MARKET INTELLIGENCE REPORT 2024

Potatoes Market in Kazakhstan and Potential for Pakistani Exporters

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1. INTRODUCTION

The potato, botanically known as Solanum tuberosum, is one of the world's most important food crops, cultivated in over 100 countries. Valued for its high nutritional content, potatoes are rich in carbohydrates, vitamins, minerals, and antioxidants, making them a staple food for billions of people globally. As a root vegetable, potatoes are among the world's most versatile and affordable crops, with a wide range of culinary applications suitable for all age groups. Due to their richness in essential vitamins and minerals, potatoes can be served in various ways, such as mashed, roasted, baked, or boiled. In 2024, the potato industry continues to be a vital component of the global agricultural sector. With their versatility, nutritional value, and adaptability to various climates, potatoes play a crucial role in food security and economic development worldwide.

Origin and Background

The potato (Solanum tuberosum) is native to the Andean region of South America, particularly in modern-day Peru and Bolivia. It was cultivated by indigenous peoples for thousands of years before European contact. In the late 16th century, Spanish conquistadors encountered the potato in the Americas and brought it to Europe. Initially met with skepticism and used more as an ornamental plant than as food, the potato gained popularity across Europe during the 17th and 18th centuries due to its high yield and nutritional value. It eventually became a staple in many European countries particularly in Ireland and Germany.

Origin in Russia and present-day Kazakhstan

In the early 18th century, the potato was introduced to Russia during the era of the Czars and the reign of Peter the Great, who recognized its potential to improve food security. However, its adoption was slow due to skepticism surrounding the potato in Russia. Factors such as unfamiliarity and cultural resistance to this foreign crop contributed to its initial rejection. As a new and exotic crop from the Americas, the potato was met with distrust, and people were hesitant to adopt something they didn't know or understand. As a result, superstitions and misconceptions grew. Some people believed that potatoes were linked to witchcraft or the devil due to their underground growth, associating them with dark, hidden things. This reluctance to cultivate or consume potatoes was reflected in the term "чёртово яблоко" (chortovo yabloko), which translates to "devil's apple."

Initially, potatoes were known more for their flowers than their tubers. The shift from ornamental use to food took time, and some viewed eating the plant's underground parts as unnatural. Health concerns also arose due to the potential toxicity of potatoes, as they belong to the nightshade family, which includes other potentially toxic plants like deadly nightshade (Atropa belladonna). Some religious leaders resisted potatoes, perceiving them as a deviation from traditional Russian crops and diets. Over time, as people became aware of the potato's high yield, adaptability, and nutritional value, skepticism began to wane. In the early 19th century, Catherine the Great encouraged the cultivation of potatoes to address food shortages, leading to broader acceptance.

As the potato became more integrated into Russian cuisine and agriculture, negative connotations disappeared, and "картофель" (kartofel) became the standard term for potatoes in Russia. During the Soviet era, from 1922 until its dissolution in 1991, Kazakhstan, as part of the Soviet Union, saw significant cultivation of potatoes on large collective and state farms. This agricultural focus helped spread the cultivation of potatoes throughout the region, including Kazakhstan and other former Soviet states. Today, "картофель" (kartofel) is widely used across Russian-speaking regions, particularly in Kazakhstan, reflecting the potato's enduring importance in the region. In the Kazakh language, potatoes are called "картоп" (kartop). Both terms are used interchangeably in different contexts within Kazakhstan.

2. GLOBAL TRENDS

Statistics on Potato Production

Global potato production continues to rise, driven by population growth, changing dietary habits, and increased demand for processed potato products. Major potato-producing countries include China, India, Russia, Ukraine, and the United States, accounting for the majority of global production. Potato consumption varies regionally, with per capita consumption highest in countries like Belarus, Ukraine, and Russia, where potatoes are a dietary staple. The Food and Agriculture Organization’s (FAO’s) FAOSTAT database, updated in late December 2023, includes potato production statistics up to 2022. The total harvested area worldwide was 17,788,408 hectares in 2022, slightly less than the previous year in 2021. An estimated 376 million metric tons of potatoes were produced worldwide in 2021, whereas in 2022 the data reveals that approximately 375 million tons of potatoes were produced globally across various countries as below:

Table 1: Global Potato production in 2022 (In million tons)[1]

S.No	Country	Production (in million tons)	S.No	Country	Production (in million tons)
1.	China	95.5	8.	Netherlands	6.9
2.	India	56.0	9.	Canada	6.2
3.	Ukraine	20.9	10.	Egypt	6.1
4.	Russia	18.9	11.	UK	4.8
5.	US	17.8	12.	Belgium	3.6
6.	Germany	10.6	13.	South Africa	2.5
7.	France	8.0	14.	Argentina	2.2

Regional Trends

Similarly, regional analysis of Potato production is worthy to be assessed. Europe remains the largest potato-producing region, with countries like Germany, France and Netherlands, leading in potato cultivation and processing. Asia-Pacific is a rapidly growing market for potatoes, driven by population growth, urbanization, and rising disposable incomes. Latin America and Africa offer untapped potential for potato production and consumption, supported by favorable agro-climatic conditions and increasing demand for nutritious foods.

Global Market Trends

Increased demand for value-added convenience foods and processed potato products, such as frozen fries, chips, and dehydrated potato flakes, is driving growth in the potato industry. Rising consumer awareness of the health benefits of potatoes, including their high fiber content, vitamins, and minerals, is driving demand for fresh and minimally processed potato products. Growing interest in sustainable agriculture and environmentally friendly farming practices is influencing potato production methods, such as organic farming and precision agriculture. The potato industry continues to evolve in response to changing consumer preferences, market dynamics, and global challenges.

[1] FAO FAOSTAT database< https://www.potatonewstoday.com/2024/01/06/global-potato-production-insights-from-the-faos-latest-data/>.

This industry faces many challenges as well. It is widely recognized that climate change and extreme weather events present substantial challenges to potato production globally. These conditions affect yields, quality, and the stability of supply chains. Additionally, pests and diseases, including late blight, potato cyst nematode, and potato virus Y, pose serious threats to potato crops around the world, necessitating the implementation of sustainable pest management strategies. Market volatility, fluctuating input costs, and trade barriers impact the profitability and competitiveness of potato growers and processors. Despite facing obstacles, the potato industry remains resilient and adaptable, poised for growth and innovation in 2024 and beyond. Expansion of potato cultivation in emerging markets presents opportunities for increased production and trade. Innovation in potato breeding and biotechnology, including the development of disease-resistant varieties and improved agronomic traits, can enhance yield, quality, and resilience. Diversification of potato products and value-added processing, such as fortified foods, snacks, and convenience meals have potentials to tap into new consumer markets and drive revenue growth

3. POTATO MARKET OF KAZAKHSTAN

Kazakhstan is a significant consumer and producer of potatoes in Central Asia, with a long-standing agricultural tradition. The country has a diverse climate and a substantial amount of arable land, leading to a stable domestic potato production industry. Kazakhstan's potato cultivation benefits from modern agricultural practices, including irrigation systems and mechanized farming techniques. Farmers typically plant potatoes in the spring, with harvesting occurring in late summer or early autumn. Kazakhstan as one of the leading potato-producing countries in Central Asia, has a diverse range of potato varieties cultivated across the country. The main potato-growing regions in Kazakhstan include North Kazakhstan, Akmola, Karaganda, and East Kazakhstan, benefiting from favorable soil conditions and adequate irrigation. Potato production in Kazakhstan is characterized by both large-scale commercial farms and smallholder producers.

Potatoes Production and consumption Trends

At time of Soviet dissolution in 1991, Kazakhstan was producing about 2.5 million tons of potatoes annually from a cultivated area of 240,000 hectares. However, during the tumultuous decade that followed, the area devoted to potato cultivation and overall production steadily declined, eventually dropping to 1.2 million tons in 1998. Since then, production has rebounded, primarily due to substantial improvements in per hectare yields, which increased from 7.6 tons in 1998 to over 15 tons by 2007. In that year, Kazakh potato farmers harvested approximately 2.4 million tons of potatoes from 155,000 hectares of land. Since 2017, potato production has been continuously increasing with an average annual growth rate of 3.2%, reaching 4 million tons in 2021. Whereas Potato consumption in the country was 3 million tons in 2021. The reason of this high growth is attributed to the dedication of 207,000 hectares to potato cultivation, yielding a total of 4,031,600 tons, however the yield was at the level of 207 q/ha. Today, potatoes rank as Kazakhstan's second most important food crop after wheat, with an average per capita consumption of around 100 kg per year. While the majority of potatoes are consumed fresh or used as animal feed, the export of processed potato products has seen significant growth in recent years, climbing from 1,000 tonnes- 15,000 tonnes in 2000s.[2]

Annual Potato Production and consumption in Kazakhstan (2012-2023)

HS Code 070190: Vegetables; Potatoes (other than seed), fresh or chilled

Year	**Production in tons**	**Consumption**
2023	4,700,000.00 tons	110.21 kg per capita
2022	4,280,470.00 tons	109.11 kg per capita
2021	4,031,580.00 tons	105.23 kg per capita
2020	4,006,780.00 tons	113.83 kg per capita
2019	3,912,100.00 tons	109.74 kg per capita
2018	3,806,990.00 tons	109.51 kg per capita
2017	3,551,110.00 tons	105.67 kg per capita
2016	3,545,700.00 tons	109.42 kg per capita
2015	3,521,050.00 tons	109.12 kg per capita
2014	34,105,40.00 tons	108.56 kg per capita
2013	3343600.00 tons	105.49 kg per capita
2012	3126440.00 tons	106.83 kg per capita

During 2022-2023 season, Kazakhstan saw an 11.9% increase in potato production, rising from 4.2 million tons to 4.7 million tons. This growth was part of a broader rise in vegetable yields reported across the country with high quality of the crop. According to the Bureau of National Statistics, the area of potato plantations was almost 200,000 ha in 2022, which is 2% more than previous year. The new harvest was expected to exceed the volumes of the previous year, and the

[2] https://www.potatopro.com/kazakhstan/potato-statistics

surplus was planned to be exported. A trade agreement was also reached with Uzbekistan to facilitate the export of up to 500,000 tons of Kazakh potatoes. The Kazakhstan's Ministry of Agriculture indicated that this growth not only ensures enough potatoes for Kazakhstan's domestic market, but also allows for exports to neighboring countries like Uzbekistan and Russia. It is also reported that domestic agricultural producers are now putting potatoes in vegetable storage. The overall quality of the vegetables, including potatoes, is high, and they are now being stored for the winter season. So the expected surplus from the new harvest is intended for export up to 500,000 tons of potatoes under favorable terms.[3]

The above statistics show that Potato farming is a crucial sector in Kazakhstan's agriculture, significantly bolstered by the nation's favorable natural and climatic conditions, which not only support robust potato production but also position the country as a potential major exporter. Potatoes hold a prominent place in the diet of Kazakhstan's population. They are a versatile and affordable staple food consumed in various forms, including boiled, mashed, fried, and baked. Potatoes feature prominently in traditional Kazakh cuisine, often served alongside meat dishes, soups, and stews. Additionally, processed potato products such as chips, fries, and snacks are popular among urban consumers. The consumption of potatoes in Kazakhstan is influenced by cultural preferences, dietary habits, and economic factors.[4]

Potato Export and Import dynamics:

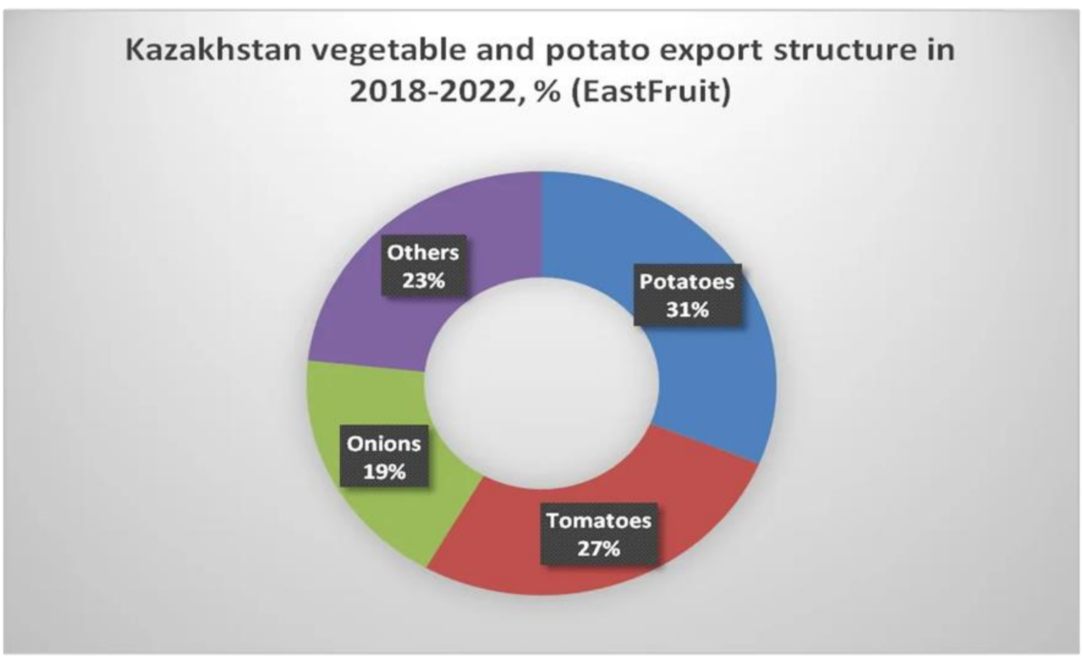
Kazakhstan has historically been import-dependent for potatoes. During the Soviet era, the country relied on Belarus for potato imports, and in the post-Soviet period, it sourced potatoes from neighboring countries. However, in the 2000s, the potato industry in Kazakhstan began to receive a significant boost as mentioned earlier. By 2010, noticeable results were evident, though Kazakhstan was still dependent on foreign potato supplies from Pakistan, Iran, China, Kyrgyzstan, and Russia. This dependence was reduced by 2016-2017, when Kazakhstan's potato growers managed to fully supply the domestic market, effectively displacing imports. The increased potato yields also suggested a potential for exports, a fact that both the government and the business community claim as a significant achievement.

Kazakhstan exports potatoes to neighboring countries and international markets, contributing to its agricultural trade. The volume of potato exports varies depending on factors such as production

[3] https://east-fruit.com/en/news/potato-production-in-kazakhstan-increased-by-almost-12-in-2022/
[4] https://www.potatopro.com/kazakhstan/potato-statistics

levels, market demand, and competition. Kazakhstan's potato exports may consist of fresh potatoes or processed potato products, catering to different market segments. Export destinations may include Russia, Central Asian countries such as Uzbekistan, and other global markets where Kazakhstan has established trade partnerships. According to local statistics, Kazakhstan exports 300,000 to 500,000 tons of potatoes to Uzbekistan annually. While Kazakhstan has made strides in potato cultivation and export, challenges remain. Processing capabilities are limited, and a significant gray market exists, impacting the price and quality of potatoes in the retail sector. Furthermore, fluctuations in the currency affect the profitability of potato farming, as many inputs are priced in foreign currencies, while most sales are made on the domestic market.

The analysis of Potatoes exports is akin to overall vegetable exports of Kazakhstan. Broader analysis of Kazakhstan's vegetable exports from 2018 to 2022 did show a growth trend, increasing on average by 2.5% or $1.7 million annually, averaging about $65.8 million per year. The main exports included potatoes, tomatoes, and onions, which together accounted for 77% of all vegetable export revenues. Other significant but smaller exports included cabbage, cucumbers, and carrots. The majority of these exports were destined for Russia (over 50%) and Uzbekistan (32%), with only minor quantities going to other countries like Turkmenistan and Belarus[5].

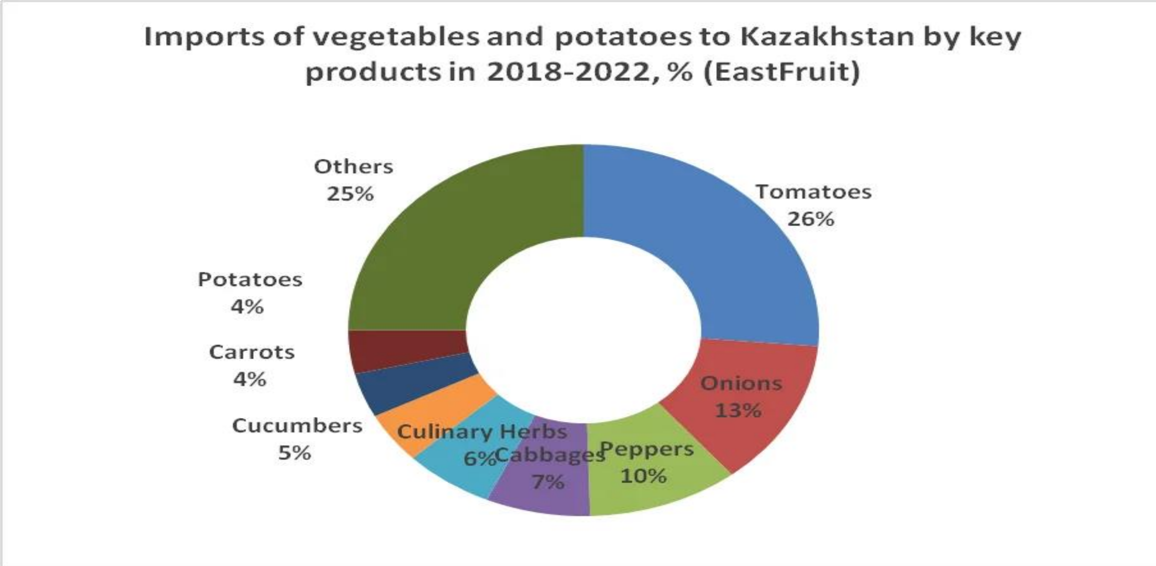


Further research on trade dynamics of vegetables of Kazakhstan depicts that despite increasing media coverage suggesting the country is achieving export success, Kazakhstan is still considered

[5] https://east-fruit.com/en/news/potato-production-in-kazakhstan-increased-by-almost-12-in-2022/

as the largest net importer of vegetables in Central Asia. In reality, Kazakhstan predominantly serves as a major market for vegetable imports in the region. While other Central Asian countries generally maintain balanced or positive vegetable trade balances, Kazakhstan has consistently been a net importer with a growing negative trade balance over recent years. Again, before analyzing the specific market conditions for potatoes, it's crucial to consider their position within the broader context of agricultural product imports. This will provide a fair understanding of the role potatoes play in Kazakhstan's import portfolio. In 2023, Kazakhstan witnessed a substantial influx of agricultural products from abroad, constituting approximately 70-80% of the fruits and vegetables available in the country's markets and stores. The total import value of tomatoes amounted to $38.5 million, with $27.3 million originating from Turkmenistan and $6.4 million from Uzbekistan. Additionally, tomatoes were sourced from China, Iran, and Russia. Garlic was imported from China ($2.1 million) and Uzbekistan ($0.6 million). Onions, both shallots and regular, were imported at a total cost of $20.9 million, including $13.8 million from Uzbekistan and $6.4 million from Tajikistan. Supplies also came from Afghanistan, Pakistan, and Russia. Potato imports to Kazakhstan reached $3.8 million, with shipments originating from Pakistan, Russia, Uzbekistan, Azerbaijan, and Belarus. Cauliflower and broccoli imports totaled $3 million and came from Uzbekistan, China, and Iran. Carrots and turnips were purchased for $2.5 million from Uzbekistan, Russia, and Kyrgyzstan. Cucumbers were imported from Iran, Uzbekistan, and China, totaling $6.2 million. Statistically there are about 25,000 hectares of agricultural farms (excluding personal farms) are dedicated to potato cultivation in Kazakhstan, with the entire area under irrigation. This yield is sufficient to feed the entire urban population and export between 200,000 and 300,000 tons annually. The average yield is around 35-37 tons per hectare, which is a marked improvement from previous years. However, some farms have already reached a yield of 50-55 tons per hectare, indicating the potential for further growth.

Kazakhstan's vegetable import market is significantly larger than its export market, with imports averaging $162.9 million annually over 2018-2022, which is 2.5 times higher than its exports. The growth rate of imports was also more than double that of exports, at 5.3% per year or an increase of $8.7 million annually. This indicates a rapidly increasing dependence on vegetable imports.The composition of Kazakhstan's vegetable imports is diverse, but tomatoes, onions, and peppers make up about half of the total imports. Notably, onions, a major import item, are also a significant export, reflecting the complex trade dynamics. Potatoes and tomatoes, which are major exports, are also substantial imports, highlighting the dual role these products play in Kazakhstan's trade.



China once held the second-largest share of vegetable imports to Kazakhstan but has been recently overtaken by Turkmenistan and Iran. Kazakhstan, while being a notable buyer from these countries, also faces them as strong competitors in its own vegetable markets. This underscores the complexity and challenges within Kazakhstan's vegetable trade dynamics. Kazakhstan's vegetable trade is heavily reliant on Russia, a market considered unstable and high-risk. This dependency suggests a need for diversification in both export markets and production strategies to enhance the resilience and sustainability of Kazakhstan's vegetable sector. This could involve liberalizing growing and trading conditions, improving logistics, and strengthening infrastructure to support the fresh produce industry.

HS Code Kazakhstan categorizes its potato exports into several HS codes:

S.No	Description	HS Code
1	Fresh or chilled potatoes (excluding seed)	070190
2	Potatoes, prepared or preserved otherwise than by vinegar or acetic acid, frozen	200410
3	Potatoes, prepared or preserved otherwise than by vinegar or acetic acid (excluding frozen)	200520
4	Potatoes, uncooked or cooked by steaming or by boiling in water, frozen	071010

Top Export Partners [6]

Top export destinations of "Potatoes, fresh or chilled" from Kazakhstan in 2022:

1	Uzbekistan with a share of 85%	18.3 million US$
2	Turkmenistan with a share of 7.41%	1.59 million US$
3	Russia with a share of 6.41%	1.37 million US$
4	Georgia	69 thousand US$
5	Belarus	65 thousand US$
6	China	25 thousand US$
7	Tajikistan	17.9 thousand US$
8	Azerbaijan	7.74 thousand US$
9	Kyrgyz Republic	5.06 thousand US$

Main Commodity groups

Exports structure of 0701 - Potatoes, fresh or chilled - from Kazakhstan in 2022 represented by the following main commodity groups :

- 96% (20 million US$): 070190 - Potatoes other than seed potatoes, fresh/chilled
- 3.89% (836 thousand US$): 070110 - Seed potatoes, fresh/chilled

Top Import Partners

Top trading partners (import of "Potatoes, fresh or chilled") of Kazakhstan in 2022:

1	Pakistan with a share of 56%	6.36 million US$
2	Russia with a share of 20%	2.3 million US$
3	Uzbekistan with a share of 6.37%	723 thousand US$
4	Germany with a share of 5.84%	662 thousand US$
5	Belarus with a share of 3.61%	409 thousand US$
6	Netherlands with a share of 3.48%	395 thousand US$
7	Kyrgyz Republic with a share of 1.72%	195 thousand US$

[6] https://trendeconomy.com/data/h2/Kazakhstan/0701

8	Azerbaijan	79 thousand US$
9	Iran	63 thousand US$
10	China	61 thousand US$

Imports structure of 0701 - Potatoes, fresh or chilled - to Kazakhstan in 2022 represented by the following main commodity groups:

- 71% (8.16 million US$): 070190 - Potatoes other than seed potatoes, fresh/chilled
- 28% (3.18 million US$): 070110 - Seed potatoes, fresh/chilledPotatoes wholesale and retail prices in Kazkahstan

Potatoes retail and market prices

Domestic demand for potatoes in Kazakhstan continues to grow steadily, driven by population growth, urbanization, and changing dietary habits. The retail price range for Kazakhstan potatoes is between $0.41 and $0.49 per kilogram, or $0.19 and $0.22 per pound. The wholesale price range for 2024 is approximately $0.29 to $0.34 per kilogram, or $0.13 to $0.15 per pound. The price of 1 kg (2 lb.) of potatoes in Almaty is 292 KzT (local Kazak currency Tenge). There is typically a seasonal price increase for new potatoes in the spring, while old potatoes remain available in the markets at more affordable prices. During visits to communal markets, they found that old potatoes were sold for about 200 tenge, although they lacked the visual appeal of the new crop, which could reach prices as high as 500 tenge. In some cases, new potatoes were priced between 320 and 400 tenge. The higher costs of cultivating new potatoes contribute to the price increase, especially since farmers face greater expenses with these crops. Despite the higher prices for new potatoes, old potatoes stored in storage are usually accessible even seasonality shortage. To prevent excessive price fluctuations, Kazakhstan government does some implemented measures aimed at stabilizing the market for vegetables by mitigating price volatility and ensuring an adequate supply of vegetables.

Photos: Potatoes prices in local Magnum Mall Almaty May 2024

All major retail chains in Kazakhstan participate in price stabilisation efforts. In January 2023, Kazakhstan's overall inflation was 1.1%, with food prices rising by 1.4%. Cities like Astana and Shymkent saw the highest food inflation at 2.2%. To tackle this, the Kazakhstan government implements several strategies. Direct lending to producers has been restructured, and stabilization funds now procure goods during harvest when prices are low, releasing them during off-seasons to keep prices stable. A forward-purchasing system has also been introduced, allowing pre-contracting with producers for supply stability through April 2024. The forward-purchasing system is in place in eight regions, including Akmola, Pavlodar, North Kazakhstan, and others. Local authorities (akimats) also builds up vegetable stocks to manage market prices during the off-season. The export price per kilogram of potatoes from Kazakhstan has experienced a steady decline over the past decade. In 2021, the price increased slightly to $0.12 per kg from $0.08 in

2020, yet this figure is notably lower than the $0.22 recorded in 2012, marking a nearly 50% decrease over nine years. The export price is expected to stabilize at around $0.12 per kg for 2023 and 2024[7].

To counteract excessive price fluctuations, the government of host country is encouraging potato growers to enter contracts that would ensure storage of potatoes until May at a fixed price. This strategy is aimed to stabilize prices and make potatoes affordable across different social strata throughout the off-season. The import price per kilogram of potatoes into Kazakhstan has shown relative stability over the past five years. In 2016, the price was $0.12 per kg, which remained consistent through 2021. While there was a slight drop from $0.13 per kg in 2017 to $0.08 per kg in 2019, the price has since rebounded to $0.12 per kg, suggesting a stable trend. Given this data, the import price per kilogram of potatoes into Kazakhstan is expected to remain at approximately $0.12 for 2023 and 2024. The export values for potatoes from Kazakhstan in thousands of US dollars were $6,023 in 2016, $35,052 in 2017, $12,964 in 2018, and $20,231 in 2019.

According to the Ministry of Trade, there are currently 900 vegetable storage facilities in Kazakhstan with a capacity of over 1.8 million tons. Last year, the National Standard for farm greenhouses was introduced, and their certification was also carried out. This allowed registered greenhouses to receive subsidies for electricity, coal and gas costs during the off-season. To ensure efficient collection, storage, sorting, packaging and distribution of fruits and vegetables, the Ministry of Trade and the Ministry of Agriculture are working to develop the appropriate infrastructure.

Kazakhstan Potatoes Industry Outlook 2022 - 2026

Potato consumption in Kazakhstan is projected to slightly increase, reaching 2 million metric tons by 2026, up from 1.99 million metric tons in 2021, reflecting a modest annual growth rate of 0.5%. This represents a deceleration compared to the 0.1% year-on-year growth observed since 2017. Internationally, Italy was the largest consumer in 2021, with Kazakhstan ranking 22nd globally, following major consumers such as India, the United States, and Russia. On the production front, Kazakhstan's potato output is expected to see more substantial growth, with forecasts predicting an increase to 4.47 million metric tons by 2026, up from 4.06 million metric tons in 2021.

[7] https://www.freshplaza.com/north-america/article/9539612/kazakhstan-has-seen-sharp-increases-in-the-prices-of-potatoes-and-carrots/

Forecast: Potatoes Production in Kazakhstan[8]

Year	Thousands Metric Tons
2024	4329.00
2025	4410.85
2026	4491.78
2027	4571.78
2028	4650.87

The Kazakh government has implemented various policies and programs to support the potato industry, including subsidies, loans, and technical assistance for potato growers and processors. Investments in agricultural research and development, extension services, and infrastructure development are key priorities to address the challenges facing the potato industry and promote sustainable growth. Despite facing challenges, including climate variability and market access issues, the industry remains resilient and adaptable, offering opportunities for stakeholders across the value chain.

[8] Forecast based on Organization for Economic Co-operation and Development data
Source: Report Linker Research

4. PAKISTAN'S POTATOES POTENTIAL

In Pakistan, potatoes are among the primary staples, ranking just behind wheat, rice, and corn in terms of importance to national food needs and domestic consumption. Most of Pakistan's potato production occurs in Punjab, with significant contributions also coming from Khyber Pakhtunkhwa (KPK). Significant advancements have also been made in potato farming, with the average yield per hectare still below global standards but improving due to the efforts of progressive farmers. Over 95% of Pakistan's potato crop is grown in Punjab, the country's core production area. According to the Ministry of National Food Security and Research, potato production surged to 7.74 million tons in 2021-2022, nearly 50% higher than the estimated 4.55 million tons in 2020. Potato production in Pakistan is steadily increasing and is expected to continue this trend in the coming years. Pakistan has recently joined the top ten global potato producers, with its output increasing by more than 35% over the last three years, reaching an estimated 8.01 million tonnes in the 2022-23 season. This surge in production is attributed to an expansion in the area under cultivation and enhanced farming techniques. The country now ranks ninth in global potato production.

Given these developments, Pakistan has the potential to expand its potato exports by increasing its market share in existing importing countries and by exploring new markets presenting a significant opportunity for revenue growth through exports. Pakistan has seen a considerable increase in potato exports. From 2015 to 2019, the country's export volume of fresh and chilled potatoes rose by over 33%, with an annual growth rate of 3% in value despite a 6% decline in the same period. The key existing markets include Azerbaijan, Uzbekistan, Oman, Malaysia, Tajikistan, Kazakhstan, and Russia. Thus, it is crucial to sustain and increase Pakistan's market share in its current export destinations, with a particular focus on Kazakhstan. The analysis further shows that Pakistan's main competitors in these markets are Egypt, Bangladesh, and India. In 2021, Pakistan's potato exports amounted to US$112 million. The main destinations for these exports were Afghanistan, Sri Lanka, the UAE, the Russian Federation, and Qatar. Export figures for Afghanistan reached US$29 million, while exports to the Russian Federation totaled US$15 million in 2021—significantly up from 2020's figures of US$3 million and US$2.7 million, respectively.

5. POTENTIAL FOR POTATO TRADE BETWEEN KAZAKHSTAN AND PAKISTAN

Opportunities

Kazakhstan's potato market presents potential for collaboration and trade partnerships with Pakistan, leveraging Pakistan's strengths as a potato exporter and Kazakhstan's growing demand for imported potatoes. As discussed earlier, Kazakhstan is a significant potato-producing country in Central Asia, with a diverse range of potato varieties cultivated across various regions. Domestic potato production in Kazakhstan meets a significant portion of the country's demand, but there are opportunities for importation to supplement domestic supply, particularly during off-season periods or for specific potato varieties not locally available. This shows significant potential for potato trade, driven by complementary factors such as seasonal production variations, quality potato varieties, Kazakhstan's growing market demand and Pakistan's enhanced potatoes production capacity. As discussed earlier, Pakistan is recognized for its expertise in potato cultivation, with a diverse range of high-quality potato varieties suitable for different culinary purposes. The country's potato exports have been steadily increasing, with key markets including Russia, Middle Eastern countries, and Europe, which provides an ample room for expanding its existing market in Kazakhstan.

Potato Import to Kazakhstan 2023[9]

Country	Value in Million USD
Pakistan	1.5
Russia	1.2
Uzbekistan	0.8
Azerbaijan	0.2
Belarus	0.1

Further analysis reiterates that Kazakhstan and Pakistan have complementary potato growing seasons, with peak production in Kazakhstan occurring during the summer months (June-August) and peak production in Pakistan occurring during the off-season months (October-December).

[9] Kazakh local customs data 2023

This seasonal complementarity offers opportunities for trade and ensures a stable supply of potatoes throughout the year. This offers a great opportunity for pakistan to export its Potatoes from February to August when Kazkahstan's Potatoes demand is fulfilled through storaed Potatoes and import from neighboring countries. Pakistan is recognized for its strengths in potato cultivation, processing, and export, with a reputation for high-quality potatoes and competitive prices in Kazakhstan market. Hence, Kazakhstan presents opportunities for potato trade and exports from Pakistan, particularly for specific potato varieties, processed potato products, and value-added offerings. Trade agreements, market access initiatives, and business partnerships between Kazakhstan and Pakistan can facilitate potato trade and enhance bilateral economic cooperation in overall agricultural sector.

The potential for Pakistani potato exporters to enter the Kazakhstani market lies in many factors. As discussed earlier, with a rising population and changing dietary habits, Kazakhstan's demand for potatoes and potato-based products is expected to increase. Pakistani potatoes can complement Kazakhstani production by providing off-season supplies, ensuring year-round availability.Pakistan competes with other potato-exporting countries in supplying potatoes to the Kazakh market, including Russia, China, and neighboring Central Asian countries.Differentiation strategies, such as offering unique potato varieties, organic or specialty potatoes, and value-added processed products, can enhance Pakistan's market positioning and competitiveness in Kazakhstan. While there are significant opportunities for Pakistani potato exporters in Kazakhstan, several challenges must be addressed, particularly in transportation and logistics. By focusing on strategic partnerships, infrastructure, market research, and compliance, exporters can overcome these challenges and establish a successful presence in the Kazakhstani potato market.

Challenges

- ***Transportation and Logistics***

One of the significant challenges in exporting Pakistani potatoes to Kazakhstan is transportation. Key transportation issues include distance and route complexity, while the geographical distance between Pakistan and Kazakhstan requires efficient transportation routes. The lack of direct routes necessitates transit through third countries, leading to increased costs and complexity. While there are options available for trading routes from Afghanistan to Kazakhstan, each comes with its own set of challenges ranging from logistical issues to seasonal limitations. Currently, three main trade routes facilitate commerce from Afghanistan to Kazakhstan: Torkham to Almaty Route: This overland route starts at Torkham (Afghanistan), passes through Bishkek (Kyrgyzstan), and terminates in Almaty (Kazakhstan). Despite being direct, this route involves high logistics costs primarily due to delays at borders and the necessity for unloading and reloading goods. Quadrilateral Traffic and Transit Agreement (QTTA) Route runs through Pakistan, enters China at the Sost Border, continues through Kyrgyzstan, and concludes in Almaty, Kazakhstan. It's noted for being the most economical of the three routes; however, it faces seasonal closures during the winter, which can disrupt trade. Bandar Abbas to Aktau Route is a maritime route begins at Bandar Abbas port in Iran and sails to Aktau port in Kazakhstan. It is a viable option for exporters but is limited to small ships that carry between 15 to 20 containers, which may restrict the volume of trade that can be conducted efficiently.

Pakistani exporters face significant logistical challenges in exporting perishables like fruits and vegetables due to the lack of cold storage facilities and the absence of direct cargo flights between Pakistan and Kazakhstan. Inadequate infrastructure and logistical issues result in delays, spoilage, or damage to perishable goods, such as sprouting buds on potatoes. Exporters also contend with complex customs regulations and delays at border crossings, affecting delivery times and increasing costs. Addressing these issues requires government action to improve infrastructure, including providing cold storage and securing reserved cargo space on direct flights. Local Kazakh buyers have complained about the spoilage of fruits and vegetables upon arrival in Almaty. The long and cumbersome routes cause potatoes to sprout and develop black or brown spots. These issues tarnish the reputation of Pakistan's potato exports among local Kazakh buyers.

- ***Market Access and Regulatory Considerations***

Pakistani potato exporters also face additional challenges, such as quality standards. Kazakhstan has specific quality standards for imported goods. Understanding market access requirements, import regulations, and quality standards in Kazakhstan is essential for Pakistani potato exporters seeking to enter the Kazakh market. Compliance with phyto-sanitary regulations and quality assurance measures is critical to ensure the smooth flow of potato exports from Pakistan to Kazakhstan. According to the National Chamber of Entrepreneurs of Kazakhstan, potatoes imported into Kazakhstan must adhere to strict phytosanitary regulations to prevent the spread of pests and diseases. Importers are required to obtain phytosanitary certificates issued by authorized agencies in Pakistan. Potatoes exported from Pakistan to Kazakhstan must meet quality standards specified by the Kazakh authorities, including size, weight, appearance, and absence of defects. Compliance with regulatory requirements and quality standards usually pose challenges for exporters, including administrative procedures, documentation requirements, and inspection processes. Ensuring compliance and meeting regulatory obligations is essential to gain market access and maintain export competitiveness.

- ***Customs Regulations***

Exporting potatoes from Pakistan to Kazakhstan involves a range of customs regulations that exporters need to consider. Kazakhstan has made significant strides in streamlining its customs processes, resulting in a more efficient system for the movement of goods. Kazakhstan is part of the Eurasian Economic Union (EAEU), a customs union that also includes Russia, Belarus, Armenia, and Kyrgyzstan. The EAEU has unified customs tariffs and non-tariff regulations, and internal customs borders within the union have been abolished. However, Kazakhstan has its own specific customs code that governs the import and export of goods.For goods imported from non-EAEU countries such as from Pakistan, customs duties apply. These duties can be based on a percentage of the customs value of goods or set in absolute terms in Euros (EUR) or U.S. dollars. Generally, the rates range between 0% and 40%, depending on the type of product. Potatoes are usually subject to these duties, and exporters must ensure they comply with Kazakhstan's customs tariff schedule.

a. Import Tariffs

As part of its WTO accession in 2015, Kazakhstan agreed to lower 3,512 tariff rates gradually, to an average of 6.1 percent in 2020. Tariffs on agricultural products saw the largest reduction, from 16.7 percent to an average of 7.6%. In 2016, Kazakhstan began applying lower tariff rates to certain food products, automobiles, airplanes, railway wagons, lumber, alcoholic beverages, pharmaceuticals, freezers, and jewelry. In 2018, Kazakhstan’s Most Favored Nation (MFN) applied tariff rate averaged 7.1 percent. Kazakhstan applies a zero percent rate on approximately 1,900 tariff lines, including livestock, pork, fish products, chemical and pharmaceutical products, cotton, textiles, machinery and equipment, medical vehicles, and some types of airplanes. Kazakhstan’s simple average WTO bound tariff rate is 10.6 percent for agricultural products and 6.4 percent for non-agricultural products.

b. Additional Regulations

Import VAT: A 12% import value-added tax (VAT) applies to most goods entering Kazakhstan, including potatoes.

Tariff Rate Quotas (TRQs): Kazakhstan maintains TRQs on certain products, such as poultry and beef. While these do not directly impact potato exports, it's important to understand that certain agricultural goods are subject to additional restrictions.

Kazakhstan also has a system for customs declarations through the Information System "Astana - 1," which allows for electronic declarations. This system aims to reduce delays and improve the efficiency of customs processing. Pakistani exporters selling potatoes to Kazakhstan, are likely need to use this electronic declaration system. Kazakhstan has provisions for 'authorized economic operators' (AEOs), which can benefit from simplified customs procedures. Foreign entities exporting to Kazakhstan must use licensed customs brokers to deal with customs authorities. Customs brokers handle the necessary documentation and ensure compliance with customs regulations. The Customs Control Agency maintains a registry of licensed customs brokers, which is regularly updated online.

A full declaration of goods must be filed within thirty days of arrival. However, a brief declaration and notification upon arrival must be submitted to the customs body within 24 hours after the goods cross the border and are placed in a temporary storage warehouse. Except for private individuals permitted to transfer goods under a simplified procedure, a customs declaration must be filed by a Kazakhstani entity. This can be a business organization registered under Kazakhstani law, its affiliate or representative located in Kazakhstan, an individual entrepreneur registered in Kazakhstan, or a permanent resident of Kazakhstan. Foreign entities cannot deal directly with customs officials in Kazakhstan and must use licensed customs brokers authorized to operate in the country.

The party declaring commercial goods at a customs office in Kazakhstan for their release for free circulation is responsible for submitting paper and electronic copies of customs declarations (one copy of each per shipment), along with accompanying documents. The Customs Cargo Declaration (five copies) must be completed in either the Kazakh or Russian language. Other documents may be submitted in a foreign language; however, a customs officer has the authority to request translations of these documents into Kazakh or Russian, as well as notarization of the translations. In addition to the Customs Cargo Declaration, the party declaring goods must submit various other documents, including invoices, a contract for the supply of goods, an import/export transaction passport, and shipping documents (e.g., bill of lading, airway bill, etc.). The transaction passport is a primary tool in the currency control system. It is a cross-agency document filled out by the exporter/importer and reviewed by customs officials and representatives of the exporter/importer's bank. These regulations are cumbersome for Pakistani exporters to navigate particularly documentation and local third party involvement.

- ***Payment Challenges***

During the B2B sessions conducted by TDAP and in follow-up close coordination with local Kazakh buyers of fruits and vegetables including Potatoes, it was revealed that local buyers are reluctant to pay any payment until products imported in Kazakhstan is sold in local markets. This sort of adjustments is offered to mitigate risk associated with spoilage of perishable products during the long route journey. This payment issues are putting Pakistani exporters in a weird situation where chances of avoidance of payments are manifold. The closure of the National Bank of Pakistan's operations in Kazakhstan has also aggravated the situation. Importers are now more inclined to make direct purchases to avoid currency fluctuations, rather than using letters of credit, which adds a layer of complexity to transactions. Additionally, Kazakhstan's local banks have strict regulations on transferring foreign currency abroad. Payment challenges between Pakistan and Kazakhstan are intensified due to lack of robust and fast banking or online payment mechanism and this is one of the significant impediments in smooth trade between the two countries.

6. Recommendations

Challenges related to logistics and infrastructure need to be addressed to fully realize Pakistan's export potential and enhance market access for Pakistani potato producers. Impediments related to transportation logistics, including infrastructure limitations, transit routes, and shipping costs, can impact the competitiveness of Pakistani potato exports to Kazakhstan. Investing in infrastructure development, including transportation, storage facilities, and processing capacity, can improve supply chain efficiency and enhance market competitiveness.It is therefore recommended to invest in infrastructure by ensuring proper storage, packaging, and transportation facilities to maintain product quality during transit.There is a need to partner with reliable logistics providers and collaborate with experienced logistics companies that specialize in cross-border transportation to manage customs clearance, transit requirements, and documentation.Given the perishable nature of potatoes, it is imperative to ensure proper cold storage and transport facilities. This helps maintain quality during long-distance journeys and reduces spoilage risks. Government need to enable cold storage facilities and direct flights cargos such as SCAT. Investing in comprehensive insurance coverage for shipments to protect against loss, damage, or delays would be helpful in risk mitigation and building trust among Pakistani exporters and Kazakh buyers.

Strengthening bilateral trade relations and economic cooperation between Kazakhstan and Pakistan through targeted initiatives, trade missions, and business matchmaking events while focusing on the potato industry can facilitate easier market entry for Pakistani exporters. To achieve this, it is suggested that Pakistan focus on reinforcing its existing market presence in these countries through marketing campaigns and trade delegation visits, thereby strengthening its position in the international potato export landscape. Ensuring compliance with Kazakhstan Quality standards is crucial for successful market entry.Kazakh Local producers and other international exporters such as Uzbekistan and China pose stiff competition. Pakistani exporters must differentiate their products in terms of quality, pricing, or unique selling points.

It is also suggested to foster dialogue and collaboration between government agencies, industry associations, and private sector stakeholders in Kazakhstan and Pakistan to address trade barriers, promote regulatory harmonization, and facilitate potato trade. Establishing trade partnerships and collaboration mechanisms between potato buyers from Kazakhstan and exporters from Pakistan can facilitate trade, ensure quality standards, and meet market demand effectively. Joint ventures, investment projects, and business alliances can further strengthen bilateral cooperation in the potato industry. The Kazakhstan Customs Committee, part of the State Revenue Committee under the Ministry of Finance, handles customs regulation in Kazakhstan. This is also essential to have close coordination with this committee for accurate import declarations and compliance with Kazakhstani customs laws. To effectively navigate the complexities of trade between Pakistan and Kazakhstan, it's important to engage with the appropriate departments and organizations on both sides such as from Pakistan Customs. Kazakhstan National Chamber of Entrepreneurs (Atameken) represents business interests in Kazakhstan. This is also imperative to have collaboration with Atameken to establish business connections, gain insights into the local market, and understand trade practices in Kazakhstan.

Kazakhstan's trade policies and agreements are largely shaped by its membership in the Eurasian Economic Union (EEU), where Russia dominates a significant portion of the market. China ranks as Kazakhstan's second-largest source of imports. However, China in 2023 has taken over place over Russia apparentlty because of Ukrain war. Recently, China and Iran are finalizing negotiations and signing a Free Trade Agreement (FTA) with the EEU to enhance market access. India is also in the midst of negotiations for an EEU-FTA. There's an opportunity for Pakistan to engage in Preferential Trade Agreement (PTA) discussions in the short term and aim for an FTA with the EEU in the long term, focusing on Central Asian markets.To address payment challenges, the State Bank of Pakistan should consider establishing Memorandums of Understanding (MOUs) with Kazakhstani banks. These MOUs would facilitate smoother fund transfers and enhance business operations between the two countries, helping to streamline the process and potentially boost trade activities. Additionally, the State Bank of Pakistan needs to address payment challenges by facilitating the opening of Pakistani banks in Kazakhstan and establishing strong links with local Kazakh banks to aid exporters.

It is also imperative to comply with Regulations and ensuring compliance with Kazakhstani import regulations and quality standards to avoid delays or rejections at customs. Pakistani exporters need to be understand Kazakhstan's import requirements, including phytosanitary certificates, inspection processes, and quality standards for potatoes. It is also advised to implement quality control measures by establishing strict quality control processes to ensure that potatoes meet Kazakhstani standards. This includes proper sorting, grading, and packaging to maintain consistency. It is also imperative to enusre all required documents, including certificates of origin, phytosanitary certificates, and customs declarations, are complete and accurate to avoid delays at border crossings. In order to have more robust mechanism interactions between respective departments of both countries would be crucial. Ministry of National Food Security and Research (Pakistan) oversees agricultural policies and food security in Pakistan. Pakistan Agricultural Research Council (PARC) provides research and standards for agricultural products, which should regularly be consulted to ensure Pakistani potatoes meet the quality standards required for export. Kazakhstan Committee for Veterinary Control and Supervision regulates phytosanitary requirements for imports into Kazakhstan, hence it should be ensured to be in compliance with their regulations to avoid delays at the border. By collaborating with these departments and organizations, Pakistani exporters can navigate the complexities of trade with Kazakhstan, ensuring compliance with regulations and optimizing logistics.

It is also recommended to build strong market presence and relationships by establishing a foothold in the Kazakhstani market, through collaboration of Pakistani exporters with local Kazakh distributors or retailers who have a strong network and understand local consumer preferences. This will help gain market access and build brand visibility. Establishing distribution channels, and fostering business partnerships with local importers and distributors in Kazakhstan can strengthen Pakistan's presence in the Kazakh potato market. The role of Trade Development

Authority of Pakistan (TDAP) has always been very significant such as conducting B2B sessions to build connections with potential buyers and partners and enhancing participation in Trade Shows and Exhibitions. Further engagements in industry events in Kazakhstan would be useful to showcase Pakistani agriproducts particularly varieties of potatoes by focusing on differentiators such as taste, sustainability, or unique varieties. By implementing these specific recommendations, Pakistani potato exporters can navigate the challenges of entering the Kazakhstan market while maximizing their chances of success. This is crucial to gain insights into the potential for potato trade between Kazakhstan and Pakistan, as well as the market access and regulatory considerations involved. By addressing these factors, Pakistani exporters can effectively navigate the complexities of international trade and maximize opportunities for collaboration and growth in the potato industry.

Annexure: List of Local Kazakh buyers of Potatoes

S.No	**Name of Person**	**Company Name**	**Contact E- mail**	**Contact number**
1	Karsybayev Maxum	Fructaim LLP, Shymkent	Maksimkarsybaev@gmail.com	+7 702 410 0304
2	Ali Shahbaz	Oxy Trading LLP, Almaty	Oxy.trading@mail.ru	+7 778 504 9003
3	Gulnur Altynbekova	Surk LLP, Shymkent	Gulnuraltynbekovna48@gmail.com	+7 706 430 8184
4	Zine Zhuman	Milia Aktau, Aktau	zine591@gmail.com	+7 707 777 7089
5	Shostak Mikhail	Exim Trans LLP, Almaty	info@exim-trans.kz	+7 775 239 5522

6	Daniyar Duzbaev	M/s Big City Market, Almaty	altynordanews@gmail.com	+7 707 101 5295
7	Duman	M/s Altyn Orda, Almaty	erlenduman@gmail.com	+7 707 568 8888