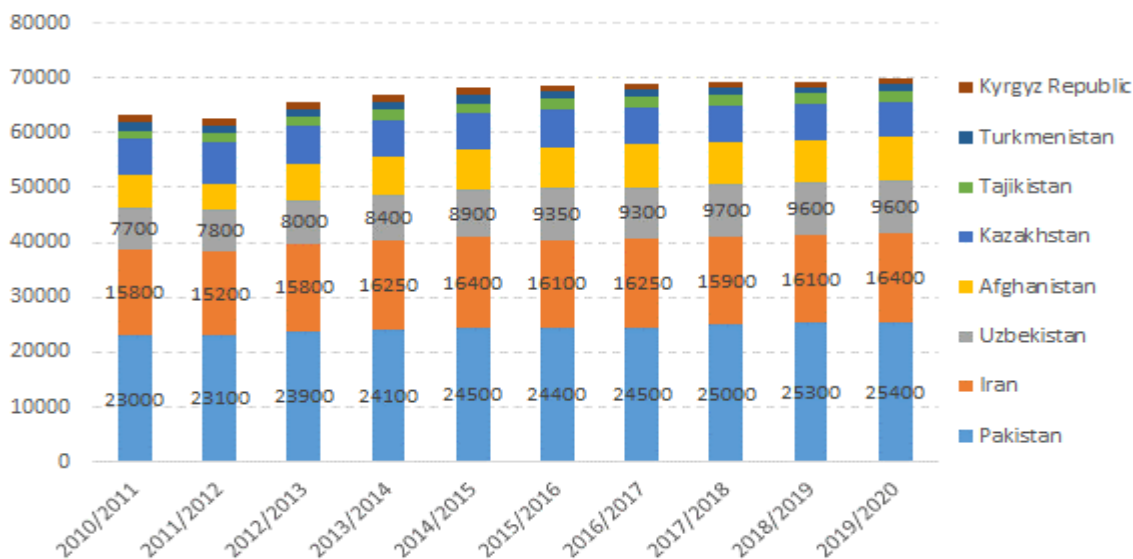
Figure 6: Wheat production and consumption in the Region, million tons



Source: USDA.

7 The structure of wheat consumption by country of the Region shows that Pakistan and Iran are the leaders, the same as in terms of production (Figure 7). Uzbekistan is on the third position after having significantly increased consumption over the last three seasons. At the same time, Kazakhstan, which is the last of the three top wheat production leaders in the Region under review, has been the 5th in the consumption rating, which shows the country's export positioning in this segment.

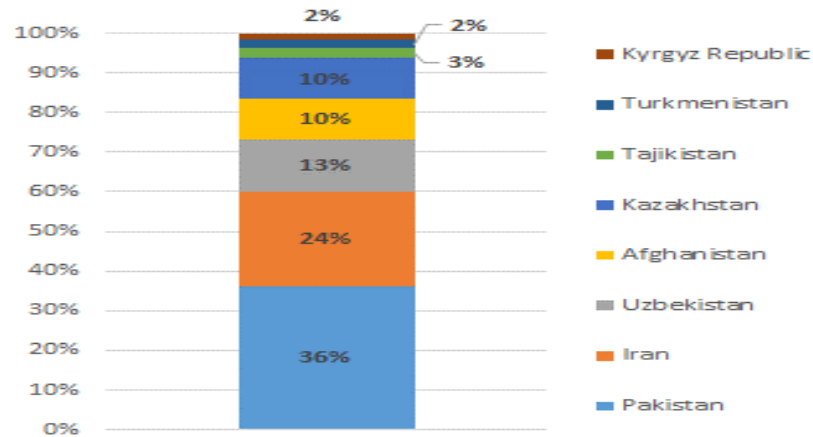
Figure 7: Wheat consumption by country in the Region, thousand tons



Source: USDA.

8 Pakistan accounts for 36 percent of total wheat consumption in the Region, Iran – 24 percent, and Uzbekistan – 13 percent (Figure 8). Kazakhstan produces 21 percent of all wheat production in the Region, while consuming only 10 percent.

Figure 8: Shares of countries in wheat consumption, %

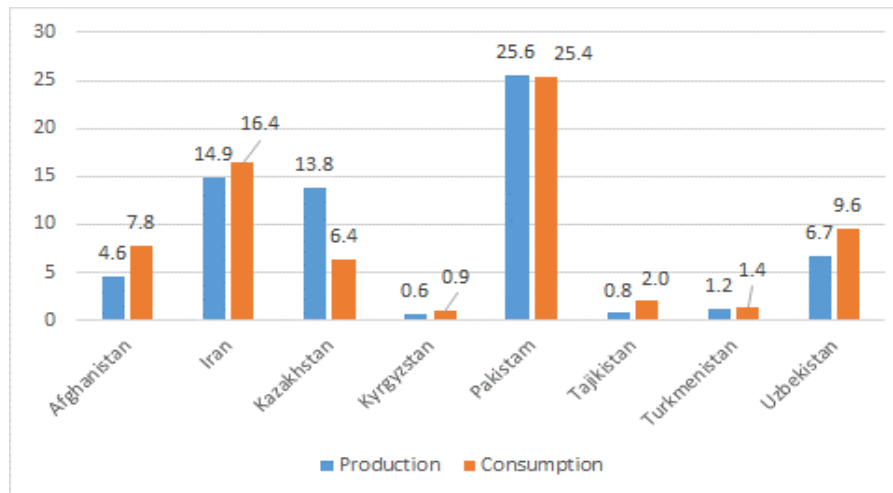


Note: Five-year average.

Source: USDA.

9 The comparison of wheat production and consumption rates by country shows that Iran, Uzbekistan, and Afghanistan are heavily dependent on imports. However, while in Iran the wheat consumption volume exceeds production by 10 percent, on the average over the past five seasons, in Uzbekistan and Afghanistan this figure is estimated at 43 percent and 70 percent, accordingly (Figure 9).

Figure 9: Average annual wheat production and consumption in the Region, million tons



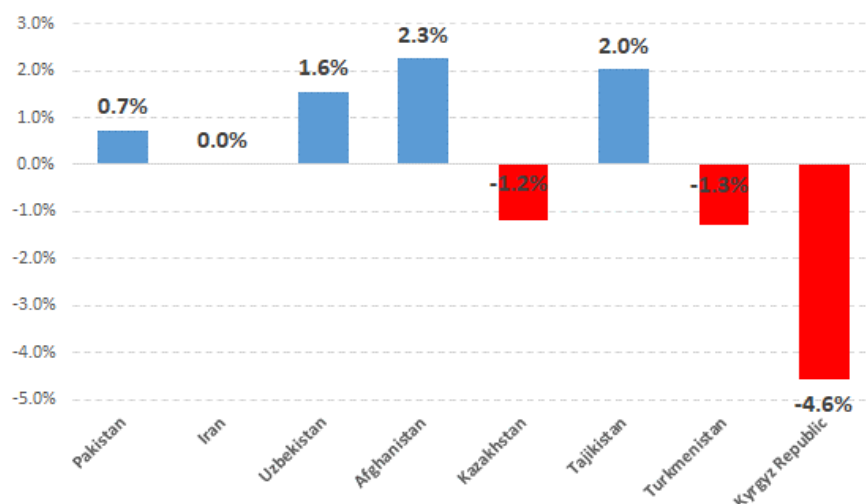
Note: Five-year average.

Source: USDA.

10 In addition, over the past five seasons, the largest growth in wheat consumption was recorded in Uzbekistan and Afghanistan of around 1.6 percent and 2.3 percent, respectively (Figure 10). At the same time, the 1.2 percent decrease in consumption over the past five seasons was recorded for Kazakhstan, primarily due to a decrease in flour consumption.

11 The share of wheat use for food is very high in all countries of the Region. In particular, in Pakistan and Afghanistan, consumption of food wheat is more than 90 percent of total domestic consumption on the average over the past ten seasons (Figure 11). In Iran and Kyrgyz Republic, this indicator reached almost 90 percent, while in other countries it was above 70 percent.

Figure 10: The change in average annual wheat consumption in the Region, %

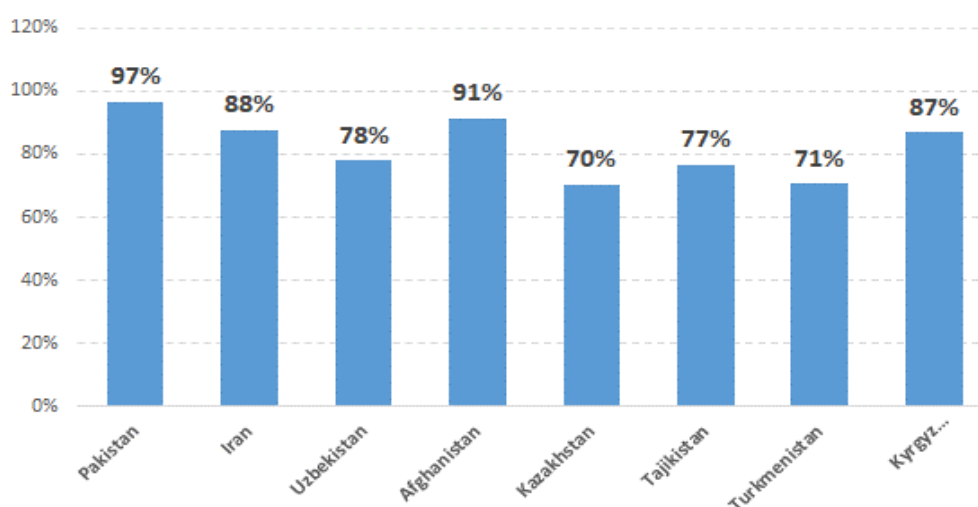


Note: Five-year average.

Source: USDA.

12 The lowest indicator is recorded in Kazakhstan (70 percent). This allows Kazakhstan to diversify wheat use by making feed available for livestock industry and exporting a surplus of wheat. However, flour production and its export remain the most attractive option.

Figure 11: Share of wheat consumption for food in the Region, %



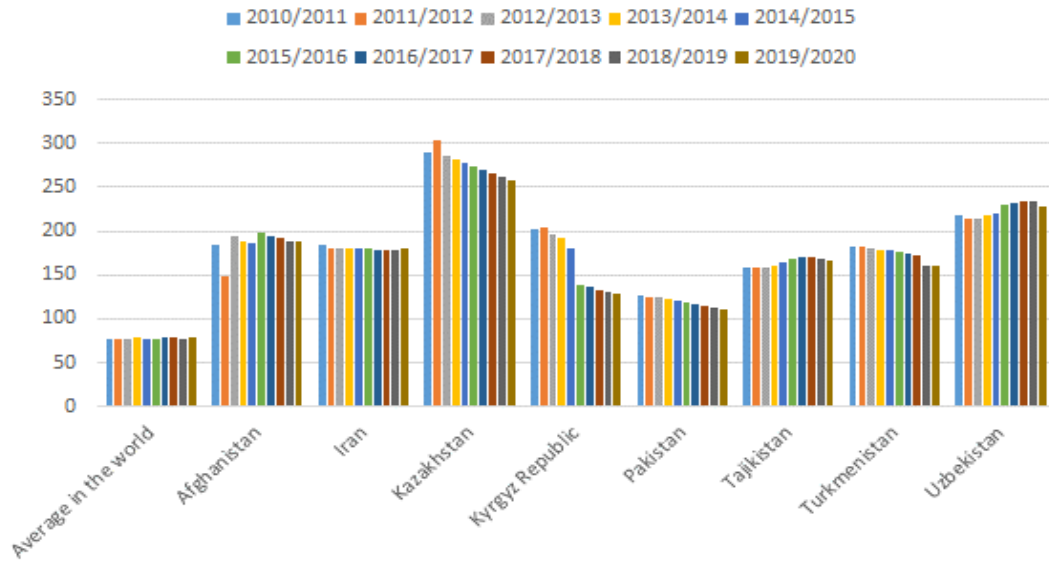
Note: Ten-year average.

Source: USDA.

13 A much higher consumption of food wheat per capita compared to the world average is the distinctive feature of the Region. The global indicator is estimated at 78 kg per year per person, while this indicator in the Region under review was 178 kg per person over the past decade (Figure 12). It should be noted that the presented figures include wheat milled into flour for exporting of the finished products.

14 Moreover, the dynamics of this indicator is different by country of the Region. The most stable situation is in Iran with a rather short range of this indicator around 180 kg/year/person. In Kyrgyz Republic, there has been a significant reduction of food wheat consumption per capita in 2015/16, largely due to the revision of the methodology on food consumption, since neither significant change in the population nor in production were recorded during this period. Uzbekistan has seen a persistent upward trend in food wheat consumption, pointing to the development of the milling industry. In Kazakhstan, on the contrary, this indicator was decreasing on average by 1 percent annually.

Figure 12: Food wheat consumption per capita, kg/person

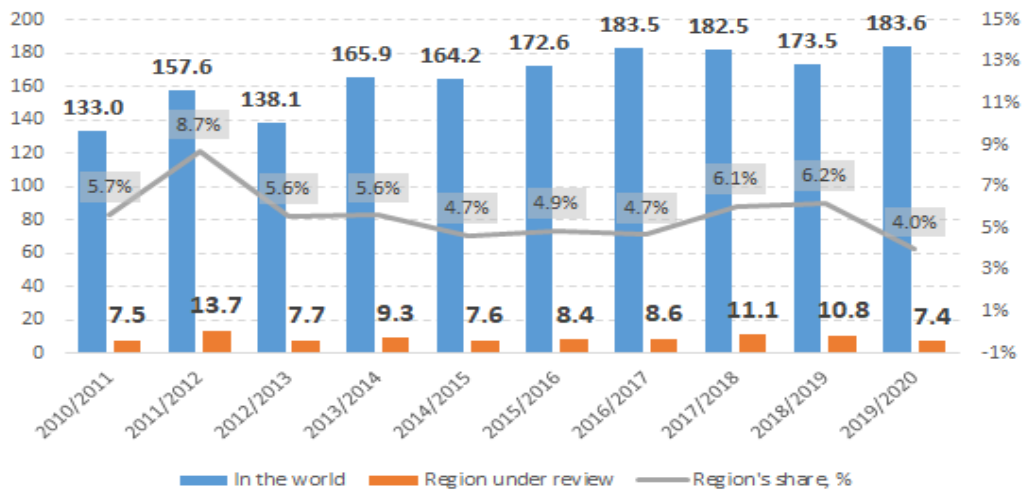


Source: USDA.

1.2. Wheat and flour global trade trends and assessment of the role of Central Asian countries, Afghanistan and Pakistan in the global trade

15 Regarding the global trade, the export of wheat and flour in grain equivalent from the countries of the Region has not been significant over a decade, making around 5.6 percent of total global exports. In addition, the trend goes downward obvious, mainly due to the lower export of Kazakhstan (Figure 13).

Figure 13: Wheat export* in the world and in the Region, million tons

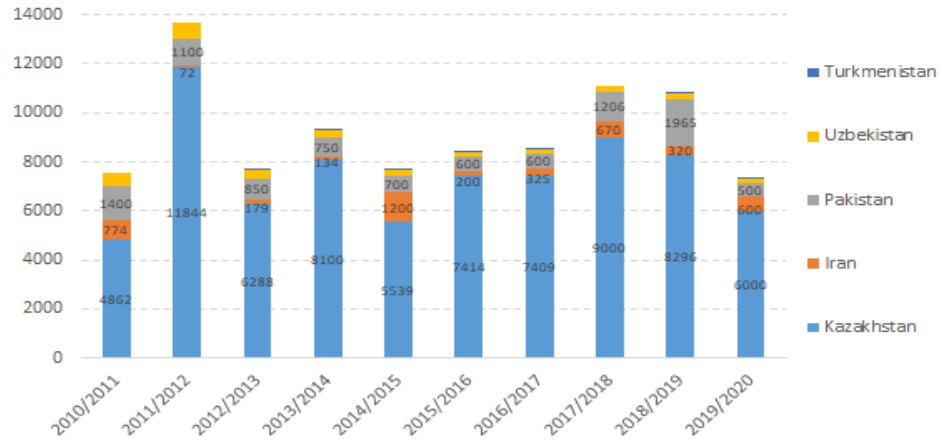


Note: (*) Including processed products in wheat equivalent.

Source: USDA.

16 Kazakhstan has been the key exporter of wheat and wheat milled products in the Region (Figure 14). Much smaller volumes are exported from Iran and Pakistan. The export volumes fluctuate with a wide range from season to season. For instance, in 2014/15 Iran exported a record 1.2 million tons of wheat, while in 2015/16, the export fell down to just 200,000 tons. Export from Pakistan in 2018/19 reached almost 2 million tons, while in 2019/20 it is projected at only 500,000 tons.

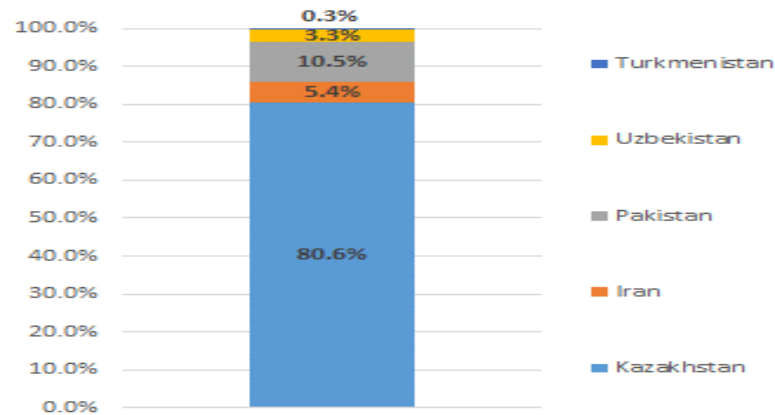
Figure 14: Wheat export structure* by country of the Region, thousand tons



Note: (*) Including processed products in wheat equivalent.
Source: USDA.

17 Over the past decade, more than 80 percent of all wheat exports from the Region originated from Kazakhstan (Figure 15). The share of Pakistan averaged 10 percent, and Iran 5 percent. The remaining countries accounted for less than 4 percent of the Region’s export.

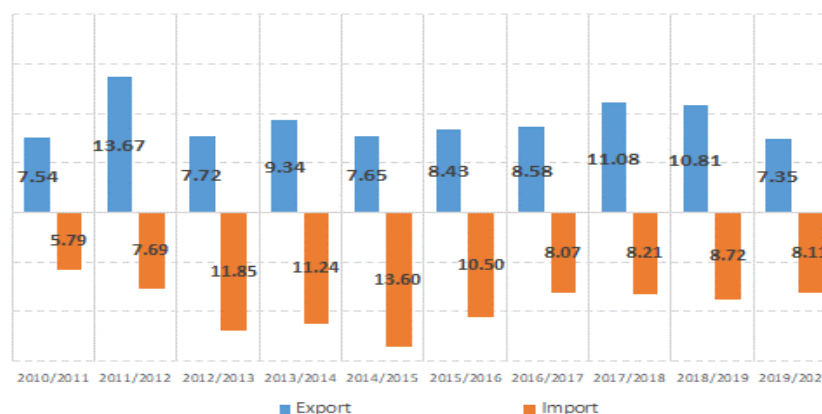
Figure 15: Wheat export shares in the Region, %



Note: Ten-year average.
Source: USDA.

18 The foreign trade balance confirms relative instability in the wheat sector at the regional level (Figure 16). From season to season, either export or import prevails in absolute terms. In ten-year period, the maximum surplus was recorded in 2011/12, reaching up to 6 million tons in favor of export. However, in 2014/15, the situation changed radically, and imports prevailed over exports with almost the same volume (around 6 million tons). In 2019/20, the foreign trade balance of wheat in the Region is being anticipated of around 0.8 million tons.

Figure 16: Wheat foreign trade balance in the Region, million tons

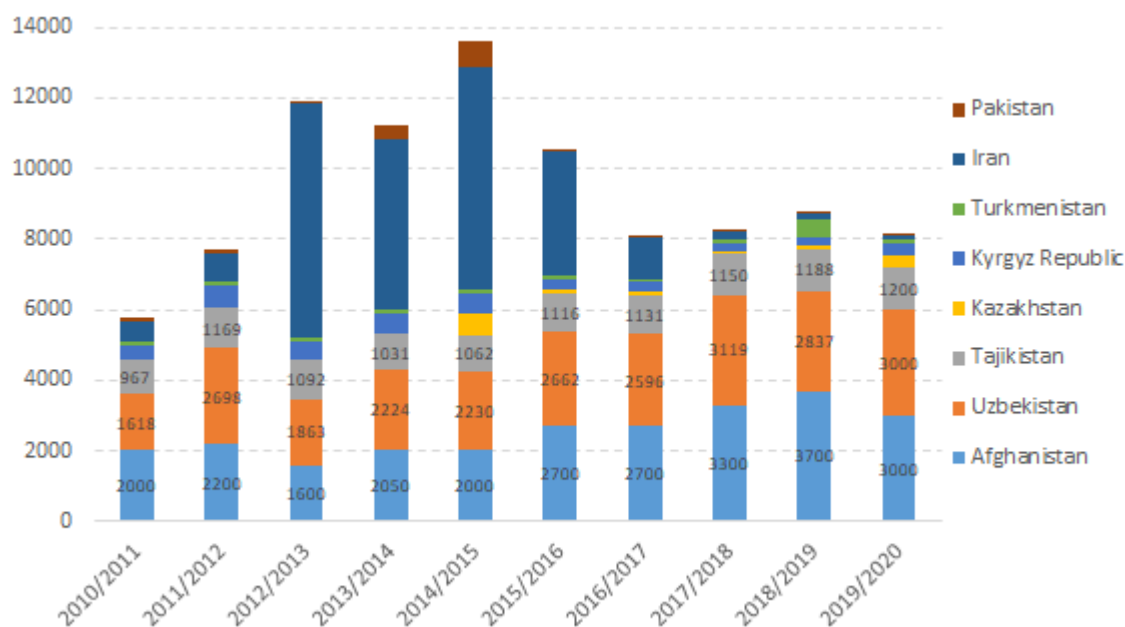


Source: USDA.

19 Afghanistan has been the key importer in the Region, and until 2018/19 it was increasing the purchase of wheat and milled products (Figure 17). In 2018/19, the import by Afghanistan was at a record level of 3.7 million tons. In 2019/20, the import is expected to decrease to 3 million tons. Import of Uzbekistan in 2019/20 is estimated at 3 million tons, which is the second largest figure over the past decade (in 2017/18, the import exceeded 3.1 million tons).

20 Tajikistan is a relatively stable importer with annual procurement of around 1 million tons of wheat. It is worth to separately note a significant import reduction in Iran. Thus, over the period from 2012/13 to 2015/16, the volume of import ranged from 3.5 to 6.6 million tons per season, and in 2019/20, the volume of imports is expected to be only 100,000 tons. At the same time, both wheat production and its consumption in Iran remained relatively stable. As a result of imports, by 2015/16 Iran managed to secure its wheat stocks of almost 70 percent of its domestic consumption, to shield itself from sanctions.

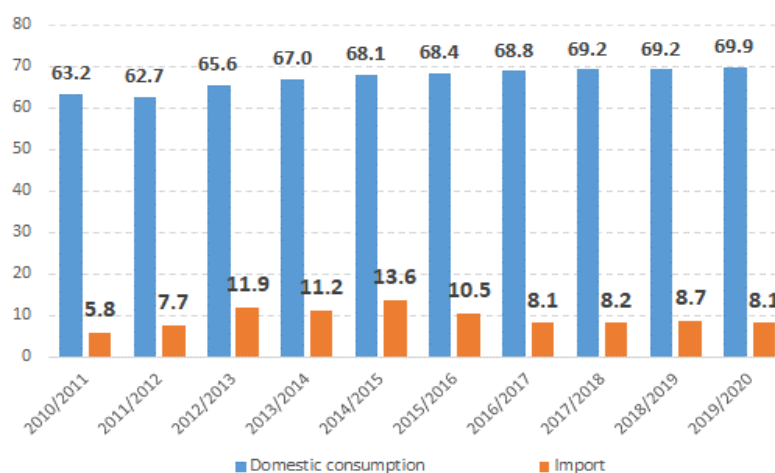
Figure 17: Wheat import by country in the Region, thousand tons



Source: USDA.

21 The volume of wheat imports in the Region makes rather insignificant share of its overall consumption. On the average, over the past decade, this volume is estimated at 14 percent, and over the past four seasons it remained stable at around 12 percent (Figure 18).

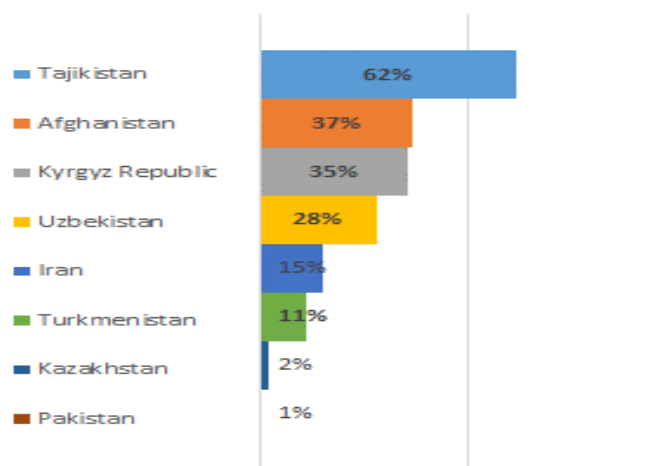
Figure 18: Wheat import and domestic consumption in the Region, million tons



Source: USDA.

22 The largest import-dependent countries in the Region are Afghanistan, Kyrgyz Republic, and Tajikistan, the ratio of imports to consumption reached 62 percent, 37 percent and 35 percent, respectively, during the last decade (Figure 19). The increase in wheat buying by Uzbekistan has allowed it to achieve an average share of import in domestic consumption the level of 28 percent for the period under review. The ratio increased from 21 percent in 2010/11 to 31 percent in 2019/20. The situation is completely opposite in Iran. A share of imported wheat reached 42 percent of its total consumption in 2012/13. But in 2019/20 it fell down to 1 percent, producing the average ratio of 15 percent.

Figure 19: Import to domestic consumption ratio by country in the Region, %

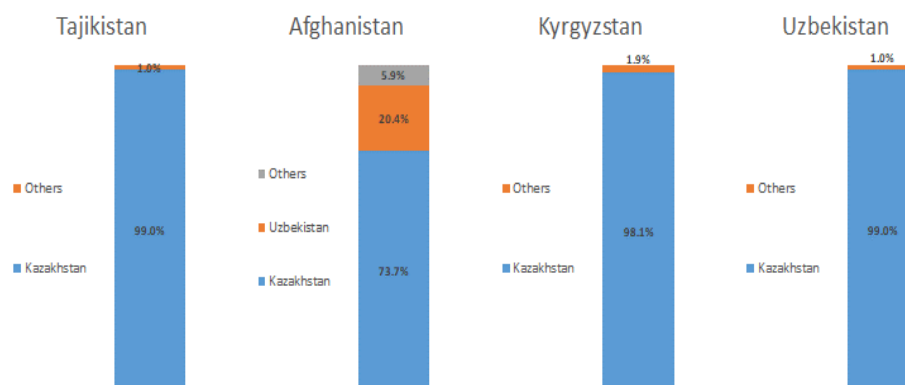


Note: Ten-year average.

Source: USDA.

23 The main exporter in the Region is Kazakhstan. Over the past five years, Kazakh wheat accounted for 99 percent of total imports by Tajikistan, Kyrgyz Republic, and Uzbekistan (Figure 20). Since 2017, Afghanistan has been actively importing wheat from Uzbekistan. Thus, the wheat trade is localized within the studied Region and is largely ‘monopolized’ by Kazakhstan by the force of nature, not the policy induced monopoly.

Figure 20: Geography of wheat purchases* by key importers in the Region

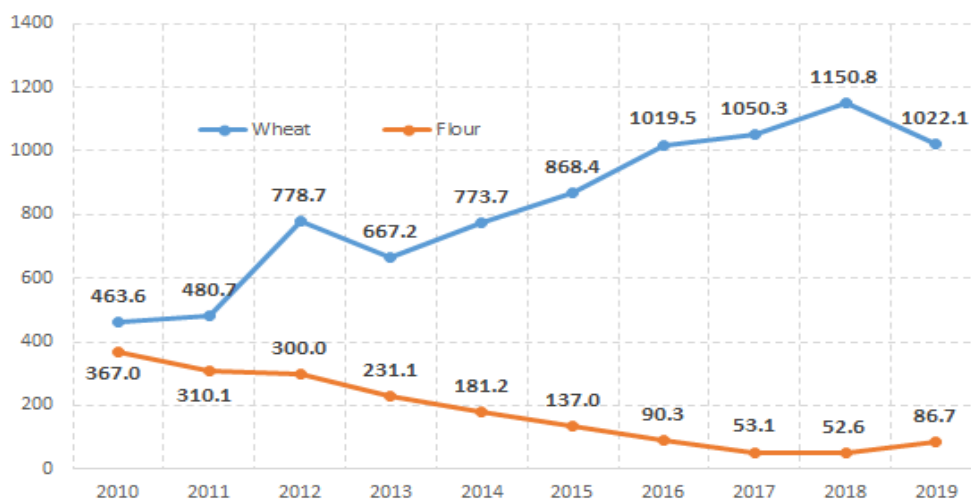


Note: Five-year average. (*) Excluding the products of wheat processing.
Source: International Trade Center.

1.3. Intra-regional trade in wheat and flour between Central Asian countries

24 This section presents the structure of Kazakh export, differentiating between wheat and flour. In the trade with Tajikistan and Uzbekistan, the analysis shows the decreasing trend of flour export and the increase in wheat export from Kazakhstan. During the past decade, Tajikistan increased the import of Kazakh wheat by an average of 11 percent annually (Figure 21). At the same time, flour imports decreased on the average by 11 percent annually. In absolute terms, the wheat imports by Tajikistan increased by 62,100 tons annually, while the import of flour in grain equivalent (with an average flour outturn at 74 percent) dropped by 42,100 tons annually. This shift points to the development of local milling industry in Tajikistan, which imports wheat to mill and sell it domestically.

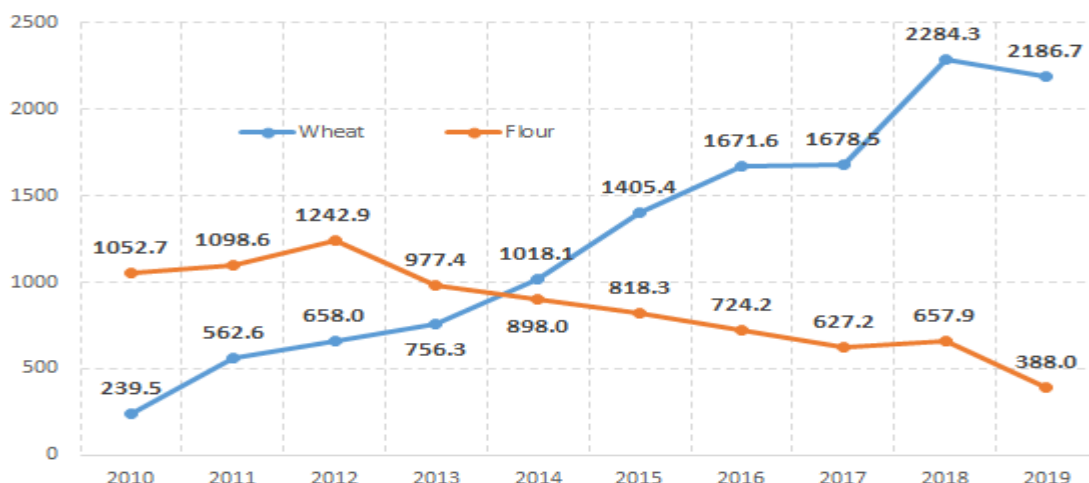
Figure 21: Wheat and flour export from Kazakhstan to Tajikistan, thousand tons



Source: Grain Processing Union of Kazakhstan.

25 A similar situation is observed with deliveries from Kazakhstan to Uzbekistan. In that case, wheat import was increasing by around 32 percent annually, while flour import was decreasing by around 9 percent annually over the past decade (Figure 22). Moreover, since 2014, the wheat import has consistently exceeded the flour import in absolute terms. Here the milling industry has been developed much faster than in Tajikistan. The annual decrease in flour import (in grain equivalent) was estimated in the amount of 99,800 tons compared to the annual growth in wheat import by 216,400 tons.

Figure 22: Wheat and flour export from Kazakhstan to Uzbekistan, thousand tons

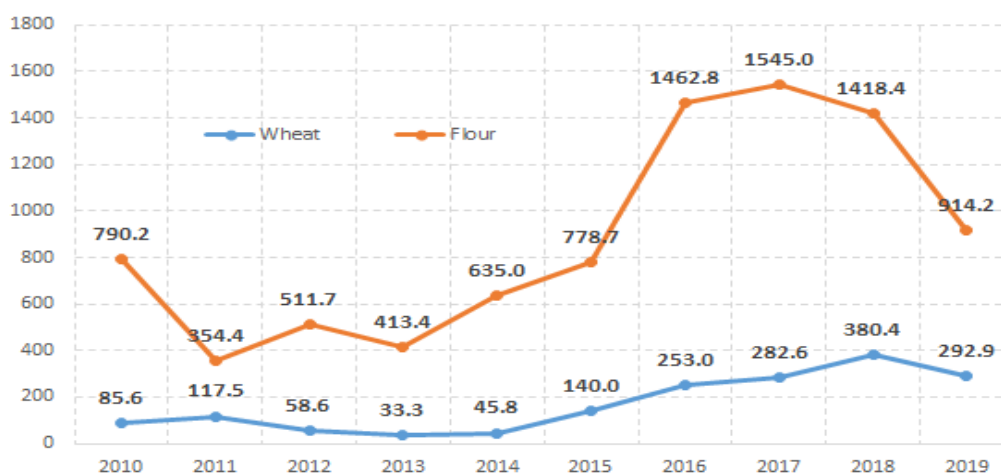


Source: Grain Processing Union of Kazakhstan.

26 Afghanistan remains an active buyer of Kazakh flour. From 2013 to 2017, it kept increasing import volumes, reaching a record of more than 1.5 million tons by the end of 2017 (Figure 23). Yet, the situation has recently changed. In 2018 and 2019, the import of flour from Kazakhstan to Afghanistan declined sharply. The main reason for such a decline was a beginning of active flour supplies to Afghanistan from Uzbekistan, estimated by the International Trade Center, to exceed 385,000 tons in 2018.

27 It should be noted that from 2014 to 2018, Afghanistan also intensified its wheat buying from Kazakhstan. The average annual import growth over the past 10 years is estimated at 32 percent annually. In absolute terms, the volume of imported wheat attained its maximum in 2018, reaching 380,000 tons. This was 3.7 times less than flour import in the same year.

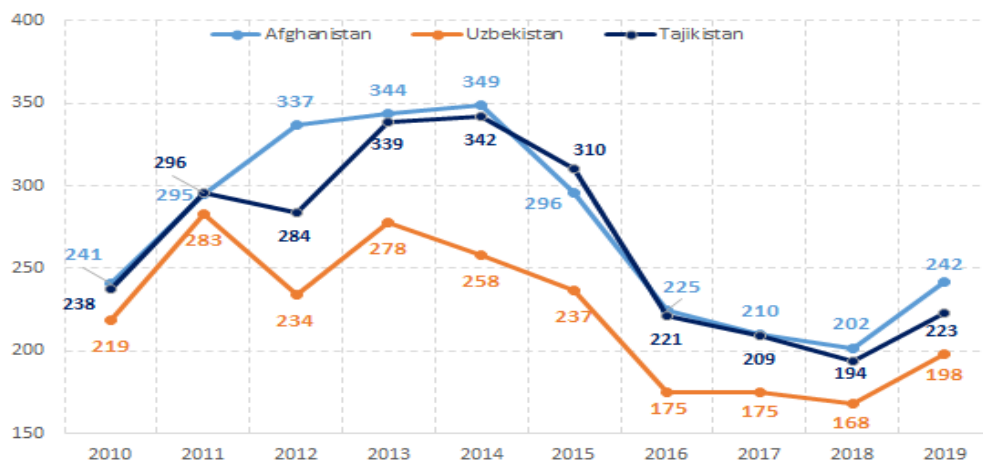
Figure 23: Wheat and flour export from Kazakhstan to Afghanistan, thousand tons



Source: Grain Processing Union of Kazakhstan.

28 The analysis of weighted average import prices in the countries-buyers of flour supplied from Kazakhstan shows that Uzbekistan has the lowest price. On average during the last decade, the prices of Kazakh wheat in Uzbekistan were 19 percent lower than that in Afghanistan and 17 percent lower than that in Tajikistan (Figure 24). The difference is due to the additional costs for transit via the territory of Uzbekistan.

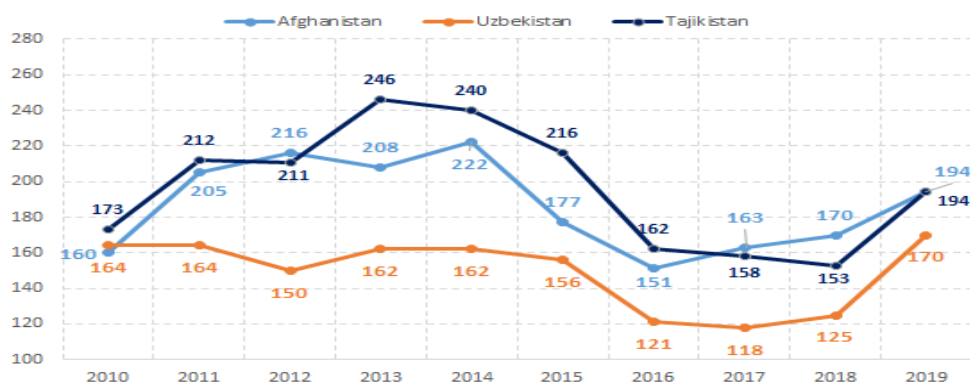
Figure 24: Average flour prices exported from Kazakhstan to Central Asia, USD/ton



Source: International Trade Center.

29 A similar situation was recorded in trading with wheat. A price of Kazakh wheat in Uzbekistan was 22 percent lower than in Afghanistan and 25 percent lower than in Tajikistan (Figure 25).

Figure 25: Average wheat prices exported from Kazakhstan to Central Asia, USD/ton



Source: International Trade Center.

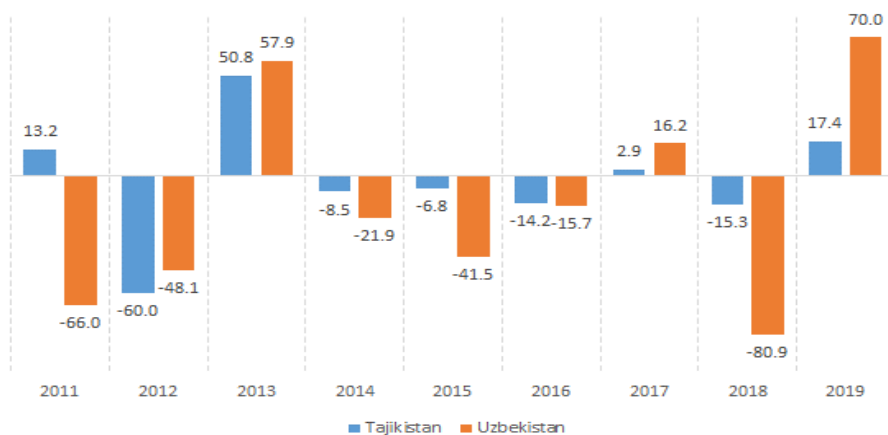
30 It is worth mentioning that in 2010 and 2011, the weighted average prices of flour were quite comparable for all three key importing countries. However, since 2012 a significant difference has begun to appear. In the wheat segment, the changes in the spread between the weighted average prices for different markets began appearing in 2011. Besides geographical and logistic reasons it might point on tariff and non-tariff measures imposed by Uzbekistan in conjunction with development plans of its milling industry.

31 Having compared the dynamics of flour and wheat export from Kazakhstan to Uzbekistan and Tajikistan and using the weighted average price of the respective commodities, the estimate can be made of either savings or additional costs from reducing flour imports and increasing wheat imports. The figures for Tajikistan and Uzbekistan are calculated as a difference between the savings from reduction of flour import and additional costs from increasing wheat import in the corresponding year at the respective average prices.

32 The analysis shows the ups and downs in savings. In 2013, when the import of Kazakh flour by Tajikistan decreased 23 percent, while the import of wheat dropped by 13 percent, the cost saving was around USD 51 million (Figure 26). During the same year, the flour imports by Uzbekistan went down by 21 percent compared to 2012, while the wheat import grew by 15 percent. As a result, this generated savings in the amount of USD 58 million.

33 The record volume of Kazakh wheat purchased by Uzbekistan was in 2018, and along with higher purchase of flour fell by 5 percent it led to losses of USD 81 million. However, in 2019, the flour imports declined by 41 percent, while wheat imports fell by 4 percent, allowing Uzbekistan to save USD 70 million.

Figure 26: Cost saving estimate at different import volumes of flour and wheat from Kazakhstan, USD million

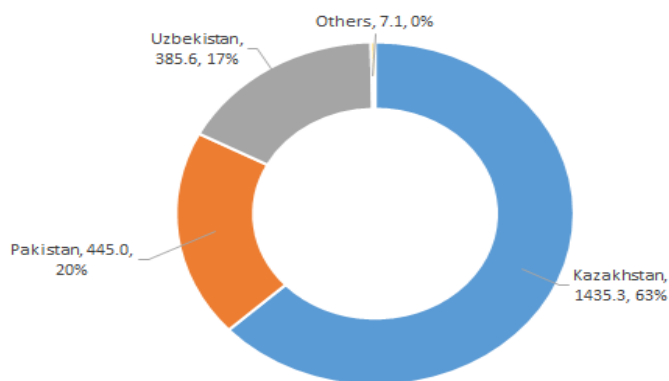


Source: World Bank estimate.

34 Thus, even though Tajikistan and Uzbekistan are developing their own wheat milling capacities, reducing flour and increasing wheat import, they have so far failed to ensure a sustainable trend of cost savings from their imports. Some positive dynamics may appear, if export potential of the flour market is developed in Uzbekistan and Tajikistan that will allow them having additional foreign exchange earnings. In particular, as noted above, in 2018 the estimated 385,600 tons of flour were exported by Uzbekistan to Afghanistan with foreign exchange earnings of USD 134 million (Figure 28), which not only compensated but also exceeded by 65 percent the higher costs of importing wheat.

35 For many years Afghanistan has been the second largest global buyer of flour import and is the leader in flour purchase in the Region. Besides Kazakhstan, Pakistan and Uzbekistan also sell flour to Afghanistan (Figure 27). Afghanistan sometimes buys small shipments of flour in Turkmenistan and Tajikistan.

Figure 27: Wheat exporters to Afghanistan in 2018, thousand tons



Source: International Trade Center.

36 Overall in the Region, Kazakhstan, Pakistan, Iran, and recently Uzbekistan are the net exporters of flour. Afghanistan, Turkmenistan, Tajikistan, and Kyrgyz Republic are net importers (Figure 28), but except Afghanistan, import volumes are rather small.

37 The flour import by Uzbekistan has been significant but starting from 2018 it achieved a positive foreign trade balance in this segment. Accordingly, the issue of prospective markets for Uzbekistani products becomes more relevant, both within the Region under review and beyond.

Figure 28: Flour foreign trade balance in the Region in 2018, USD million

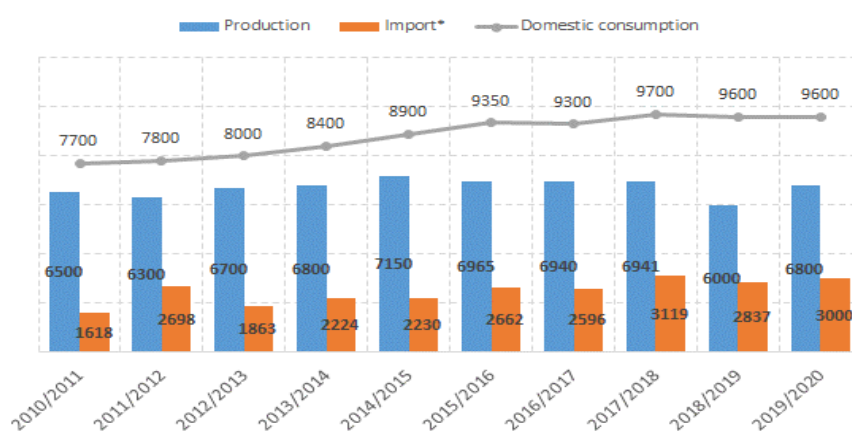


Source: International Trade Center.

1.4. Assessment of the promising wheat suppliers to Uzbekistan

38 Increase in the domestic consumption of wheat in Uzbekistan has been driven by domestic production and imports (Figure 29).

Figure 29: Dynamics of key indicators in wheat segment, Uzbekistan, thousand tons

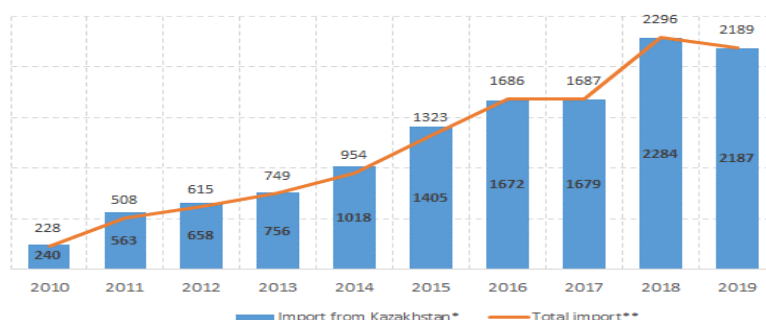


Note: (*) Including wheat processing products.

Source: USDA.

39 Figure 30 shows that Kazakhstan has been largely a sole supplier of wheat and wheat products to Uzbekistan.

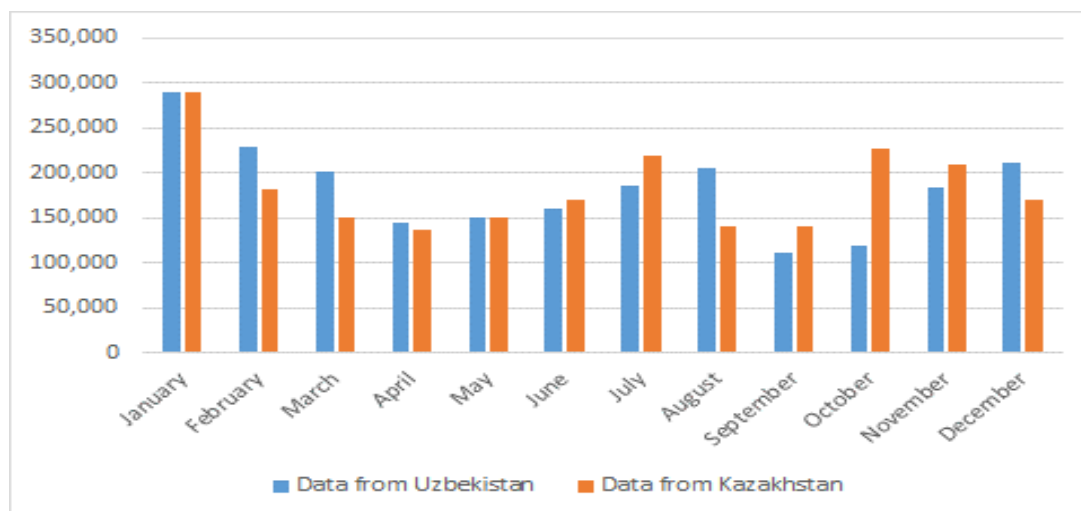
Figure 30: Wheat import geography, Uzbekistan, thousand tons



Source: Grain Processing Union of Kazakhstan (*) and International Trade Center (**).

40 It is worth noting that the export statistics obtained from Kazakhstan almost all the time differ from the import data provided by Uzbekistan (Figure 31). This, on the one hand, indicates some inconsistency of statistics and the difficulties in accounting, and on the other hand, probability of unaccounted wheat flows between two countries.

Figure 31: Import of wheat to Uzbekistan in 2019: Comparison of the data from Kazakhstan and Uzbekistan



Source: APK Inform and the State Customs Committee of Uzbekistan.

41 The high dependence of Uzbekistan’s milling industry on wheat imports from Kazakhstan and the emerging competition between these countries in flour trade increase the risk of restrictions on wheat export from Kazakhstan. Thus, maintaining positive dynamics in the milling industry of Uzbekistan requires a diversification of wheat purchase. From the point of view of geographical location and export potential, Russia, a leader in world exports of grain, as well as Iran, which over the past few seasons developed its wheat export potential at the level of 300-600,000 tons, could be considered as alternative wheat suppliers to Uzbekistan (Figure 32).

Figure 32: Assessment of promising wheat suppliers to Uzbekistan

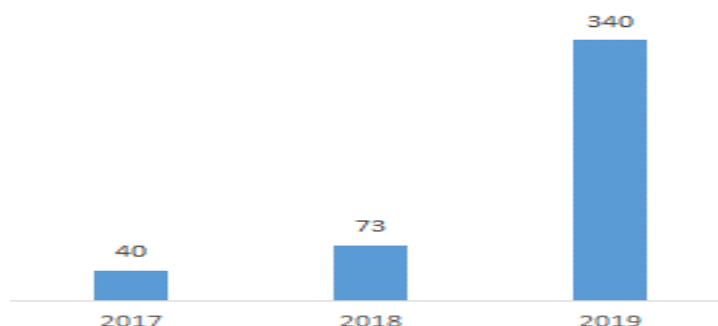


Source: World Bank’s assessment.

42 For wheat supplies from both Russia and Iran, a transit via other countries is required that also creates risks of tariff and non-tariff restrictions and increases the price of raw materials. At the same time, although Kazakhstan is a major wheat exporter in the Region, it has recently started to import large wheat volumes from Russia, with increasing tendency (Figure 33). In any case, a transit of Russian wheat to Uzbekistan should still transit Kazakhstan, keeping the risk high for Uzbek mills.

43 Thus, nothing but mutually beneficial agreements between Kazakhstan and Uzbekistan on transit of wheat via the territory of Kazakhstan and Kazakh flour supplied to Afghanistan via the territory of Uzbekistan are advisable. The parties could also consider processing of Kazakh wheat in Uzbekistan under a tolling scheme, given more attractive economic conditions in Uzbekistan.

Figure 33: Wheat export from Russia to Kazakhstan, thousand tons



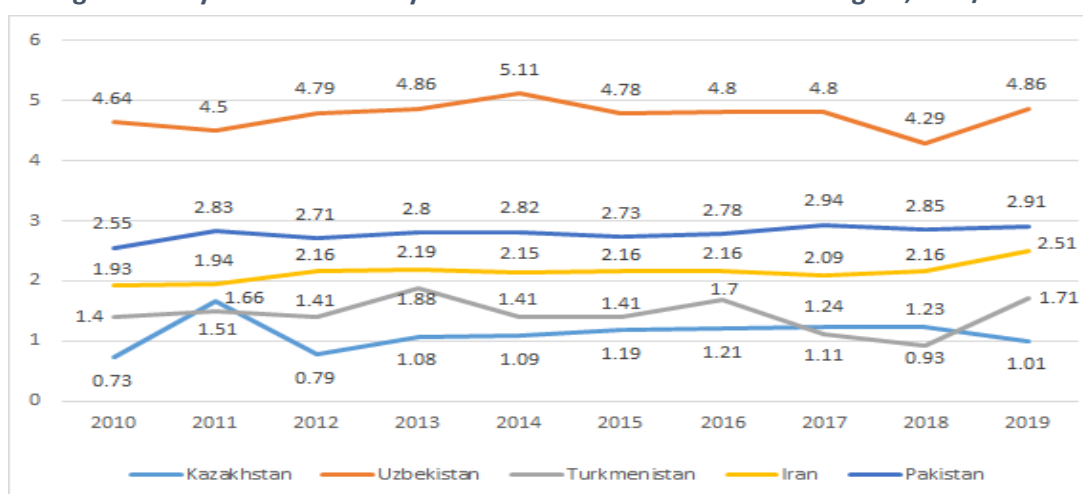
Source: Grain Processing Union of Kazakhstan.

44 Wheat export from Iran would also be associated with risks. First of all, the export potential of this country is unstable, with production and export going up and down. Secondly, Iran faces trade sanctions due to its nuclear development program that creates difficulties for financial transactions. Thirdly, wheat export by Iran is almost entirely directed to Oman. In that direction the average price of wheat export in 2019 was USD 236/ton, which is significantly higher than the export price of Kazakh wheat to Uzbekistan (USD 170/ton). Considering the need to transit via Turkmenistan, the wheat import by Uzbekistan from Iran does not seem currently feasible.

45 The remaining countries of the Region, including near-border Turkmenistan, are net wheat importers. Pakistan could be an exception, however the risks are the same as related to possible supplies from Iran, with the only difference that Pakistan's exports are directed towards East and Southeast Asia.

46 It should be noted that the anticipated continued population growth in the Region necessitates an increase in wheat production to satisfy the rising wheat consumption. The limited scope for farmland expansion requires meeting this demand by increasing yields. The analysis of wheat productivity in the Region shows rather flat yield curves, which pose a significant risk for the Region as a whole and increase import dependence for individual countries (Figure 34).

Figure 34: Dynamic of wheat yields in selected countries of the Region, tons/ha



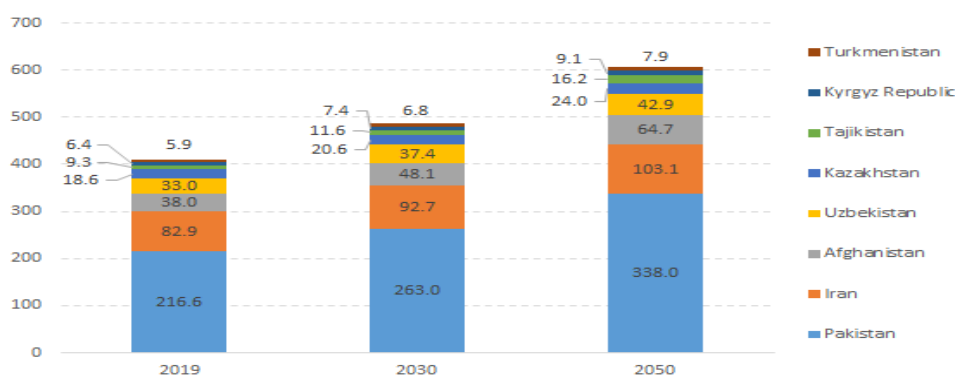
Source: USDA.

47 Uzbekistan stands out positively in the Region with its average wheat yield to be significantly higher than in other countries. While this high average yield helps satisfy domestic demand and reduce imports, it makes it difficult to further increase it in the short run. In the medium run the potential is still

there, as the average yield in Uzbekistan lags the averages in Germany and France at 6-7 tons/ha, for example.

48 Higher wheat production could increase flour export by Uzbekistan in the Region, especially to Afghanistan, the key importer in the Region with the advantageous geographical position for Uzbekistan. In addition, Turkmenistan, Tajikistan, and Kyrgyz Republic are all net flour importers and they can also buy flour from Uzbekistan. By 2030 the total population in the Region is projected to increase by 19 percent and reach 488 million people (Figure 35). In the longer term by 2050, the population in the Region is projected to be 606 million people, which is 48 percent more than in 2019. In the absence of substantial growth in wheat production, the projected robust population growth will stimulate the outside-of-Region import of both wheat and flour.

Figure 35: Population growth in the Region, million people



Source: FAO.

49 Afghanistan remains the most promising market, where over the next decade the population may grow by more than 10 million people (+26 percent). The population growth is expected at 24 percent in Tajikistan, 16 percent in Kyrgyz Republic, and 14 percent in Turkmenistan by 2030. Thus, Tajikistan would also be considered as a promising market. By 2050, the largest population growth is expected in Tajikistan, estimated at 74 percent of the current level, corresponding to the population growth by 6.9 million people. In Afghanistan, over the same period, the population may increase by 26.6 million or by 70 percent. In Kyrgyz Republic and Turkmenistan, the growth will be less significant and is estimated at 2 million and 2.7 million people by 2050, accordingly.

50 The above-mentioned creates an opportunity for Uzbekistan to develop competition to Kazakhstan in sales of flour, but not wheat, where Kazakhstan holds a more advantageous position. The next chapter dives into the details of the current state of affairs and opportunities for collaboration.

2. Impact Analysis for Uzbekistan

2.1. Analysis of supply and distribution balance of wheat and flour in Kazakhstan

51 As mentioned above, the wheat production in Kazakhstan has been declining, both due to the decline in wheat sown areas and the low wheat yields. In 2019, wheat was harvested on 11.3 million ha, with an average yield of 1.01 ton/ha (Table 1). Together with the carry-over stocks from the previous season, the wheat supply was only 14.3 million tons, the minimum indicator for the last 5 years and 21 percent less than during the previous season.² The lower wheat production resulted in a significant increase of import, to 600 thousand tons in 2019/20, largely from Russia within the Eurasian Customs Union.

52 It should be noted that the wheat balance shown in Table 1 is a bit different from the balance produced by USDA. The main differences are for wheat food consumption and foreign trade. The balance

² In 2020/21, USDA forecasts wheat production in Kazakhstan to grow by 18 percent to 13.5 million tons.

compiled by Ukraine’s Analytical Company APK-Inform shows the actual dynamics of flour production in Kazakhstan, while the USDA assumes a relatively flat consumption of food wheat/flour at 4.8 million tons over the past four seasons. APK-Inform’s balance shows the foreign trade for wheat only, while the USDA also includes foreign trade with wheat and flour in wheat equivalent. That is why the USDA numbers are much higher and, accordingly the volume of ending stocks are smaller.

Table 1: Kazakhstan’s wheat demand and supply balance, thousand tons

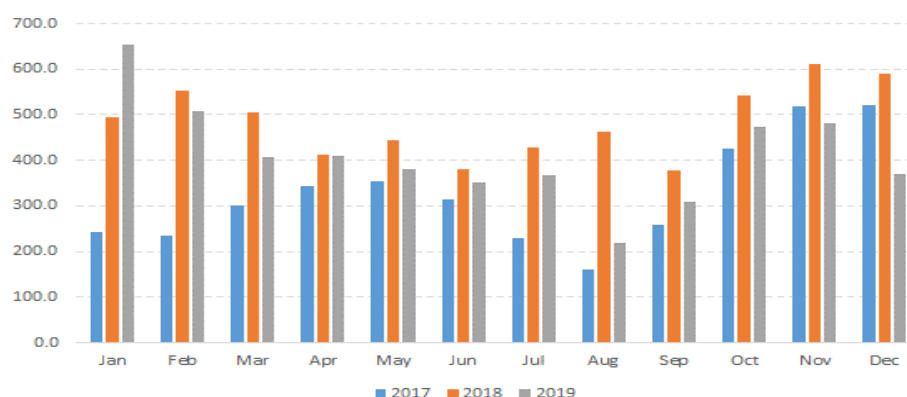
	2016/17	2017/18	2018/19	2019/20	Difference 2019/20 vs 2018/19
Beginning stocks	4,166	4,843	4,029	2,293	-43.1%
Sown area, thousand ha	12,431	11,978	11,408	11,415	+0.1%
Harvested area, thousand ha	12,373	11,912	11,354	11,297	-0.5%
Yield output, t/ha	1.21	1.24	1.23	1.01	-17.5%
Production	14,985	14,803	13,944	11,453	-17.9%
Import	50	71	58	600	+933.1%
Total supply	19,202	19,717	18,071	14,347	-20.6%
Consumption	10,182	10,476	9,636	8,920	-7.4%
Food consumption	5,122	5,356	4,546	4,050	-10.9%
Feed consumption	2,000	2,100	2,150	2,050	-4.7%
Seed stock	2,400	2,350	2,300	2,250	-2.2%
Losses	380	390	360	290	-19.4%
Other	280	280	280	280	
Export	4,177	5,212	6,142	3,550	-42.2%
Total distribution	14,359	15,688	15,778	12,470	-21.0%
Ending stocks	4,843	4,029	2,293	1,877	-18.2%

Source: APK-Inform³.

53 Wheat consumption in Kazakhstan has been going down, primarily due to the reduction in wheat milling. While in 2016/17 the food wheat consumption was estimated at 5.1 million tons, amounting to 50 percent of the domestic consumption, in 2019/20 this indicator was less than 4.1 million tons or 45 percent of the domestic consumption.

54 In 2019/20, wheat export is projected to sharply decline due to the lower wheat production. It will however recover in 2020/21 as predicted by the USDA. The dynamics of wheat export are not exposed to a pronounced seasonality. In the past three years, the maximum monthly supply was recorded in January 2019 in the amount of 654,000 tons. The minimum volume of supply was in August 2017 and amounted to 160,000 tons only. The average monthly export in 2017 was 325,000 tons. In 2018 it increased to 483,000 tons and in 2019 it fell to 411,000 tons (Figure 36).

Figure 36: Kazakhstan’s wheat export dynamics, thousand tons



Source: Grain Processing Union of Kazakhstan.

³ APK-Inform Agency is a leading agribusiness consulting agency in the CIS countries. The Agency was established in 1996 in Dnipropetrovsk, Ukraine, where is the head office.

55 Such drops in exports did not allow stabilizing the ending stocks in 2019/20. They are estimated to be only 1.9 million tons, which is the minimum figure in the last five years and is 18 percent less than in 2018/19. This reduction of the ending stocks was the reason of higher wheat prices in 2019/20.

56 Wheat flour supply and distribution in Kazakhstan has also experienced the downward trends. In 2019/20, flour production is expected to reach 3.0 million tons, which is 11 percent less than in 2018/19 (Table 2). In 2019/20, Kazakhstan is projected to buy 10,000 thousand tons of flour from Russia.

57 For the first time in many years, the domestic flour consumption will surpass the flour exports in 2019/20 (Table 2). Domestic flour consumption is estimated at 1.6 million tons (53 percent of total supply), while flour exports might be only 1.3 million tons at the year-end (42 percent of total supply). **Thus, the flour market in Kazakhstan is getting more focused on domestic consumption.**

Table 2: Kazakhstan’s flour demand and supply balance, thousand tons

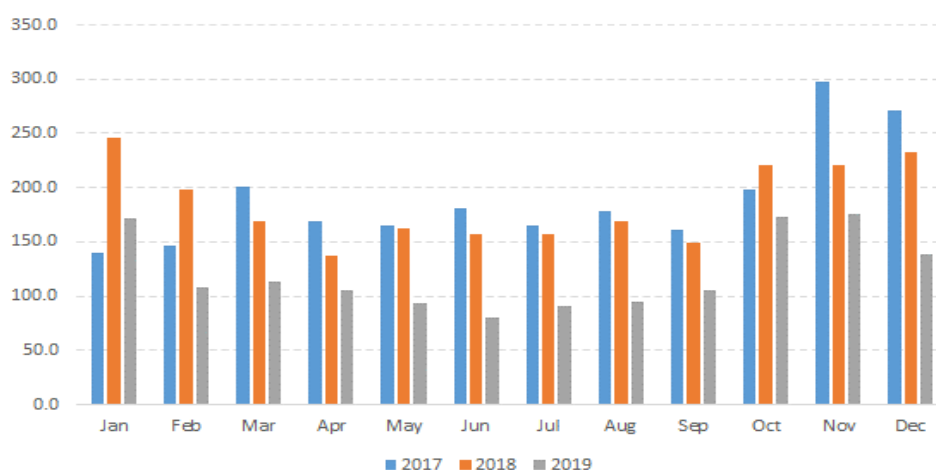
	2016/17	2017/18	2018/19	2019/20	Difference 2019/20 vs 2018/19
Beginning stocks	439	267	233	61	-73.7%
Production	3,664	3,964	3,364	2,991	-11.1%
Import	2	4	3	10	+258.5%
Total supply	4,105	4,234	3,600	3,062	-14.9%
Consumption	1,600	1,620	1,612	1,600	-0.7%
Export	2,239	2,381	1,927	1,300	-32.5%
Total distribution	3,839	4,001	3,539	2,900	-18.0%
Ending stocks	267	233	61	162	+164.4%

Source: APK-Inform.

58 Export reduction in 2019/20 increased the ending stocks of flour. Their volume is estimated to reach 162,000 tons at the year-end, which is 2.6 times higher than in 2018/19, which had the minimum value for the analyzed period.

59 The monthly export of flour from Kazakhstan has been quite stable throughout the year, in comparison with wheat exports. Most flour is being exported during October-January. The average monthly export of flour decreased from 189,000 tons in 2017 to 121,000 tons in 2019 (Figure 37).

Figure 37: Kazakhstan’s flour export dynamics, thousand tons



Source: IA APK-Inform.

60 Reduction in exports of both wheat and flour is the key trend in Kazakhstan. The lower flour export is a result of more competition and investment in own milling capacity by traditional importers, while the lower wheat export is a result of the falling production and the declining demand from the domestic milling industry.

2.2. Analysis of wheat and flour supply and distribution balance in Uzbekistan

61 According to the USDA, the wheat supply and distribution balance in Uzbekistan looks relatively stable. The crop area is stabilized at 1.4 million ha. In 2019/20, yield was expected to reach the maximum level for the reviewed period of 4.9 ton/ha (Table 3). Most wheat production is irrigated, so output is relatively stable, although large drops such as in 2018/19 still occur.

62 Note that the data of the State Statistics Committee of Uzbekistan on wheat production is very different from the USDA estimates. According to the official data, the production was 5.4 million tons in 2018, while the USDA estimated the production at 6.0 million tons. In 2019, the official statistics showed 6.0 million tons of wheat, while USDA - 6.8 million tons. This is a significant difference. Also note that the official data on wheat consumption is not disclosed, making it impossible to assess ending stocks and forecast trade and prices.

Table 3: Uzbekistan's wheat demand and supply balance, thousand tons

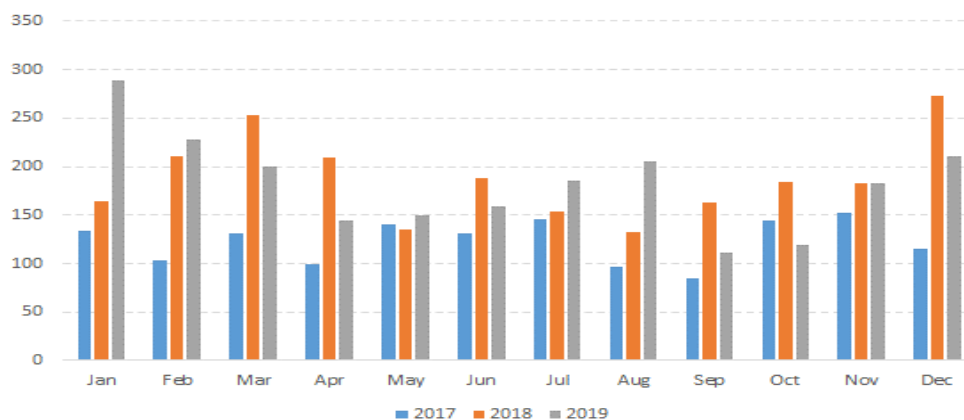
	2016/17	2017/18	2018/19	2019/20	Difference 2019/20 vs 2018/19
Beginning stocks	2277	2313	2473	1510	-38.9%
Harvested area, thousand ha	1446	1446	1400	1400	+0.0%
Yield, t/ha	4.8	4.8	4.3	4.9	+13.3%
Production	6,940	6,941	6,000	6,800	+13.3%
Import	2,596	3,119	2,837	3,000	+5.7%
Total supply	11,813	12,373	11,310	11,310	+0.0%
Consumption	9,300	9,700	9,600	9,600	+0.0%
Food consumption	7,300	7,500	7,600	7,500	-1.3%
Feed consumption	2,000	2,200	2,000	2,100	+5.0%
Export	200	200	200	200	+0.0%
Total distribution	9,500	9,900	9,800	9,800	+0.0%
Ending stocks	2,313	2,473	1,510	1,510	+0.0%

Source: USDA.

63 Despite the relative stability of production owing to irrigation, it is insufficient to meet demand for this crop, thus requiring import. During 2016-2019, the annual wheat imports to Uzbekistan ranged from 2.6 million tons to 3.1 million tons, which accounted for 22-27 percent of total wheat supply. Note that this figure includes the flour import in grain equivalent, which is estimated from 500,000 tons to 850,000 tons annually.

64 There is no pronounced seasonality in wheat import by Uzbekistan (Figure 38). The average monthly purchase increased from 123,000 tons in 2017 to 182,000 tons in 2019. The maximum monthly import volume was recorded in January 2019, amounting to 289,000 tons.

Figure 38: Uzbekistan's wheat import dynamics, thousand tons



Source: Grain Processing Union of Kazakhstan.

65 The USDA estimates that food wheat consumption in Uzbekistan is around of 7.5-7.6 million tons over the past three seasons or 77-79 percent of total wheat consumption⁴. The remaining 21-23 percent of wheat are used for feed annually. The export is estimated at 200,000 tons each season.

66 Given the decline in wheat production in 2018/19 to 6.0 million tons and the increase in the estimate of food wheat consumption to 7.6 million tons, the stocks were significantly reduced by the end of the season, reaching 1.5 million tons. For 2019/20, the ending stocks are estimated at the same level.

67 Regarding the prospects, considering the projected population growth in Uzbekistan and assuming the stable consumption, food wheat consumption in the country may increase to 8.5 million tons by 2030, requiring an incremental growth in total supply by 13 percent over the next decade, either by increasing domestic production or imports.

68 The balance of flour supply and distribution in Uzbekistan was compiled on the basis of data on foreign trade for these products, estimates of food wheat consumption, and the estimates of norms of consumption of flour per capita. According to the Grain Processing Union of Kazakhstan, Uzbekistan has the largest consumption of pastries per capita among other Central Asian countries of around 500 g per person per day. At the same time, this indicator is the lowest in Kazakhstan, estimated at only 259 g/person/day (Table 4).

Table 4: Pastries consumption estimate in Central Asia

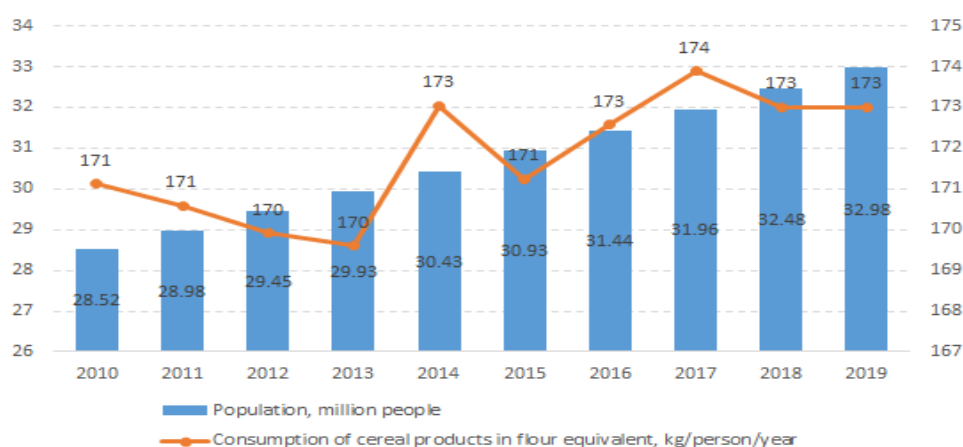
Country	Average annual grain production, million tons*	Average annual wheat production, million tons*	Specific Pastries Consumption, g/person/day
Uzbekistan	8.0	6.7	500
Afghanistan	6.1	4.8	439
Tajikistan	1.3	0.9	420
Turkmenistan	1.5	1.0	385
Kyrgyz Republic	1.7	0.7	378
Pakistan	37.5	25.0	311
Kazakhstan	21.0	14.0	259

Note: (*) Average for past 5 seasons.

Source: Grain Processing Union of Kazakhstan.

69 According to FAO, Uzbekistan’s consumption of cereal products in flour equivalent ranges from 170 to 173 kg per person/year (Figure 39). This corresponds to the above estimate of the daily wheat/flour consumption rate.

Figure 39: Additional data of wheat consumption in Uzbekistan



Source: World Bank estimate based on the FAO data.

⁴According to the Ministry of Economic Development and Poverty Reduction of Uzbekistan, food wheat consumption is estimated at no more than 4.0 million tons. This is another large difference with the USDA estimates.

70 Considering these indicators and the population figures for Uzbekistan, the domestic flour consumption was estimated at 5.5 million tons in 2016/17, with an increase of up to 5.75 million tons in 2019/20. Table 5 presents the flour supply and demand balance for Uzbekistan.

Table 5: Uzbekistan’s flour demand and supply balance, thousand tons

	2016/17	2017/18	2018/19	2019/20	Difference 2019/20 vs 2018/19
Beginning stocks	1,251	1,476	1,663	1,789	+7.6%
Production	5,213	5,393	5,630	5,723	+1.6%
Import	617	640	522	365	-30.0%
Total supply	7,081	7,508	7,815	7,876	+0.8%
Consumption	5,492	5,588	5,662	5,750	+1.6%
Export	114	257	364	400	+10.0%
Total distribution	5,605	5,845	6,026	6,150	+2.1%
Ending stocks	1,476	1,663	1,789	1,726	-3.5%

Source: IA APK-Inform.

71 By the year-end of 2019/20, the flour production in Uzbekistan may reach 5.72 million tons, which is almost the same as the estimated domestic consumption (5.75 million tons). The total flour supply in Uzbekistan is estimated at 7.88 million tons, which is 2.6 times more than in Kazakhstan.

72 Note that in the future, with the income growth in the Region, the consumption of flour per capita is likely to decrease. The survey of the Central Bank of Uzbekistan in February 2020 showed that the growth of total income is associated with sharp increase in meat consumption and decline in consumption of bread and bakery products. Households with a monthly income between USD 100 and USD 200 spend USD 30 on bread and bakery products and USD 35 on meat. At the same time, households with a monthly income of more than USD 600 monthly spend only USD 24 on bread and USD 86 on meat.

73 According to the State Statistics Committee of Uzbekistan, flour has been produced by 134 enterprises in 2020 to date (Figure 40). There is a high concentration of such enterprises in Tashkent region, where 57 mills operate, including 42 mills in the City of Tashkent.

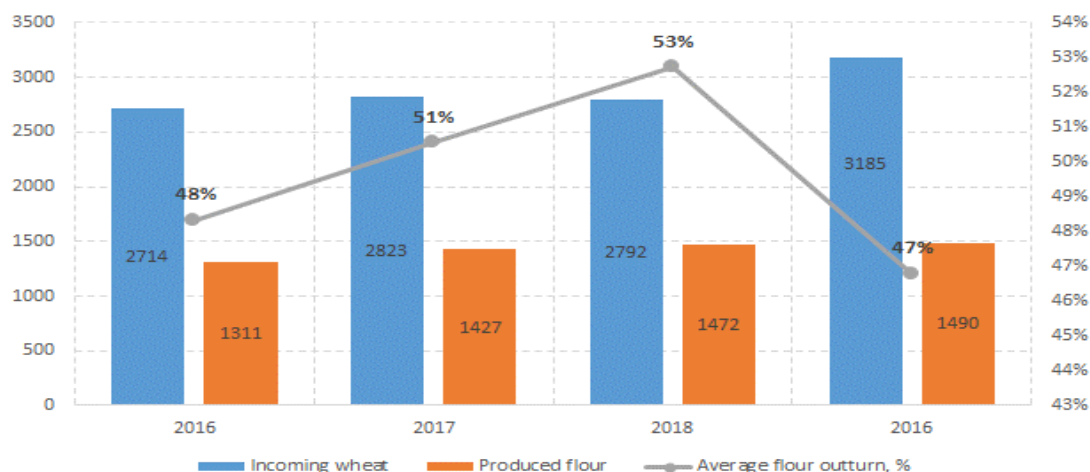
Figure 40: Distribution of flour mills in Uzbekistan in 2020



Source: State Statistics Committee of Uzbekistan.

74 On average over the past three seasons, around 26 percent of flour was produced in Uzbekistan under the state order system by Uzdonmakhsulot JSC enterprises. The flour production is going up steadily. Uzdonmakhsulot Joint-Stock Company operates 58 mills, 114 bread baking shops, 46 pasta shops, 45 cereals production shops, and 2 crushed cereals production shops. The comparison of wheat procurement for milling at the company's enterprises and flour production shows that the average outturn ratio ranged from 47 to 53 percent over the past four years, compared to 75 percent in Kazakhstan. This is a result of a fairly high share of wheat groats production by Uzbek mills (Figure 41).

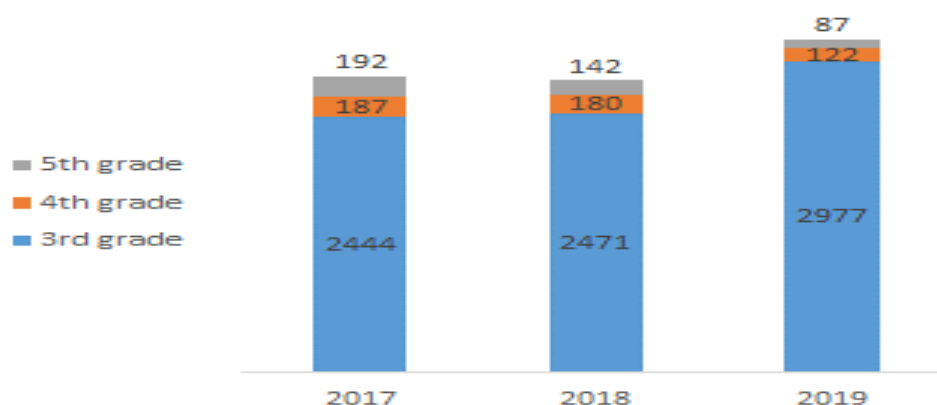
Figure 41: Wheat milling in Uzbekistan at Uzdonmakhsulot enterprises with the state support, thousand tons



Source: Ministry of Economic Development and Poverty Eradication of Uzbekistan.

75 The 3rd grade grain dominates in the structure of wheat procured by the company, from 87 percent to 93 percent over the past 3 seasons (Figure 42)⁵.

Figure 42: Wheat procurement breakdown by grade, Uzbekistan



Source: Ministry of Economic Development and Poverty Eradication of Uzbekistan

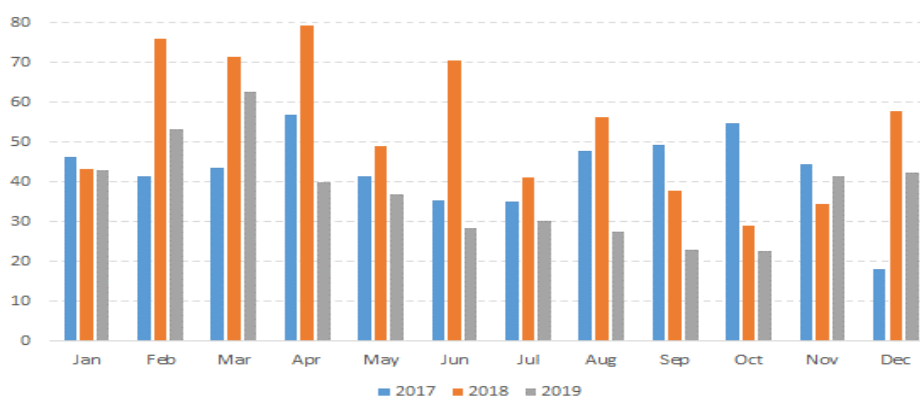
76 Uzbekistan imports flour from Kazakhstan. Total volumes show a declining trend, but in 2018 monthly import volumes surged (Figure 43). November-March are the busiest months for buying flour.

77 As mentioned above, Uzbekistan managed to produce and export more flour in recent years. In 2019/20, the export is expected to reach 400,000 tons, while in 2016/17 it was only 114,000 tons (Table 5). At the same time, even in the context of the increased export volumes, the ending stocks of flour

⁵ Wheat has 5 grades. The first grade is best valued, given to hard/durum wheat for food consumption. The third grade is soft wheat for food consumption. Fourth and fifth grades represent feed wheat, but sometimes they get mixed with food wheat to reduce the cost of flour and bread, often at the expense of quality.

remain substantial, estimated at 1.7-1.8 million tons. They provide a buffer to unexpected disruptions of trade, accounting for 27-32 percent of domestic consumption.

Figure 43: Uzbekistan’s flour import, thousand tons



Source: Grain Processing Union of Kazakhstan.

2.3. Analysis of regulatory aspects in milling industry of Kazakhstan and Uzbekistan

78 When reviewing the regulatory framework of the milling industry in Kazakhstan and Uzbekistan, the significant differences should be first noted in wheat production’s segment. In Uzbekistan, wheat production is supported through production cost reduction (Table 6). The support is smaller in Kazakhstan, although its farmers receive the market-based farm-gate prices. In Uzbekistan, farm-gate prices for wheat purchased under the state order system were below the market level until 2019.

Table 6: Key types of the state support and facilitation of agriculture in Uzbekistan and Kazakhstan*

Uzbekistan	Kazakhstan
Forward procurement of agricultural products up to 40 percent of the value	Not available
Public services (land, seeds, technology, machinery) for farmers	Not available
Acquisition of inputs and equipment from state-owned companies at reduced prices	Cost subsidizing of agricultural producers for procurement of goods and materials
Long-term lending to agricultural producers at up to 9 percent interest rate per annum with a grace period of 2 years	Lending to agricultural producers at 6-17 percent interest rate per annum with a grace period of 2 years
Working capital at up to 3 percent interest rate per annum for 1-1.5 years	Working capital at up to 6 percent interest rate per annum for 9 months
Agricultural machinery leasing at 2 percent per annum for a period of 10 years	Agricultural machinery leasing at 14 percent per annum
5-year exemption from customs fees and duties	Not available
5-year exemption from taxes and duties	Not available

Note: (*) As of fall 2018.

Source: Grain Processing Union of Kazakhstan.

79 The review of key incentives adopted in Uzbekistan showed that similar measures are not present in Kazakhstan. In particular, an absence of tax and customs benefits reduces the competitiveness of Kazakhstan in foreign markets, while less attractive lending terms increase prices of wheat for millers. The measures in Uzbekistan are being cross subsidized by other sectors of the economy, which should lead to their phased cancellation during market liberalization reforms.

80 The Resolution of the President of Uzbekistan “On measures for widespread implementation of market principles in the grain production, procurement and marketing” published on March 9, 2020 envisaged a phasing-out of state order for grain production. According to the document, starting from 2021 crop season, the Government will abolish a practice of setting farm-gate wheat prices and set

production targets. The state procurement system will be abolished, allowing farmers and other enterprises to sell their products at market prices.

81 According to the Decree of the Cabinet of Ministers of Uzbekistan “*On measures for the full-fledged implementation of market mechanisms in the grain, flour and bread supply system*” dated October 14, 2019 envisages that since October 15, 2019 all categories of wheat consumers, with the exception of Uzdonmakhsulot enterprises, shall procure wheat harvested in 2019 and intended for flour production without any restrictions and exclusively through the stock exchange. In this case, the initial price of wheat shall be established by a seller on the basis of actual procurement price and production, transportation, storage, and other costs.

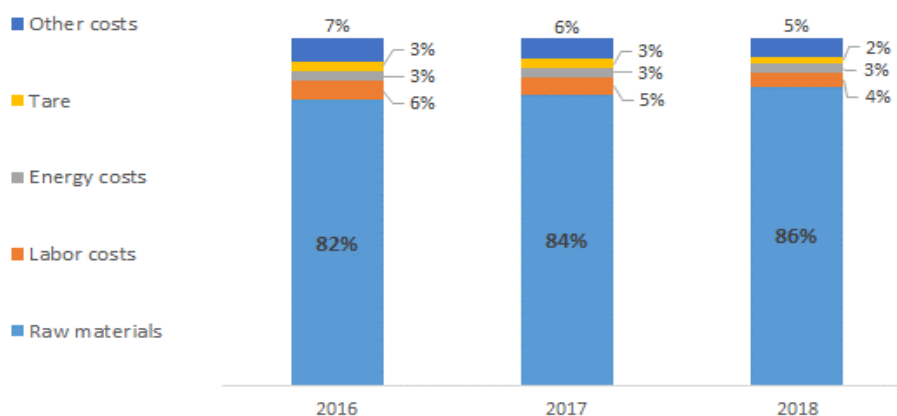
82 The state support has also been provided in Uzbekistan to the flour industry, mainly through foreign trade regulation. In particular, the Decree of the Cabinet of Ministers of Uzbekistan No. 684 “*On measures for additional support of grain processing enterprises and expansion of their export potential, the business entities, regardless of their organizational and legal structure*” dated August 24, 2018, permits the export of flour produced from imported grain. The volume of exported flour shall not exceed 75 percent of the imported wheat volume, which equals the milling outturn ratio.

83 In addition, since September 1, 2018, the document establishes a procedure, according to which the VAT taxable turnover for products of grain processing enterprises shall be calculated as a revenue minus grain price. Also, the grain processing enterprises selling grain, flour and bread, are exempted from paying mandatory contributions to the state trust funds for the period until January 1, 2019. Also, grain products imported to Uzbekistan are exempted from customs fees and duties (except for customs handling fee) for the period until January 1, 2020. Despite a rather short period of tax and customs benefits mentioned above, Uzbekistan managed to export more than 380,000 tons of flour in 2018.

2.4. Comparative analysis of flour milling costs in Kazakhstan and Uzbekistan

84 Value of raw materials accounts for a large part of flour production cost. In Uzbekistan, the share of raw materials in the cost structure is quite high and, on the average, according to some market operators is estimated at 84 percent (Figure 44). Labor costs in the milling industry of Uzbekistan make up around 5 percent in the cost structure. Energy costs are minor (less than 3 percent).

Figure 44: Flour cost structure in Uzbekistan



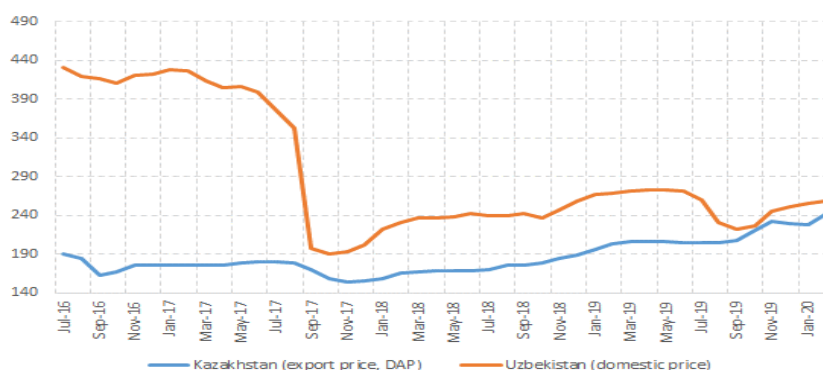
Source: APK-Inform.

85 This cost structure is comparable with that in Kazakhstan and probably in the most post-Soviet countries, where historically, around 80 percent of production costs can be attributed to wheat procurement.

86 Wheat prices are usually higher in Uzbekistan than in Kazakhstan (Figure 45). This is a normal situation for net exporter Kazakhstan and net importer Uzbekistan, otherwise Kazakhstan would not have

been able to sell wheat to Uzbekistan. It is worth noting that the price wedge in USD has decreased over time, especially after Uzbekistan liberalized the currency in September 2017.

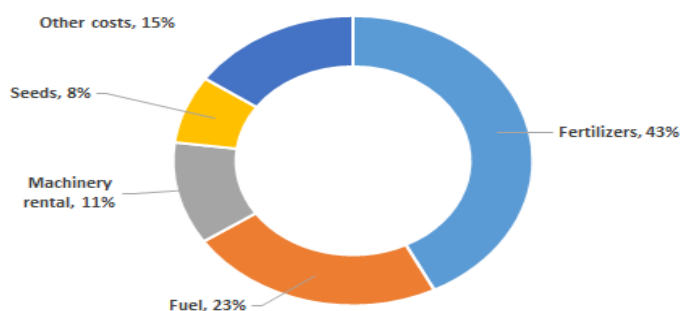
Figure 45: Average wheat prices, USD/ton



Source: FAO GIEWS.

87 Fertilizer costs dominate in the structure of wheat production costs in Uzbekistan with a large margin. For agricultural enterprises, a share of fertilizer costs is estimated at 43 percent (Figure 46). In case of dekhkan farms, this indicator reaches even higher 59 percent. Around 23 percent falls on fuel, 11 percent on rented machinery, and about 8 percent - on seeds in the structure of production costs.

Figure 46: Cost breakdown of wheat production in Uzbekistan, %

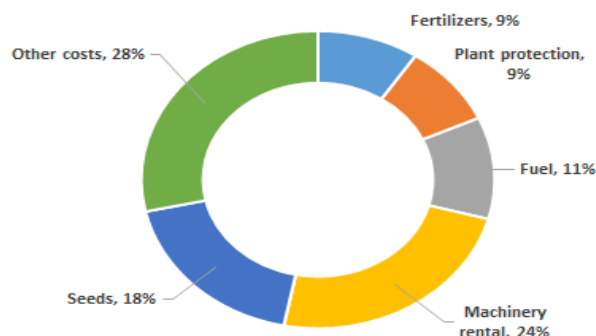


Source: APK-Inform.

88 The high share of fertilizer costs, combined with irrigation, make it possible to attain high and stable wheat productivity in Uzbekistan. In 2019, the average cost of wheat production ranged from USD 400 to USD 550 per ha. With the yield of 4.5 tons/ha, the cost of production would be USD 90-120 per ton. But if the yield is 3 tons/ha, the average production cost would be USD 135–USD 185 per ton.

89 In Kazakhstan, according to the assessments of market participants, machinery rental makes the major share of wheat production costs (around 24 percent in 2019), as well as procurement of seeds (18 percent). The cost of fertilizers and plant protection products is relatively small (Figure 47).

Figure 47: Cost breakdown of wheat production in Kazakhstan, %

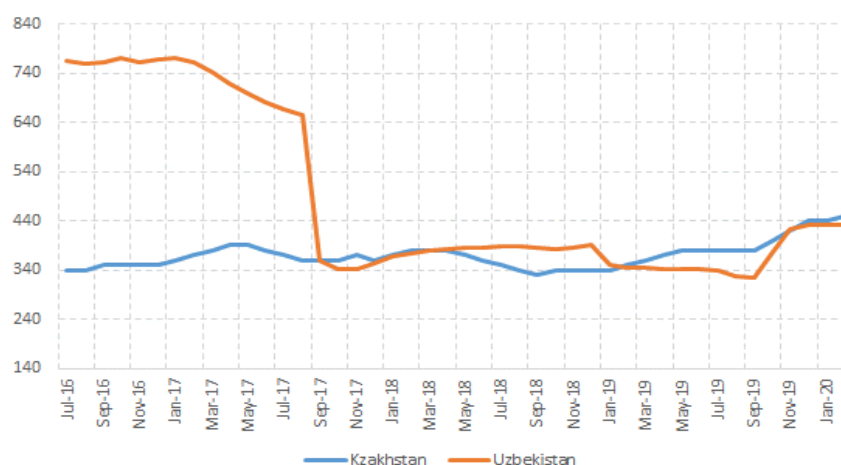


Source: Grain Processing Union of Kazakhstan.

90 The average cost of wheat production in Kazakhstan is estimated at USD 155/ha in 2019 (or USD 140/ton at yield of 1.1 tons/ha) with the anticipated increase to USD 175/ha in 2020. Machinery rental share of costs will grow up to 33 percent and seeds to up to 23 percent.

91 Flour prices at the retail level are about the same in both countries (Figure 48). The higher wheat prices in Uzbekistan are being compensated by lower costs for other parts of the milling costs.

Figure 48: Retail flour prices in Kazakhstan and Uzbekistan, USD/ton



Source: FAO GIEWS.

92 The energy cost's share is insignificant in flour cost of production in Uzbekistan because of their low value. Tariffs for main inputs in Kazakhstan and Uzbekistan differ significantly, by 60-95 percent (Table 7).

Table 7: Comparison of energy costs in Uzbekistan and Kazakhstan

	Unit of measurement	Tariffs, USD*		Difference, %
		Kazakhstan	Uzbekistan	
Electric energy	Kilo Watt	0.06	0.02	-71
Water supply	M ³	0.12	0.03	-70
Water treatment	M ³	0.47	0.02	-95
Gas supply	M ³	0.08	0.03	-69
Heating	M ³	0.30	0.12	-60

Note: (*) exchange rate: 1 tenge = USD 0,0023.

Source: Grain Processing Union of Kazakhstan.

93 In addition to lower tariffs in Uzbekistan, owing to specific geographical location, the production facilities need less heating as compared to Kazakhstan that brings additional competitive advantages.

94 Besides that, the flour pricing in Uzbekistan was a subject to state regulation until the mid-2019. The state control led to the lower flour prices, necessitating subsidization of the milling industry. Partially this was done through lower farm-gate prices of wheat. As noted above, since October 15, 2019 the state regulation mechanisms have been significantly relaxed, and significant market fluctuations are planned to mitigate through Uzdonmakhsulot - the state operator.

95 Thus, both market liberalization in Uzbekistan and the high level of state support during the reform period have enabled Uzbekistan's flour industry to become more competitive vis-à-vis Kazakhstan.

2.5. The key methods and mechanisms of flour supply between Central Asian countries

96 Main flows of wheat and flour from Kazakhstan, both to Uzbekistan and in the direction of Afghanistan, pass through the railway station Sary-Agash in Kazakhstan. After that they go through the border-crossing point to Keles station in Uzbekistan, located in close proximity to Tashkent (Figure 49).

Figure 49: Wheat and flour supply routes from Kazakhstan



Source: APK-Inform.

97 When the deliveries of Kazakh flour go to Afghanistan, the goods are transported by rail to Galaba station in Uzbekistan and further to Khairaton station in Afghanistan. In this case, the transportation distance via the territory of Uzbekistan exceeds 880 km. The difference in the transportation costs for flour exported from Kazakhstan across the territory of Uzbekistan and of flour produced in Uzbekistan is significant. For example, the cost of grain cargo transit from Keles station to Galaba station for Kazakhstan suppliers, as of April 2020, was USD 36.7/ton. At the same time, transportation of the same commodities of Uzbek origin from Tashkent station to Galaba station will be only USD 12.6/ton. Thus, **whereby the distance is comparable, the tariff differs in favor of Uzbek cargoes almost by 3 times** (Table 8).

Table 8: Estimate of the fees for grain and flour transit via Uzbekistan

Transportation section	Distance, km	Transit Fee, USD/1 ton
Transit		
Keles-Galaba	882	36.71
Export		
Tashkent-Galaba	858	12.62
Import		
Keles-Ablyk	139	8.58
Keles-Termez	867	25.47
Keles-Samarkand	385	18.61
Domestic transportation		
Karshi-Urgench	831	6.82
Karshi-Nukus	947	7.55
Jizzakh-Kamashi	346	3.90
Jizzakh-Kasan	279	3.46
Jizzakh-Tashkent	248	3.31

Source: World Bank estimates.

98 In the past few seasons, flour buyers from Afghanistan, having realized the aspects of flour deliveries from Kazakhstan, began to use a tolling system: they import wheat from Kazakhstan to Uzbekistan, rent mills, produce flour on their own costs and transport the finished products to Afghanistan. In the current economic situation, this scheme becomes economically feasible due to the significant differences in the cost of transporting flour produced in Kazakhstan and flour produced in Uzbekistan. This is a non-tariff regulation tool, which will be discussed further. Also, it is worth mentioning that under such a scheme, Afghan consumers buy raw materials rather than finished products, retaining the added value after processing and becoming both wheat and flour traders at the same time.

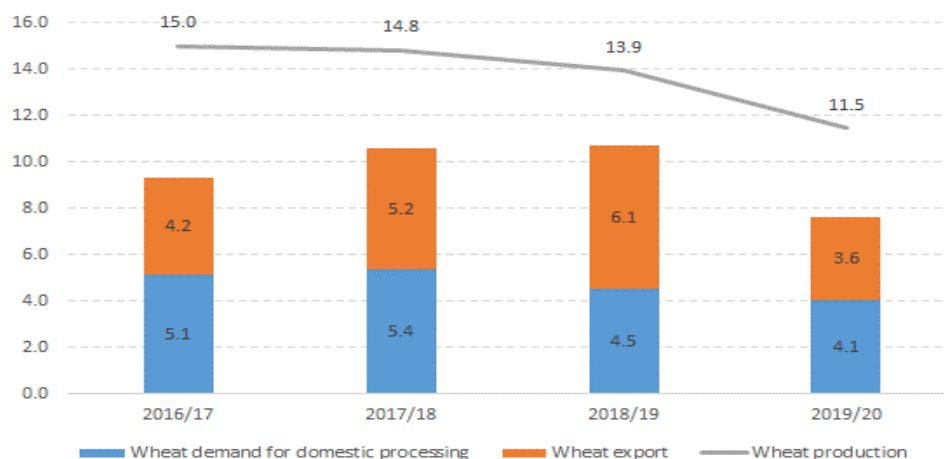
99 In the context of the current situation with high transit tariffs for transportation via the territory of Uzbekistan, some alternative routes for flour delivery to Afghanistan via Turkmenistan are being developed. According to the statement of the Prime Minister of Kazakhstan, referring to the Grain Processing Union of Kazakhstan, Turkmenistan is interested both in development of transportation on its territory and in creation of a competitive route (with Uzbekistan), and is ready to provide a 30 percent transit tariff discount making it equal to the tariff for domestic transportation.

100 The logistics of both wheat and flour transportation could be hampered by periodical shortage of wagons in Kazakhstan. Against the backdrop of strong demand for Kazakh barley, many export-oriented companies began to make contracts on barley supply to Iran through the Port of Aktau. This situation caused a transport collapse: a huge number of wagons had got accumulated in the Port of Aktau waiting for unloading. Following this, as a chain reaction, due to the lack state-owned grain wagons, private companies took away their grain wagons from the general use and began to transport products on their own. Further, the shortage of grain wagons entailed a shortage of covered wagons, as market participants began to transport grain and other crops in the covered wagons. Accordingly, Kazakh market operators faced a shortage of all kinds of wagons and this situation remains actual up to date. Besides, the logistics problem was aggravated with a high yield of wheat in Russia: Russian market participants also lacked wagons for grain shipments both domestically and for export, and therefore they recalled from use the wagons previously rented by Kazakhstan.

2.6. Competition among Kazakhstan's exporters of wheat and flour

101 Considering the current situation with increasing wheat exports from Kazakhstan and a decline in flour exports, Kazakhstan experiences a competition between grain traders and flour producers for both a possibility of selling commodities in foreign markets and for raw materials in the domestic market. The highest level of competition was recorded in 2018/19, when the share of exported wheat reached 44 percent of its domestic production, while only 33 percent of produced wheat was used for domestic flour production (Figure 50).

Figure 50: Competition in wheat procurement between millers and exporters in Kazakhstan, million tons

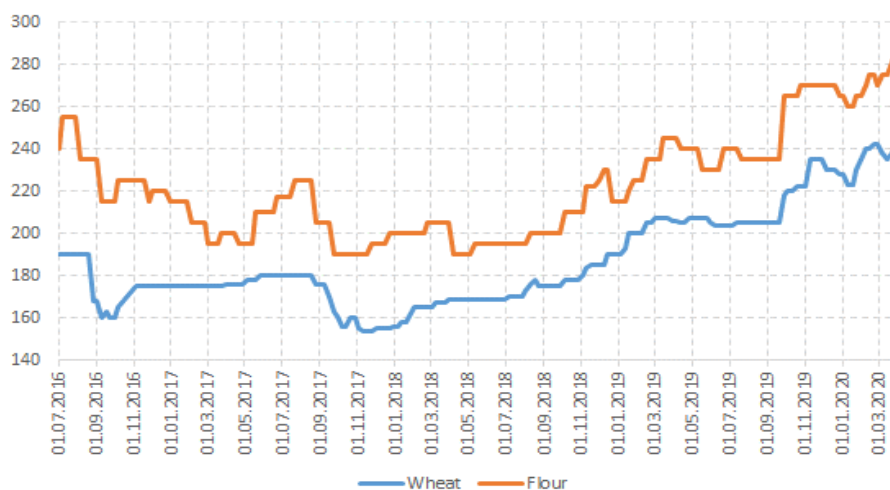


Source: Grain Processing Union of Kazakhstan.

102 Given the decline in wheat production in 2019, a parity slightly recovered last year, with the share of wheat used for domestic milling was 35 percent of wheat production, while the share of exports was 31 percent.

103 The increasing competition between wheat and flour traders has led to the reduction in the spread between export prices of wheat and flour. So, in 2016/17 flour was USD 40/ton more expensive than wheat. In 2018/19 the difference fell to USD 30/ton (Figure 51). In conjunction with the increased demand for raw materials from Uzbekistan and other Central Asian countries, a charge off in the price spread between wheat and flour stimulated higher exports of wheat.

Figure 51: Wheat and flour export prices in Kazakhstan, DAP, Sary-Agash station, USD/ton



Source: APK-Inform.

104 With regard to the competition amongst flour exporters, around 150 companies in Kazakhstan export flour, of which around 100 companies are millers. As many as 140 companies were in the list of applicants applying for the permission to exporting flour in May 2020. The size of shipments, limited by export quota, ranged from 53 to 2,700 tons per one company. The average monthly flour supply per company under the export quota system was 1,000 tons.

105 Around 70-80 companies are actively engaged in wheat export from Kazakhstan on an ongoing basis. The competition amongst wheat exporters is estimated indirectly having the results of quota distribution, which was adopted in Kazakhstan for the period of covid quarantine. According to the list of applicants, who received their quota for export of wheat of 3rd and 4th grades in May 2020, 79 companies planned to export these products, with the average volume of export shipment per company of

2,657 tons. The minimum shipment is around 71 tons, and the maximum one is more than 10,000 tons. Thirteen companies, which obtained export quotas, exported from 5,000 to 10,000 tons of wheat.

2.7. Tariff and non-tariff foreign trade barriers between Central Asian countries

106 Trade relations between Kazakhstan and Uzbekistan are regulated by the Protocol on Application of the Agreement on CIS Free Trade Zone Between its Countries and Uzbekistan dated May 31, 2013. According to the Protocol, Kazakhstan does not apply customs duties on imports of goods originating from the customs territory of Uzbekistan. At the same time, Uzbekistan does not apply customs duties with respect to imports of goods originating from the customs territory of Kazakhstan, however, it applies excise taxes. The same Protocol secures the right to use excise taxes in equivalent of customs duties. Kazakhstan has been negotiating with Uzbekistan the cessation of applying excise taxes for quite a long period of time. As a result of bilateral negotiations, in recent years, the excise policy of Uzbekistan has been significantly liberalized. In view of the above, and also taking into account the structure of imports of goods from Uzbekistan, Kazakhstan did not introduce any retaliatory measures (Table 9).

107 Until September 2017, according to the Decree of the President of Uzbekistan No. PP-2455 dated December 22, 2015, excise tax was levied on 243 commodity items imported to Uzbekistan. Moreover, the tax rate ranged from 2 to 120 percent of the commodities' customs value. By the Decree of the President of Uzbekistan No. PP-3303 dated September 29, 2017, 113 commodity items were exempted from excise tax, including flour.

108 According to the Decree of the President of Uzbekistan No. PP-4470 dated October 2, 2019, in order to diversify the national economy, support competitiveness of domestic producers, create conditions for innovative development and establishment of export-oriented industries for production of high value-added products, as well as for creation of favorable investment climate, a zero import duty on wheat and 10 percent import duty on wheat and wheat-rye flour were established.

Table 9: Import duties for wheat and flour in Central Asia

	Exporter							
	Afghanistan	Iran	Kazakhstan	Kyrgyz Republic	Pakistan	Tajikistan	Turkmenistan	Uzbekistan
	2018	2018	2018	2018	2018	2018	2018	2018
Afghanistan								
Durum wheat		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Wheat and meslin (other)		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Wheat or meslin flour		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Iran	2019		2019	2019	2019	2019	2019	2019
Durum wheat (fodder)	10%		10%	10%	10%	10%	10%	10%
Durum wheat (other)	20%		20%	20%	20%	20%	20%	20%
Wheat and meslin (other)	10%		10%	10%	10%	10%	10%	10%
Wheat or meslin flour	55%		55%	55%	55%	55%	55%	55%
Kazakhstan	2020	2020		2020	2020	2020	2020	2020
Wheat and meslin (durum)	5%	5%		Eurasian Customs Union - 0%	5%	5%	5%	5%
Wheat and meslin (other)	5%	5%			5%	5%	5%	5%
Durum wheat flour	10%	7,5% - preferential tariff for GSP countries			7,5% - preferential tariff for GSP countries	10%	10%	10%
Common wheat flour	7.50%	7,5% - preferential tariff for GSP countries			7,5% - preferential tariff for GSP countries	7.50%	7.50%	7.50%
Meslin flour	10%	7,5% - preferential tariff for GSP countries			7,5% - preferential tariff for GSP countries	10%	10%	10%
Kyrgyz Republic	2020	2020	2020		2020	2020	2020	2020
Wheat and meslin (durum)	5%	5%		Eurasian Customs Union - 0%	5%	5%	5%	5%
Wheat and meslin (other)	5%	5%			5%	5%	5%	5%
Durum wheat flour	10%	7,5% - preferential tariff for GSP countries			7,5% - preferential tariff for GSP countries	10%	10%	10%
Common wheat flour	7.50%	7,5% - preferential tariff for GSP countries			7,5% - preferential tariff for GSP countries	7.50%	7.50%	7.50%
Meslin flour	10%	7,5% - preferential tariff for GSP countries			7,5% - preferential tariff for GSP countries	10%	10%	10%
Pakistan	2019	2019	2019	2019		2019	2019	2019
Durum wheat	11%	11%	11%	11%		11%	11%	11%
Wheat and meslin (other)	11%	11%	11%	11%		11%	11%	11%
Wheat flour	3%	3%	3%	3%		3%	3%	3%
Meslin flour	11%	11%	11%	11%		11%	11%	11%
Wheat or meslin flour	3% - preferential tariff for SAFTA countries							
Tajikistan	2017	2017	2017	2017	2017		2017	2017
Durum wheat	5% 2,5% - preferential tariff for least developed countries	5%	5%	5%	5%		5%	5%
Wheat and meslin (other)	5% 2,5% - preferential tariff for least developed countries	5%	5%	5%	5%		5%	5%
Durum wheat flour	5% 2,5% - льготный тариф для наименее развитых стран	5%	5%	5%	5%		5%	5%
Common wheat flour	5% 2,5% - preferential tariff for least developed countries	5%	5%	5%	5%		5%	5%
Meslin flour	5% 2,5% - preferential tariff for least developed countries	5%	5%	5%	5%		5%	5%
Turkmenistan	no data	no data	no data	no data	no data	no data		no data
Uzbekistan	2015	2015	2015	2015	2015	2015	2015	
Durum wheat	10%	5%	10%	10%	5%	10%	10%	
Wheat and meslin (other)	10%	5%	10%	10%	5%	10%	10%	
Durum wheat flour	20%	10%	20%	20%	10%	20%	20%	
Common wheat flour	60%	30%	60%	60%	30%	60%	60%	
Meslin flour	60%	30%	60%	60%	30%	60%	60%	

Source: International Trade Center.

109 Export restrictions have been so far rare in Central Asia, but the Covid-19 outbreak showed what may happen in case of sudden food security risks in individual countries and what negative impact these restrictions would have on regional trade. On March 31, the Eurasian Economic Commission decided to introduce a temporary ban on export of certain food products from the countries of the Eurasian Economic Union, including flour and grains. A bit earlier, Kazakhstan, the key supplier of flour and wheat

in the Region, introduced temporary restrictions on export of flour for the period from March 22 to April 15, 2020. However, considering the depth of economic crisis and the risks for flour mills, the decision to ban the export of flour was replaced on March 31, 2020 by the export quotas for wheat and flour. In April 2020, export quotas equaled 200,000 tons for wheat and 70,000 tons for flour. Export quotas for flour in May 2020 were increased to 150,000 tons, while the quota for wheat export was left unchanged at 200,000 tons. on June 1 the export restrictions ended.

110 The Government of Kyrgyz Republic imposed a temporary ban on export of certain types of commodities, including wheat and flour. The restrictions are expected for a period of 6 months from the date of making decision on March 23, 2020. The Government of Tajikistan imposed a ban on export of wheat, flour and other products in May 2020.

111 Despite that most of these measures are temporary, their adoption is very exemplary for future risks, which may arise in Central Asian market.

3. Conclusions

112 In total, the broader Central Asian Region generates around 9.3 percent of the global wheat production and accounts for 9.5 percent of the global wheat consumption.

113 Comparison of production and consumption in individual countries of the Region shows that Pakistan and Iran, the main wheat producers (cumulatively they produce 59 percent of total production in the Region), are the main consumers at the same time (60 percent). Kazakhstan, which is the third of the top three leaders in wheat production with a share of 21 percent in total production in the Region, takes only the fifth position in consumption with a share of 10 percent. That allows Kazakhstan to export significant volumes of wheat and positions the country as the key supplier in the Region.

114 Wheat trade in the Region is contained by the borders of the Region. Any shortage of wheat production in the countries of the Region is mainly compensated by the purchase of wheat from Kazakhstan. Afghanistan and Uzbekistan are the key importers, with their domestic consumption covered by imported wheat to equal 37 percent and 28 percent, respectively.

115 A much higher, relative to the world average, food wheat consumption per capita has been formed in the Region. it is estimated at 178 kg/person/year, as compared to 78 kg/person/year in the world on an average. Within the Region, the highest rate of bread and pastries consumption per capita, approximately 500 g/person/day, is registered in Uzbekistan *versus* 249 g/person/day in Kazakhstan.

116 Reduction in flour import and increase in wheat import from Kazakhstan by main importers, which include Afghanistan, Uzbekistan and Tajikistan, has been the key trend in wheat and flour trade in the Region in recent years. At the same time, the flour import by Afghanistan from Kazakhstan remains at the high level, while the annual import of flour by Uzbekistan and Tajikistan was declining by around 9 percent and 11 percent, respectively.

117 Uzbekistan, having a common border with Kazakhstan, has used its advantage by promoting development of its flour milling industry using the state support and non-tariff measures. This has boosted the production and export of flour in Uzbekistan and reduced the gap between wheat and flour prices with Kazakhstan.

118 Key non-tariff regulations in wheat and flour trade in the Region include higher tariffs for transportation of Kazakh grain cargoes via Uzbekistan to Afghanistan and Tajikistan vis-à-vis the tariffs for transportation of the same cargoes originating from Uzbekistan. The cost of transit is almost three times higher than the cost of domestic transportation at the same distance in Uzbekistan.

119 As a result of such regulation, a tolling system has been developed. Importers from Afghanistan buy Kazakh grain in Uzbekistan at the average price 19 percent lower than the price of wheat to Afghanistan, mill it within Uzbekistan, where energy costs are 60-95 percent lower than in Kazakhstan, and then transport flour to Afghanistan, applying the domestic transportation tariffs of Uzbekistan.

120 Development of the flour industry in Uzbekistan also facilitated formation of the fairly high export potential in this segment. In 2018/19, the flour export from Uzbekistan was 364,000 tons, expected to

reach 400,000 tons in 2019/20. The main buyer is Afghanistan, including under the framework of the tolling system.

121 Key opportunity for wheat and flour trade is population growth. The population growth in the Region is expected to be 19 percent in the coming decade. The largest increase is projected in Afghanistan (+26 percent by 2030), which cements the country's status of the key importer of both flour and wheat. In Uzbekistan, a population growth is expected at 13 percent, which will require a proportional increase in total supply of wheat ensured by both increased domestic production and import.

122 Key risk for both Uzbekistan and the Region as a whole is related to possible use of more stringent tariff and non-tariff regulations by Kazakhstan, which could escalate costs of wheat and flour for key buyers and reduce efficiency of the milling industry in Uzbekistan. Another key risk is future reduction in per capita consumption of flour and pastry products, due its current high consumption rate and the increase of population incomes, which would trigger the shift in consumption away from bread.

123 Russia can be considered as an alternative supplier of wheat to Uzbekistan. However, in this case, the deliveries will go via the territory of Kazakhstan and be exposed to the same non-tariff regulation risks, which are presently in force on the part of Uzbekistan applicable to Kazakh products delivered to Afghanistan and Tajikistan. A tolling system could be a solution with Russian wheat to be procured by Uzbek buyers in Kazakhstan.