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**Main factors behind price fluctuations in food market and its
impacts on purchasing power of people in Azerbaijan**

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Chapter 1. Introduction

Increasing food prices, high rates of inflation have significantly affected the purchasing power of consumers over the years. Price fluctuations led to the higher food insecurity, limited access to the important nutrition items and resulted in aggravation of poverty. The current scale of global crisis on hunger and undernutrition is tremendously increasing. Due to WFP (2023), it is estimated that 345 million people in 79 countries are currently facing the harsh levels of food insecurity in the year of 2023. These statistics have doubled since 2020 from the period of COVID-19. This represents a surprising increase of 200 million people in comparison to before pandemic levels. It seems that ongoing price fluctuations in the food market is going to continue as the global conflicts are aggravating and world population is increasing. Market prices for agricultural goods has significantly increased a year after Russia invaded Ukraine. Though there is a slight decrease in prices in comparison to early 2022, but still extension of the war between world's largest exporters of wheat and other essential crops to the second year puts many countries to face the excessive food insecurity. According to IMF (2023) Fragile and conflict-affected states, home to 1 billion people, are at particular risk.

During the last years Azerbaijan has particularly developed in terms of economic growth and diversification. However, geopolitical impacts of war between Russia and Ukraine have also affected to the food security of Azerbaijan. Country strongly relies on imports for its certain food items as: meat and dairy products. Any kind of disruptions in international trade may lead to the higher prices for indispensable nutrition products, less purchasing power of consumers to acquire these food items and more importantly it may result for the shortages which causes danger for food security. When studying the conditions that were present leading up to the 2007–2008 global food crisis and the 2010–2011 food price inflation that contributed to the Arab Spring, we observe even higher risks to the global food system today (McKinsey, 2022). Significant and unexpected spikes in food prices pose challenges for low-income families to adapt, leading to a decline in consumer spending, decreased access to sufficient calories and nutrition which push people into poverty and hunger. When the prices for food products in domestic market remarkably increases, buyers are experiencing a decline in their ability to acquire certain goods. Especially low-income families allocate a significant portion of their income towards food (50-70 percent), because they face a greater challenge in adapting to increased food prices rather than other income groups. While investigating the recent studies on this topic it became obvious that, there is a lack of data and

evidence about the outcomes of food price fluctuations on people. Therefore, this capstone project seeks to find out the factors causing for food price fluctuations in Azerbaijan market and provide appropriate policy recommendations for decreasing its outcomes on people.

Methodology

Methodology part of capstone project represents how the primary data was collected and how it used during the project. For gaining more appropriate data for the project, I used both quantitative and qualitative data collection methods. Initially, a survey comprising six questions was conducted among 83 respondents. The objective of the survey was to analyse the impact of price fluctuations on people and based on answers of respondents to identify the main challenges and problems in local food market. (Survey questions are indicated in [Appendix A](#)) The survey participants were selected from the age group of 18 to 45 years. Due to statistics obtained from the survey, it became obvious that 84,1 percent of respondents felt a significant change in prices of food products in past one year while other participants were resilient. Moreover, one of the questions which had huge importance was to find specifically in what percentage people use their monthly income on nutrition items. The answers gathered from this question would help to find correlation between purchasing power of consumers and increasing food prices. The responses to this question were deemed unsatisfactory, as 51.2 percent of the participants indicated that they allocate 20-50 percent of their monthly income towards food expenditures. Many of them in this study primarily reported that, they are allocating most part of their monthly income on expenditures towards essential nutritional items such as meat, dairy products, and edible oils. All these findings serve as compelling evidence of the upward trend in food market prices. It is imperative to promptly implement appropriate measures to address these issues.

After gathering the quantitative data, an interview ([Appendix B](#)) was conducted to gain insights into the primary obstacles and challenges associated with the increase in food products in the local market, as well as to get more information about how to mitigate the impact of high prices on low-income families. My interviewee was Senan Kerimov, The export manager of Indian manufacturing and export company “Indo Arab Grain suppliers”. As an export manager Senan Kerimov has been operating in global food market approximately 9 years. The goal of my interview was to analyse which factors impact to rise of food prices on the other hand to find out how it affects to the purchasing power of consumers. So, my initial questions to Senan Kerimov

were related to general situation of Azerbaijan food market, how does his sales affected by inflation and do the consumers meet their requirements for basic nutrition items in such increasing prices. During the interview Mr. Sanan indicated that, Azerbaijan has been successfully integrated to the global market for a period exceeding three decades. Consequently, it is evident that the ongoing global processes will inevitably exert their influence on Azerbaijan. Due to Mr. Kanan's extensive specialization in the field of rice, the examples he presented predominantly focused on the rice market. For instance, Mr. Sanan mentioned that the occurrence of natural disasters in India has caused significant production delays, consequently posing challenges in meeting the demand for essential products as basmati and non-basmati rice varieties. This factor directly impacts the pricing dynamics within the market. As consumers spend 50 percent of their monthly incomes on food products, food price inflation forces them to search for alternative nutrition items. As a policy recommendation Mr. Senan emphasized the significance of incorporating non-arable saline lands into the reclamation process as a political strategy to mitigate price escalation. Additionally, he emphasized the essence of utilization of these lands in order to boost productivity. Moreover, Mr. Sanan highlighted that a significant amount, specifically 30 percent, of food products manufactured and distributed to supermarkets undergoes expiration and spoilage. Considering this, he underlined the significance of implementing an effective training methodology to mitigate such occurrences. To increase consumer education and awareness in this issue is considerably important. Last but not the least, Sanan Bey stated that the reduction of the customs duty and value added tax applied to basic nutrition items such as rice, edible oils, flour will have a positive effect on the purchasing power of the population especially low-income families. My second interviewee was Anar Bayramov, co-founder and head consultant of Sat Group company. Besides one or two exceptions, the same set of questions which were asked in the previous interview was given to Mr. Anar Bayramov. His responses during the interview contributed to a clearer description of the problems in the sphere of food industry, while his proposed solutions for mitigating these issues might be considered highly valuable. My last interviewee was Jeyhun Mammadbayli, professor at ADA university and American Chamber of Commerce in Azerbaijan. According to Jeyhun Mammadbayli, the growing population and the effects of global warming have resulted in price fluctuations within the food market. In order to avoid further escalation of inflation in the food market government needs to focus on import substitution, where government will assist the local production by providing them with new technologies and subsidies.

Chapter 2. Problem Description

During the last years there were conspicuous increase in the prices of food products, causing to the less purchasing power of consumers. This inflation might be attributed to various factors, including rising labor and transportation costs, which have long been a never-ending challenge leading to higher food prices. However, the year of 2022 presented completely different challenges that may have further contributed to the double-digit increase in food prices. For instance, Supply chain has been significantly disrupted during the COVID-19 pandemic. While there were slowdowns in production, on the other hand expectations for longevity of this situation convinced the people to purchase more food products in order to secure themselves in case if there would be any kind of scarcity in the future. Eventually, this led to the rising prices for basic food items. Due to The State Statistical Committee of the Republic of Azerbaijan (2023) By the September of 2023, the cost of foods in Azerbaijan market has witnessed the 12,40 percent of increase. The average food inflation in domestic market from 2010 to 2023 stood at 7,55 percent which illustrated significant decrease in inflation level in comparison to year of 2022. In last decade, the highest level of food price inflation was recorded as 19,50 percent in the November of 2022. The recent price fluctuations in food prices have led to considerable decreases in purchasing abilities of consumers. The escalation of prices in its turn, as a consequence, poses challenges in ensuring the country's food security. In this regard, this chapter aims to examine the primary determinants which affect the escalation of food prices and their subsequent impact on people's purchasing power.

2.1. Triggering factors which lead to diminishing purchasing power of consumers

One of the primary consequences of price fluctuations is the decreasing purchasing power. The global food market has encountered considerable challenges since the beginning of the COVID-19 pandemic. Since that time, prices in the food market have demonstrated an upward trend. The supply of these products has experienced a considerable decrease, resulting in a significant decline in consumers' purchasing power. The purchasing ability of people depends on several factors such as global inflation, wage stagnation, unemployment, rising costs for production etc. For instance, the rising prices for food products have been a significant factor contributing to the acceleration of global inflation. The average global cost of living has risen more in the 18 months since the start of 2021 than it did during the preceding five years combined (Barrett, 2022). Food inflation

alone caused decreasing living standards at the same level as inflation of all consumption did in the five years' time immediately before the pandemic. The same situation is also relevant for energy expenses which are affected in both direct and indirect forms such as rising transportation costs. For instance, when there's a 1% rise in the price of oil, it can increase food commodity prices by 0.2% (What Factors Affect Food Prices, 2023). Energy consumption has a considerable effect on the food sector in obvious and less obvious ways. Higher oil prices have a direct impact on fuel prices, resulting in increased transportation costs for delivering products to consumers, regardless of the mode of transportation employed (such as boat, plane, or truck). The rise in fuel prices considerably influences the transportation sector, which in turn leads to an overall increase in food prices. The relationship between higher fuel prices and transportation costs follows a general rule where increasing transportation expenses result in soaring food prices. Therefore, fluctuations in oil prices can have a significant impact on the cost of food production and distribution, eventually affecting the affordability and accessibility of food for consumers. In the agricultural industry, farmers depend on fuel to power their machinery, while fossil fuels are used to produce fertilizers and other farm-level inputs, where energy-related costs comprise a significant portion of overall food production expenses. Therefore, any increase in energy prices may have disastrous impacts on the profitability of farmers, as well as retailers and vendors, eventually resulting in higher consumer food prices. The interdependence between energy costs and profitability at different stages of the food distribution network highlights the potential effects of increased energy prices on the purchasing power of consumers over significantly important nutrition items. However, it should be noted that the inflation in food product prices is not completely dependent upon energy carriers, as numerous other factors contribute to price fluctuations within the food market. The cost of raw materials and production became much more expensive in comparison to previous years. As the consequence of escalating production costs, manufacturers are compelled to seek alternative strategies in order to suggest cheaper prices for consumers and reduce costs. One of the policies involves the implementation of personnel reforms, which is one of the measures often adopted by international companies in these circumstances. Taking into account the above-mentioned factors, it becomes evident that all the problems regarding food price inflation have a substantial impact on the purchasing power of the population. Consequently, urgent and effective measures need to be properly implemented to mitigate the inflation process within the food market and increase the purchasing ability of people.

2.2. Restrictions by international trade markets for exportation

There are numerous factors which impact on food prices and the global food supply chain. Disruptions in any given element of the supply chain can lead to devastating effects throughout the entire system. An illustrative example can be noticed in recent developments regarding global rice prices. India, as the leading global rice exporter, imposed limitations on major rice companies' export capabilities and grain shipments. On July 20th, the Indian government made an official statement to impede the export of non-basmati white rice with instant effect. The target of this policy, as stated by the government, was to mitigate the increasing trend of rice prices and secure a sufficient supply within India (Wiener-Broner, 2023). The enforcement of the ban describes the most recent slowdowns for the global rice market, which has witnessed a significant increase in prices from 15% to 20% since September of 2022. These fluctuations in prices appeared following a period of relative stability in the earlier part of that year, regardless of the increasing prices of other cereals due to the Russia-Ukraine war. Over the past 15 years, India has emerged as the biggest rice exporter in international arena, accounting for approximately 40% of the total global rice exports during the periods of 2022 and 2023 (Glauber, Mamun, 2023). Therefore, any action taken by India in this regard may have outstanding resonances in the market.

While taking an interview from Mr. Sanan Kerimov, two primary reasons were emphasized as the driving factors behind India's decision to impose a ban on certain grain product exports. Firstly, it was mentioned that India's rice market has experienced a notable increase of 15% in recent years, posing a potential risk to the country's food security. Secondly, the construction of methanol factories, which employ agricultural products such as rice for production, played an outstanding role in the decision to enforce the export ban. Methanol serves as a substitute for imported oil, thereby contributing to India's domestic energy sustainability efforts. Due to Mr. Sanan Kerimov, the intention of Indian government to keep secret of construction of methanol factories is related to displeasure of society in this issue. This surreptitious approach is likely driven by strategic considerations. As the imported oil becomes highly costly compared to the manufactured methanol, it is expected that a decline in the supply of agricultural products, particularly rice, will occur in the upcoming years. This decline can be attributed to the prioritization of rice utilization for methanol production purposes. Export bans in products such as rice, wheat and citrus fruits have led to increases in prices estimated at respectively 12.3%, 9% and 8.9% (Espitia, Rocha, Rutha, 2022). These price surges might primarily be attributed to the reduction in the supply of

these commodities from top exporting countries. India, accounting for 33% of global rice exports, observed a decline in supply, while Russia, responsible for 17.5% of global wheat exports, and Turkey, contributing 13.5% of global citrus fruit exports, also experienced reductions in their export volumes. These considerable changes in the export landscape have subsequently influenced the price dynamics within the respective markets. The aggravation of geopolitical and geoeconomic tensions has the potential to generate considerable price increases in global markets and intensify long-term inflation pressures in partner countries. Thus, all these export bans might exacerbate supply chain complexities and contribute to global food shortages. The imposition of export restrictions, along with logistical and settlement challenges affecting imports from key trading partners, may require the substitution of these supplies with more expensive alternatives. Subsequently, the cost of imports tends to rise, further intensifying the challenges faced by international trade and the global food supply chain. The aforementioned factors create a risk to the realization of the baseline scenario regarding inflation forecast and contribute to the persistence of increasing import inflation in Azerbaijan (Central Bank of The Republic of Azerbaijan, 2022).

2.3. Inefficient allocation of agricultural lands and exacerbation of drought

Nowadays, the agricultural and food systems are facing substantial transformations that have led to significant implications for the future of the sector, not only in Azerbaijan but also global agricultural industry. Any kind of changes in globalized supply chains gives rise to emerging trends affected by climate change, draining of natural resources, unstable market dynamics, global trade, and rapid economic growth initiatives. This dynamic perspective presents both new risks and opportunities. Therefore, the evolving landscape of the agricultural and food sectors insist a shift in the requirements and priorities of agricultural product producers, thereby calling for the execution of innovative approaches in food and agricultural production. In light of these circumstances, the agricultural industry holds the potential to presume an important role in presenting optimal support and capitalizing on the developing opportunities within this domain. A comprehensive reevaluation of the primary functions, tools, and perspectives of Agricultural services should be revised to effectively fulfill their role, while contemporaneously classifying agriculture as a vital sector for the advancement and diversification of the Azerbaijani economy. One of the prevailing challenges currently observed on a global scale, including Azerbaijan, refers to the escalating incidence of global warming and drought conditions. Drought, a pervasive

occurrence across different geographical regions, has had a greater impact on global populations over the last four decades than any other natural threat. It describes a miscellaneous natural phenomenon defined by varying degrees of intensity, period, spatial coverage, and consequences. Severe drought incidents have extreme socio-economic and environmental impacts, such as widespread famine, population displacement, degradation of natural resources, and declining economic productivity. According to FAO (2023), the agricultural sector is determined as the primary sector to be affected by the occurrence of drought, and it is also the sector that observes the most noticeable effects, absorbing approximately 80 percent of all direct impacts. These effects have far-reaching consequences on agricultural production, food security, and the purchasing power of consumers.

According to former Minister of Agriculture Inam Kerimov (Impact of global processes on Azerbaijan's food security, 2022), The primary part of Azerbaijan's cropland (approximately 1 million hectares) is dedicated to the cultivation of grain crops. Among these, half of the land is irrigated, while the remaining lands are dry. However, it is expected that the exacerbation of drought in the future will become an unavoidable reality. In fact, the International Natural Resources Institute has identified Azerbaijan as one of the 20 countries vulnerable to desertification processes by the year of 2040. Therefore, the proper management of water and land resources emerges as predominant determinant for developing sustainable agricultural practices in the region.

Chapter 3. Policy Alternatives

As mentioned in previous chapters, there are significant problems regarding to current food market. The massive pressures of inflation and persistent price fluctuations have substantially decreased the purchasing ability of consumers. Therefore, this chapter aims to propose three primary policy alternatives to address the prevailing challenges in the food market.

3.1. Development of Agriculture and Food industry in Azerbaijan

To facilitate the economic and political advancement of Azerbaijan and strengthen its competitiveness on global scale, the establishment of a strong and efficient economic system is significantly important. During the last decades Azerbaijan has classified agriculture as one of the priority sectors for diversifying its economy. According to The State Statistical Committee of the Republic of Azerbaijan (2023), the average GDP from the agricultural sector in Azerbaijan between 2001 and 2023 averaged at 339.66 AZN Million, with the third quarter of 2022 witnessing a record high of 796.70 AZN Million. Despite the considerable development during the past years in the agricultural industry, there is still a significant demand for products from the global food markets. In this regard, the agricultural industry in Azerbaijan necessitates the realization of essential reforms, which encompass enhancing the food safety system and suggesting support to agricultural producers through incentives for technology transfer. These reforms are aimed at increasing the productivity and competitiveness of the sector. Against the economic stagnation of the global food crisis and rising importation prices, Azerbaijan is undertaking large-scale reforms in its agricultural sector to provide food security by fostering domestic production. In this context, a range of measures are being implemented to boost the development of the agro-industrial complex, as well as to attract foreign capital and advanced technologies.

To stimulate the establishment of a competitive production and processing industry for agricultural products, it is crucial to employ diverse strategies and adhere to sustainable development principles. Therefore, these strategic objectives embrace to increase the sustainability of food safety measures, augmenting the production capability of agricultural items throughout the value chain, assisting the development of the agricultural production market, facilitating access to requiring equipment, strengthening food safety, veterinary and plant health services, with the goal of eliminating existing barriers to agricultural and food trade. The key procedures for achieving productivity in the agricultural industry may include the adoption of advanced agricultural

technologies, cost-effective irrigation systems, digital transformation of sector management systems, and the innovative development of new lands in the Karabakh region. According to the Minister of Economy Mikayil Jabbarov, Concessions are enforced for residents in the liberated territories. It is planned to provide 90% of loans to entrepreneurs with 10% state guarantee (Vahid, 2023). Furthermore, the minister emphasized the plans regarding the establishment of 420 new employment opportunities within the Araz Valley Economic Zone. The assessment of land in Zangilan, Gubadli, Kalbajar, and other territories, along with field and surveying activities covering an area of 714 thousand hectares, has been successfully concluded. These territories along with all liberated areas are expected to significantly contribute to the advancement of agriculture in the upcoming years.

Taking into the consideration all the aforementioned factors, the most feasible policy recommendation for improving standards in the domestic food market and augmenting consumer purchasing power would involve the advancement of agriculture and food industry in Azerbaijan through the implementation of large-scale projects. These projects would focus on the adoption of cost-effective irrigation technologies, comprehensive methods in grain production, livestock farming, greenhouse farming, and the reduction of food sector losses. Additionally, it is crucial to develop the agricultural potential of the Karabakh and East Zangazur economic regions, which encompass the establishment of "smart" villages and the incorporation of "green" technologies, including artificial intelligence, IT services, and the utilization of drones in agriculture.

3.2. Subsidizing the local companies operating in food market

The considerable rise in inflation rates over the past decade had a significant impact on consumers' purchasing power. To address these issues and enhance consumer purchasing power, the government should implement policies focused on mitigating this process. In this regard, alongside the development of the agricultural industry, it may be beneficial to provide subsidies to companies that actively contribute to local production and maintain the country's food security.

A subsidy refers to a form of assistance given by the government to individuals, businesses, or institutions, which are in the form of direct financial aid or indirect benefits such as concessions. Subsidies play a crucial role in enhancing the competitiveness and sustainability of local companies operating in the domestic food market. Thus, one of the potential advantages of subsidizing local companies might be the enhancing efficiency of economic growth and

development. By enhancing the capabilities and resources of local business entities, subsidies can contribute to improved employment opportunities, and overall economic activity. Thus, it might have a positive effect on the country's GDP and indirect impact on welfare of population. Moreover, subsidizing local companies can contribute to stimulating self-sufficiency and reduce dependence on imports. Too much reliance on importation of food products may lead to food insecurity during the periods of crises and global trade restrictions. For instance, the imposition of export ban by the Indian government on specific grain products coerced Azerbaijani companies to seek alternative sources, consequently leading to subsequent price increases. As a policy to address this situation, Azerbaijan exempted rice import from Pakistan from customs duty. According to Marja.az (2022), the Cabinet of Ministers adopted a relevant decision in this regard. Due to this policy, rice imported from the Islamic Republic of Pakistan was exempted from import customs duty until the date of 31.12.2027. The other example which illustrates the case of subsidy given by government is the exemption of wheat from the value added taxes (VAT). The implementation of these policies by the Republic of Azerbaijan had a substantial impact on the supply dynamics within the food market. These particular cases can serve as relevant illustrations of trade concessions or government subsidies.

While having an interview with Mr. Jejhun Mammadbayli, he emphasized the significance of providing financial leasing opportunities to companies involved in food production and processing. According to his viewpoint, implementing such a policy would undoubtedly stimulate production and enhance efficiency. However, there are considerable concerns regarding the potential deficiencies and challenges associated with subsidization. One concern is the potential deformation of market dynamics. Subsidies may lead to unfair rivalry, favoring some companies gaining advantage over others and potentially discouraging competition. Consequently, this may result in inefficiencies and lack of innovation within the food market. Therefore, there is a necessity for effective monitoring and assessment mechanisms to check that subsidies are allocated and utilized efficiently. Without proper strategy, there is a high risk of misuse or misallocation of funds, which can lead to unintended consequences. Therefore, the provision of subsidies to local companies in Azerbaijan's food market represents a variety of potential advantages and disadvantages. While subsidies have the potential to increase the production in domestic enterprises, revive the economic prosperity, and strengthen food security, it is very essential to ensure that the process of providing subsidies is characterized by transparency, fairness, and solid

monitoring mechanisms in order to optimize the intended results.

3.3. Promoting food security programs which includes in itself: Consumer education and awareness

Consumer education and awareness have emerged as a critical concern in the contemporary globalized world. Approximately over a third of the total global food production, equivalent to approximately 2.5 billion tons, is lost or wasted annually. Out of this amount, one-third of those wastes occur during the food production stage. Due to the data provided by the Boston Consulting Group (BCG), the economic value of this wasted food amounts to nearly \$230 billion (Safdie, 2023). Therefore, there is a significant demand for consumer education in addressing these challenges. By providing the consumers with the proper education regarding how to effectively make meal planning, budgeting plans and make cost-efficient food choices, people might acquire these nutrition items easier and save most of their available resources. Education on topics such as analyzing prices, perception of sales and discounts, and using food assistance projects can empower consumers to make informed decisions that fit their financial constraints. Thus, there is an inspiring project in Turkey known as the "zero waste", which aims to promote ecological sustainability and reduce waste. Currently, there are two billion tons of solid waste generated annually, including different materials such as plastics, textiles and decomposing food. The goal of this project is to create a sustainable environment and create livable cities for future generations through the adoption of a zero-waste strategy. "Zero Waste" is a waste management strategy that encompasses waste prevention, efficient resource utilization, identifying and mitigating the causes of waste, and implementing separate collection of waste at source for recycling.

Consumer education may not directly address the issue of diminishing purchasing power among consumers. However, it plays a significant role in enabling consumers to make an informed decision and allocate their financial resources effectively. By equipping consumers with knowledge and skills related to budgeting, comparison shopping, and understanding product value, consumer education empowers the people to make the most feasible choices within their financial constraints. This in turn enables consumers to maximize their purchasing power and potentially save money.

Chapter 4. Evaluation of Policy Alternatives

In this chapter, an analysis will be conducted on three policy alternatives that strive to address the specific issues causing the decline in consumers' purchasing power. This analysis will be based on criteria such as effectiveness, efficiency, equity, feasibility and flexibility.

Development of Agriculture and Food industry in Azerbaijan

The policy alternative regarding to development of agriculture and the food industry in Azerbaijan through the execution of wide scope projects and bringing advanced new technologies appears to be a feasible recommendation for improving standards in the domestic food market and increase consumer purchasing power. This recommendation demands the adoption of cost-effective irrigation technologies and extensive approaches in grain production, cattle-breeding and the reduction of food sector losses. By addressing significant challenges in the agricultural industry, this policy alternative seeks to achieve considerable improvements in productivity of Azerbaijan's food industry. Moreover, the Karabakh and East Zangazur economic regions have considerable agricultural potential, presenting the country with new chances to increase its agricultural production. The creation of smart villages and the combining of Eco-friendly technologies in the lands of Karabakh, such as development of expert systems, information technology services, use of drones in agricultural practices would be an operative strategy for modernizing the agricultural industry in Azerbaijan.

From the perspective of efficiency, this project has the potential to generate long-term benefits. Bringing innovations and giving leasing to local farmers would certainly increase the supply chain in food industry. This in turn would reduce the dependence of the domestic food market on global markets and lead to growing competitiveness in food prices. Furthermore, the development of agriculture in the liberated territories of Nagorno Karabakh would create new employment opportunities, thereby would reduce the unemployment rates and increase the purchasing power of the population. Therefore, this project promises a positive effect in terms of efficiency, effectiveness, and feasibility. Furthermore, it is worth noting that the project presents a high degree of flexibility.

Subsidizing the local companies operating in food market

Subsidies can be provided to the companies operating in the food market either directly or

indirectly. Direct subsidies involve the distribution of funds, while indirect subsidies may take the form of tax exemptions. However, it is important to note that subsidizing companies does not guarantee long-term efficiency. While companies receiving subsidies in the food market may initially lower the prices of food items, this effectiveness is likely to be not consistent. Nevertheless, these measures play a significant role in a country's food security. Therefore, when considering effectiveness and efficiency, providing subsidies may be considered productive in the short term but inefficient in the long-term period. As the government tends to achieve sustainable development in the food sector, the policy of giving subsidies will only help to increase the overall turnover in the food industry by helping the companies to continue their operations. The effects of this policy on consumers' purchasing power would be indirect, as the subsidies provided to companies focus to increase food production capacity and prevent employee layoffs during crisis situations. However, the primary impact of this policy would be on the stability of the Azerbaijan food market, as it would help maintain current food prices and mitigate the risk of inflation. However, it would not give long-term benefits. Instead, it will cause the government to run a budget deficit, making its situation worse. Therefore, the feasibility of this project in terms of flexibility appears to be questionable.

Promoting food security programs which includes in itself: Consumer education and awareness

Taking into consideration that food consumption is a fundamental human need, it should be noted that availability and affordability of daily nutrition items are crucial factors that require regulation. Due to the data provided by the Boston Consulting Group (BCG), 2.5 billion tons of food in the world is wasted annually. To address this issue, countries like Turkey have implemented practices such as the Zero Waste program. The impacts of food security programs hold significant potential for long-term effectiveness. By providing accurate information on nutrition, food safety, and consumption practices, households can make more informed choices that might contribute to their purchasing practices. The enforcement of this policy might potentially lead to increased consumer savings and improved resource allocation in the context of food consumption. Thus, this strategy has the potential to enlighten individuals in making informed decisions regarding their food choices, while also presenting cost-effectiveness and feasibility through appropriate resource allocation and collaborative efforts.

Chapter 5. Conclusion and Recommendations

The capstone project aimed to determine the triggering factors behind fluctuations in food prices and their impact on consumers purchasing ability. Through surveys and interviews, it became evident that food price inflation had a significant impact on a large part of the population. There has been a considerable decrease in the Consumer Price Index (CPI). According to data provided by The State Statistical Committee of the Republic of Azerbaijan, the CPI in Azerbaijan declined from 218.15 points in August 2023 to 211.60 points in September 2023. On average, the CPI in Azerbaijan has been 144.53 points from 2011 to 2023, with a record high of 218.15 points in August 2023. There have been various factors which affect people's purchasing power. As it was mentioned in previous chapters, global issues such as the COVID-19 pandemic, the ongoing conflict between Russia and Ukraine, trade restrictions on exports, and rising worldwide inflation have significantly disrupted the global food supply chain, leading to a decline in purchasing power of people in many countries. As one of the states affected by this disruption, Azerbaijan needs to mitigate the impacts of these incidents and improve the situation in local food market. Thus, this "Capstone" project provides a variety of potential strategies to address the indicated problems in this paper. To mitigate the problems regarding increasing prices and limited availability in food industry, an adequate long-term policy alternative could be the stimulation of agricultural development of the liberated territories of Nagorno Karabakh with the use of highly efficient technologies. On the other hand, the other policy alternatives such as giving subsidies to local companies doesn't promise long term effectiveness. However, it would significantly reduce the risks of food insecurity. Last but not least, an approach similar to the "Zero Waste" strategy used in Turkey and many other countries could potentially be implemented in Azerbaijan to educate the people about consumption practices and making more literate choices that might contribute to their purchasing behavior.

The findings of this study underline the sensitivity of the food market to global events and indicate the need for effective measures to mitigate the impact of these processes on consumers. Policymakers should take into account the strategies to stabilize food prices, increase domestic production, and diversify import sources to decrease its reliance on inconstant markets. Furthermore, endeavors to develop food security and increase social safety nets might contribute to protecting the purchasing ability of low-income families. In conclusion, understanding the primary factors which leads to price fluctuations in food market and their impacts on purchasing

ability is essential for policymakers and stakeholders in Azerbaijan for developing targeted intervention strategies and policies which would potentially mitigate the negative outcomes and arrange a more stable and affordable food market for the population.

Recommendations

To properly address the challenges arising from fluctuations in food prices and their impacts on the population of Azerbaijan, it is preferable to jointly implement the following recommendations. These recommendations were devised based on international practices.

1.To implement highly efficient agricultural technologies, cost-effective irrigation systems, comprehensive methods in grain production and develop the agricultural potential of the Karabakh and East Zangazur economic regions.

2.Providing subsidies to companies operating in the food market of Azerbaijan in the form of leasing arrangements or tax exemptions.

3.To adopt worldwide practices such as "zero waste" program which seeks to provide precise information on nutrition, food safety, and consumption practices, so households can make more literate choices that might contribute to their purchasing behavior.

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Appendix A

1. Son bir ildə ərzaq məhsullarının qiymətlərində hər hansı ciddi dəyişiklik müşahidə etmişinizmi? (Have you noticed any significant changes in food prices in the past year?)
2. Xahiş edirik, qida sərfiyatına sərf olunan aylıq məbləğinizin faiz etibarilə nə qədər olduğunu qeyd edəsiniz.
 - 5-20%
 - 20-50%
 - 50-80%
 - 80-100%
3. Sizin fikrinizcə qiymət artımı daha çox hansı məhsullar üzərində əks olunur? (Are there any specific food items that you find more affected by price increase?)
 - Çörək, un məmulatları
 - Ət və ət məhsulları
 - Süd və süd məhsulları
 - Şirniyyat
 - Kərə və bitki yağları
 - Meyvə
 - Su, meyvə şirələri
 - Çay, kofe
4. Ərzaq bazarında olan qiymət artımı bir istehlakçı kimi sizin seçimlərinizə necə təsir göstərir?(məsələn, qida seçimlərində dəyişiklik, brendə sadiqlik və ya alternativ qida mənbələrindən istifadə etmək kimi) / (How do price fluctuations in the food market influence consumer behaviour, such as changes in food choices, brand loyalty, or reliance on alternative food sources?)
 - Kifayət qədər çox təsir edir
 - Az təsir edir
 - Ümumiyyətlə təsir etmir
5. Azərbaycanda qida məhsullarında baş verən qiymət artımlarının qarşısının alınması üçün nə kimi tədbirlər görülmə bilər? (What strategies can be implemented to mitigate the escalation of food prices in Azerbaijan?)

Appendix B

1. Azərbaycanca ərzaq bazarının hazırkı vəziyyəti və baş verən son qiymət artımları barədə ümumi məlumat verə bilərsinizmi? (Can you provide an overview of the current food market situation in Azerbaijan and the recent price fluctuations that have occurred?)
2. Azərbaycanca qida məhsullarında olan qiymət artımına əsasən nə kimi faktorlar təsir edir? (What are the main factors which affects the food price inflation in Azerbaijan?)
3. Hindistan hökumətinin 20 iyul tarixli qərarına əsasən qeyri-basmati düyülərinin exportuna qadağa qoyulmuşdur. Azərbaycan Respublikasının böyük bir düyü idxalçısı olduğunu nəzərə alaraq, sizcə bu iqtisadi proseslər ölkənin qida bazarına necə təsir göstərib? (Due to the regulation of the Indian government dated July 20, the export of non-basmati rice has been banned. Taking into consideration the fact that the Republic of Azerbaijan is a big importer of rice, what do you think how these economic processes have affected the country's food market?)
4. Bildiyiniz kimi dünya bazarında ərzaq məhsullarının dəyərində artan bir tendensiya var və qiymətlərdə olan bu artım insanların (əsasən də aztəminatlı ailələrin) alıcılıq qabiliyyətini önəmli dərəcədə azaldır. Sizcə qida məhsullarında olan bu qiymət artımının qarşısının alınması üçün nə kimi tədbirlər görülmə bilər? (As you know, there is an upward trend in the global market prices of food products, leading to a substantial decline in the purchasing power of individuals, particularly those belonging to low-income families. Based on your knowledge and experience, what measures or policies do you think could be implemented to mitigate the impact of price fluctuations on the low-income class in Azerbaijan?)
5. Və son olaraqda ərzaq bazarında illərdir fəaliyyət göstərən bir mütəxəssis kimi, sizcə xalqın rifahının yaxşılaşdırılması üçün dövlət yerli idxalçı və istehsalçılara hər hansı bir yardım və ya güzəştə getməlidirmi? (Based on your experience in the food market, do you believe it is preferable for the government to provide assistance or concessions to local importers and producers as a means to enhance the welfare of the population?)