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Research Article

Effects of Peaches and Apricots Market on People's Living Standards of Shakar Dara District of Kabul Province

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Abstract

Agriculture plays a pivotal role in Afghanistan's economy. Nearly 50% of the population lives from agriculture, which accounts for 25% of the country's GDP (World Bank 2015). We learned that there has been little research on Afghanistan's fruits market system and agri-business. This study aims to analyze the market system of peaches and apricots in the Shakar Dara district of Kabul province. No information about their origins in Afghanistan is available regarding the history of apricots *(Prunus armeniaca)* and peaches *(Prunus persica)*. However, the country grows a wide variety of peaches and apricots. A total of 6 percent of Afghanistan's farmers earn a living from apricots only; after grapes, almonds, and pistachios, apricots rank fourth in terms of perennial yields, thus making it one of the most important crops for the Afghanistan Ministry of Agriculture, Irrigation, and Livestock (MAIL). Some 185 farmers have been questioned in the Shakar Dara district of Kabul province.

We learned that the farmers want to invest in the establishment of peach orchards in order to generate revenue. The soil and climate are very appropriate for peach production, thus making this crop one of their primary sources of income. The farmers of the Shakar Dara district are skilled in traditional farming practices and managing their orchards. The farmers have access to pesticides at both the local and provincial markets and use a variety of soil fertilizers. A key component of the district's irrigation system, the Shah Wa Aroos dam regulates flash floods.

Additionally, a substantial portion of water for the district's irrigation is supplied by the water reservoir. However, the canal system in the district can be further improved to support the district's irrigation system better. In terms of the application of contemporary technology, the district's residents continue to practice traditional farming, which results in a lower yield of fruits when considering the fertility and potential of the soil. Farmers must be equipped with training and awareness sessions for modern farming practices. Local labor is available for fruit packing and pruning. Fruits are transported to the provincial markets using the district's transportation infrastructure. Shakar Dara district is accessible by paved roads connecting most villages near the paved road with provincial/central markets. High-quality fertilizers and disease control practices enable them to produce high-quality products for international markets.

Keywords: Agri-business, market system, GDP, and orchards

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Introduction

Afghanistan is a landlocked country located in central Asia, with a total area of 652,867 square kilometers and an estimated population of 38 million people. Being a war-torn country that has been continuously fighting for four decades, the country's economy has also been severely damaged, in addition to its other aspects.

Economics importance of agriculture in Afghanistan

It is worth mentioning that the agriculture sector plays a vital role in the country's economy and can be regarded as the central pillar supporting the country's Gross Domestic Product (GDP). According to the World Bank, 25% of the country's GDP depends on agriculture. In comparison, nearly 50% of the country's population receives income from agriculture, which also impacts the unemployment rate (World Bank 2015). It is important to understand the current agriculture market function, practices, and system, identify the gaps, and find room for improvement. There are fewer studies on Afghanistan's market system and agri-business fields, including the peaches and apricots market system.

Historical Context of Peaches and Apricots

There is no known evidence about the basis and history of Afghanistan's peaches (*Prunus persica*) and apricots (*Prunus armeniaca*). Peaches are also grown in different areas of Afghanistan, including the central and eastern regions. Different varieties of peaches include Early Grand, Flavorcrest, Suncrest, Big Top, Caldesi, and Maycrest. The pruning seasons are from July until September. Furthermore, according to the Afghanistan National Horticulture Development Organization (ANDHO), apricots are grown for a long time throughout different provinces of Afghanistan. They are mainly produced in the country's central, south, northwest, and western regions, making it a prioritized crop for MAIL and the 4th most significant perpetual yields after grapes, almonds, and pistachios.

Additionally, various kinds of apricots are grown in different areas of the country. This crop makes income for 6% of farmers in the country. A hectare of apricots can produce much money for farmers if orchards are appropriately managed and are an excellent replacement for poppy farming.

Current Market Challenges

Hereby, it is important to understand the fundamental reasons for the problems of the existing market system, identify different stakeholders who can play an influential role, develop creative ideas to solve the obstacles and develop strategies for the market system development. Currently, the farmers are not familiar with modern farming techniques such as "high-density fruit production," dripping system for saving water, utilizing modern farming equipment, high-quality fertilizers and pesticides, provision of awareness sessions to farmers, the establishment of cooperatives, provision of subsidies, construction of facilities, e.g., cold rooms.

Implementation of Agriculture Projects, Agri-business, and Market System

According to Afghanistan MAIL, the ministry strives to support improved agriculture, increasing yields, horticulture, Natural Resources Management (NRM), introduction of modern agricultural technologies, increasing cooperative programs, and supporting agri-business for export purposes by launching different agricultural projects throughout Afghanistan. In addition, Afghanistan has a very appropriate climate for growing various kinds of fruits and vegetables (MAIL). During the last few years, there have been several agricultural-related projects throughout Afghanistan, funded by World Bank, Asian Development Bank (ADB), United States Agency for International Development (USAID), United Nations Food and Agriculture Organization (UNFAO), United Nations Development Program (UNDP), International Fund for Agriculture Development (IFAD), Japan Fund for Poverty Reduction (JFPR), and European Union (EU) in coordination through MAIL. The MAIL also funded the implementation of several agricultural projects throughout this period (MAIL). Such projects were worth several hundred million USD and impacted people's lives in all regions of the country. However, since August 2021, after the regime change, several funding institutions have put their funding to Afghanistan on hold, such as USAID, World Bank, Asian Development Bank, et. (Asian Development Bank).

Additionally, despite these implemented projects or being implemented by UNFAO, UNDP, and a few other international/national organizations and MAIL, there is still a lot more to do in agri-business and market systems for fruits and vegetables in the country that can reduce the level of poverty in the country. Based on up-to-date information published in January 2024 by the United Nations Office for Humanitarian Affairs (UNOCHA), more than half of Afghanistan's population (23.7 million people) is living in poverty (UNOCHA). Promoting agribusiness, which the country's main population relies on, can positively affect the people's living standards.

The district of Shakar Dara is in the northwest of Kabul province. It is approximately 25 kilometers away from Kabul city. The district has around 85,000 people (2016 World Bank/NSIA official est.). Shakardara district shares boundaries with Guldara and Mir Bacha Kot districts in the North, Deh Sabz district in the east, Paghman districts, and Kabul districts in the south. Agriculture is the primary source of income for the district population, and the district is well-known for its fruit production, which consists mainly of peaches, grapes, apples, cherries, and apricots. According to a Wikipedia source, the district was announced as a poppy-free district in Kabul province in 2009.

The district produces enormous quantities of fruits, including peaches. However, the market system for selling the mentioned fruits needs to be expanded, which is expected to improve the living standards of the people of Shakar Dara district, contributing to the economy of Kabul province. As Afghanistan is also an agricultural country, this study will help open the way for exploring further studies in the field of agriculture and, in the big picture, will help the idea for improving the country's economy in the agriculture sector. Finding national and international markets and improving the current market system for fruit production will improve the living standards of the people of the country and will help the country to export its fruits and vegetables abroad. Such studies will also benefit the MAIL and private sector by creating more ideas for improving the fruit market system in the country. According to the World Bank, around 75% of people live in rural areas, and of the mentioned percentage, around 90% live in poverty. WB further suggests an enormous potential of creating 1.3 million agricultural jobs in rural areas when the right policies and investments are made strategically. It is important to improve the living conditions of the people through the agriculture sector (World Bank). Knowing that Shakar Dara district is one of the most fruits-producing districts in the central region of Afghanistan.

Importance of the Problem

With an estimated population of 38 million, Afghanistan is a landlocked country in central Asia with a total area of 652,867 square kilometers. In addition to all the adverse effects of being a war-torn nation that has seen warfare for forty years, the nation's economy has also suffered greatly. It is important to note that the agriculture sector is a major contributor to the national economy and is the primary pillar of the country's GDP. Nearly 50% of the population earns a living from agriculture, which also helps lower the unemployment rate and contributes 25% of the nation's GDP, according to the World Bank (World Bank 2015). Comprehending the current agricultural market's function, procedures, and structure is crucial to spot any gaps and determine where improvements can be made. Research studies on Afghanistan's market structure and agribusiness, particularly about the markets for peaches and apricots, appear scarcer. When discussing the historical background of peaches and apricots, no information regarding the origins in Afghanistan is currently known. Moreover, peaches are produced across Afghanistan, particularly in the central highlands and eastern parts. Peaches come in various kinds, including Big Top, Caldesi, Flavorcrest, Early Grand, and Suncrest. The pruning seasons occur from July through September.

Regarding the apricots, ANDHO reports that apricots have been grown for a very long time in Afghanistan, primarily in the country's central, south, northwest, and western regions. As a result, they are a crop prioritized for the MAIL and have the fourth-highest perpetual yields after grapes, almonds, and pistachios. Furthermore, different varieties of apricots are grown in various parts of the nation. Six percent of farmers in the nation receive money from this crop. A hector of apricots can yield between US$3,000 and US$4,000, making it a viable substitute for poppies (ANDHO). We need to know the root causes of the obstacles to the market system development, categorize different stakeholders for playing prominent roles, and provide inspirational solutions to resolve issues and remove the barriers to developing strategies for the market system expansion.

Agri-business, fruit market system, and farming practices.

Agribusiness is one of the most significant sectors globally, comprising both on-farming and off-farming activities. According to the World Bank, agriculture accounts for 4% of total global GDP; however, in lower-level developing countries, this percentage gets higher and can be up to 25% or more. According to Statista, the total gross production worth agri-business is estimated to be 4.59 trillion USD by the end of the year 2024 with an expected annual growth rate of 3.76% (2024 – 2029), which means by 2029, we will have 5.52 trillion USD total gross production. More precisely, the total import value in agri-business is estimated to be up to USD 872 billion by the end of 2024; meanwhile, an annual growth rate of USD 3.85% is projected from 2024 – 2029 globally, regarding the total export of agri-business estimated to be 812.6 billion by the end of year 2024 with an annual growth rate of 3.45% projected from the year 2024 – 2029. It is worth mentioning that the key contributors to the above-mentioned agri-business global trades are the United States, Brazil, Germany, Italy, and Spain, among other countries (Agriculture Worldwide). At the same time, agricultural-related activities also majorly influence the economy of Afghanistan. Relief Web says more than 80% of people rely on agricultural-related activities to earn income (ReliefWeb, 2024).

Fruit production also has a high potential in Afghanistan and continues to influence the country's economy gradually. The country got 42nd in the global rank in 2023 for fruit production, overtaking Saudi Arabia. It is estimated that in Afghanistan, the fruit industry will significantly develop and will have a growth rate of 2.6%, which means the country will be producing about 4 million metric tons of fruits by the end of the year 2028, which is 3.4 million metric tons in the year 2023 (Reportlinker). In 2022, Afghanistan produced 97.7 metric tons of peaches, a 4.73% decrease compared to 2021, when the country produced the highest-ever production of 103 thousand metric tons. Afghanistan is ranked 24th out of 78 peach-production countries globally (Helgi Library). According to ReportLinker Research and Development organization, the peaches production in Afghanistan is estimated to touch 81.4 metric tons by 2026 from 64.7 metric tons, which will be a rise of an estimated 33.4% per year. China, Spain, Italy, and Greece are estimated to come in 1st, 2nd, 3rd, and 4th, respectively, in this category (Reportlinker). Peaches are exported to Iran, Pakistan, United Arab Emirates, India etc.… through ground + freight (World Bank).

Apricots are grown in different provinces of Afghanistan, such as Kandahar, Kabul, Nangarhar, Ghazni, Hirat, Wardak, etc., and they are of several varieties. The most common varieties from a commercial point of view are Amiri, Charmaghzi, Shakarpara, Tomcot, and Qaisi, with Shakarpara being the most commonly grown variety. The apricots produced in Afghanistan are well known for their flavor and uniqueness. The apricots produced in Afghanistan are exported to India, Pakistan, Central Asian countries, and the United Arab Emirates, usually through ground and sea freights. In Afghanistan, the approximate production of apricots is 83.5 metric tons (Squarespace).

Research Objectives

1. To find the impact of the peaches and apricots market system on the living standards of the Shakar Dara district of Kabul province.
2. To know the relationship between the peaches and apricots market system and the living standards of the Shakar Dara district of Kabul province.

Hypothesis

1. The peaches and apricots market system has no impact on the living standards of the Shakar Dara district.
2. There is no relationship between the peaches and apricots market system and the living standards of the Shakar Dara district of Kabul province.

Literature Review

Ognjanov et al. (2018) declared that the species peach and apricot had extraordinary possibilities for the growth of fruit cultivation in the Republic of Serbia. This study examines qualitative and quantitative variables that impact peach and peach production in the Republic of Serbia and the countries with the most significant development in Europe. The arrangement of ripe fruit and processing impact the structural features of the contemporary peach and nectarine selection. The peach type is defined by the maturation period, fruit quality, and compatibility with our developing environment. Develop variations corresponding to distinct ripening phases to provide the market with exceptional fruits in as many forms as feasible and rationally plan to grow. When selecting a fruit variation to be used in business cultivation, consideration should be given to the specifications needed for specific fruit qualities in connection with their intended use. Developing new foundations aims to promote interspecies, the process of hybridization that produces intricate variants within the Prunus species. Contemporary vegetative transfer techniques enable effective reproduction. Hashmi et al. (2020) stated that the horticultural crops significantly boosted the country's reputation; however, the apricot market was smaller, and their viability was also questioned. The primary focus of this study was the marketing of apricots that 102 farmers supplied to the Kandahar market. The participants answered a structured questionnaire designed to ascertain the marketing constraints, map the marketing channels used by supply chain participants, and examine the connection between farmers' sociodemographic traits and the quantity of apricots supplied to the market. The primary respondents were the apricot farmers, traders, and brokers based on the study findings of the illustrative analysis. The results also showed how poor apricot quality, a shortage of supply, expensive transportation, lack of demand, price fixing, lack of support from the government, and lack of storage hindered the chain.

Meanwhile, the chi-square analysis showed that the quantity of apricot provided to the market was significantly connected with farm size, education level, farming experience, and family size, except for the farmer's age. The findings of this study indicated that farmers need to grow their farms and receive more education to improve the number of apricots produced. Suitable intervention mechanisms, such as land acquisition plans and education and awareness campaigns, can help achieve this.

Pasquali, Krishnan, and Alford (2021) said that many studies have looked at the opportunities for global South suppliers to advance inside global value chains (GVCs) led by companies in the global North and focused on their end markets. However, the geography of GVCs has changed as South-South commerce has increased. Earlier research has highlighted key distinctions between South-South (SVCs) and North-South (NVC) value chains. Significantly less is known about the multiple chain tactics companies employ to engage in NVCs and SVCs concurrently and how these tactics impact their chances for financial improvement. The present study examines the consequences of multiple chain methods for financial improvement in terms of additional value or product variety and sophistication and financial benefits, using the case of Kenyan agriculture suppliers as a basis. A combination of techniques integrating supplier interviews with transaction-level customs information covering 2006 to 2018. While results for product complexity are negligible, we find that suppliers using multiple chain methods had much higher economic returns and more product variety than sellers participating in NVCs or SVCs.

Propensity score matching (PSM), two-step system-GMM, and multilevel linear regressions (MLRs) all yield results that hold up well. The study emphasizes how important it is that multiple chain methods used by suppliers to serve various intersecting value chain segments be considered in GVC research, as well as the consequences for financial development. Christina (2021) showed that the rearrangement of the supply chain and the reengineering of its operations have been emphasized with the emergence of the Circular Economy (CE) concept. Both domestically and internationally, Greece's economy may benefit from sophisticated farming, especially from the 400 million EUR the state exports yearly in the peach business. A vital debris component was not used to its full potential; the grain kernel is frequently regarded as a worthless remnant like waste. The study addresses the supply chain optimization accomplished by CE programs, where the kernel's timber-covered surface is used as biomass fuel, and the seed itself is split to develop novel goods that will provide revenue for the supply chain. The final goods under research are natural medicines and peach oil applied in beauty products.

The ideas are considered to change the peach bottling business's company structure and revitalize the market. The newly refined supply chain framework that can be applied to many processed fruits is presented through the supply chain lens. Dube et al. (2018) stated that there is a high potential for the fruit value chain to expand in export markets, providing chances for small farmers to participate more. This study evaluates the potential for value chain upgrading and increased trade between South Africa and Tanzania. The rise in worldwide preferences for fresh fruit and related processed fruit products offers developing nations the chance to enter significant financial marketplaces. However, achieving this potential requires developing supply chains and technological capacities to enter these industries. This involves combining access to top-quality fruit types, manufacturing methods, norms, transportation, and advertising. South Africa is acknowledged worldwide as a top exporter of fruit and fruit-related goods that have been processed, with strong production, standards, and logistical capabilities; on the contrary, Tanzania generates plenty of fruit, but its export potential is relatively small due to high losses after harvest. The main conclusions indicate that the lack of proper facilities to facilitate commerce in fresh fruit has limited prospects for commerce in fresh or processed fruit goods between both states. Given the disparities in capacities along the value chain, the best prospects for value chain upgrading lie in skills and technical guidance connecting Tanzania and South Africa.

Methodology

The methodology of the research has been considered to undertake analysis, consisting of study design, population size, sample size, data collection method, and sources of data for the study and assessed the effects of peaches and apricots market system on people’s living standards of Shakar Dara district of Kabul province. The process has been coordinated with the provincial authorities, Kabul Provincial Governor House (PGH), and the Directorate of Agriculture, Irrigation and Livestock (DAIL) of Kabul province. The data was collected from 185 farmers from different district areas and accumulated using a questionnaire, study, research design, and deductive approach. It aimed to describe current occurrences in further detail, have findings to fill the gaps and increase our knowledge. The Statistical Package for Social Science (SPSS) software was used to process data coding, tabulation, and editing, key factors for the study data analyses. In the initial phase of the study, through the directorate of Kabul DAIL, permission was acquired from the provincial governor of Kabul province to collect the data at the field/district level. In the second phase, the 192 farmers of the Shakar Dara district were contacted during the field visits to the district to complete the questionnaires. Overall, 185 farmers answered the questions of the distributed questionnaires. The disseminated questionnaires were in hard copy. The collected data from the farmers in the district was interpreted and written in the SPSS. The statistical functions were used to examine the hypothesis and analyze the study's objectives, and the conclusions were presented in the following study segments.

Results and Discussion

Dependent variable: Living standards.
Independent variables: Orchard formation (OF), Water and soil Productivity (WSP), Cultivation Management (pest/disease control/ experience) (CM), Technology Utilization & Packaging, Transportation/Infrastructure & Labor (TUPTIL), Product Marketing/Value Chain/Storage (PMVCS), and Climate change/Natural disasters (CCND).
Population: Farmers of Shakar Dara district
Organization: Shakar Dara district/Ministry/Directorate of Agriculture, Irrigation and Livestock
Proposed Regression line: LS =10.483 + 0.154 (OF) + 0.232 (WSP) + 0.111 (CM) + 0.116 (TUPTI) + (-0.11) (PMVCS) + 0.183 (CCND)
One unit change in OF, WSP, CM, TUPTI, PMVCS, and CCND will bring 0.154, 0.232, 0.111, 0.116, 0.11, and 0.183-units positive changes and one negative change in living standards.

The dependency effects of living standards on dimensions like orchard formation, Water and soil Productivity, Cultivation Management (pest/disease control/ experience), Technology utilization and packaging, Transportation/Infrastructure and labor, Product Marketing/Value Chain/Storage, and Climate change/Natural disasters are defined in hypothesis 1, taken up and its results are shown in the table 60, as an outcome of multiple regressions model conceptualized. From the result, it can be defined that the F value of 21.871 is significant at a 5 percent level, and hence, hypothesis 1 is rejected. The results suggest that living standards depend on the group of 6 dimensions in the Shakar Dara district. Furthermore, the adjusted R square value of 0.680 from Table 60 indicates that 68 percent of understanding levels affect the living standards of these groups of 6 dimensions in the Shakar Dara district. Also, the 't' values of 2.718, 1.925, 3.574, 0.737, 1.364, 0.189, and 1.660 corresponding living standards dimensions, for example Orchards formation, Water and soil Productivity, Cultivation management (pest/disease control/ experience), Technology utilization & packaging, Transportation/infrastructure & Labor, Product marketing/value chain/storage, and Climate change/Natural disasters and living standards are found to be having significant effect on the model conceived.

More specifically, Cultivation management (pest/disease control/ experience) is found to have a significantly superior effect on living standards, with the highest value of 3.574. This confirms that the farmers in the Shakar Dara district have easy access to pesticides in the local market. Additionally, the farmers are aware of the use of pesticides. The results also show that farmers in Shakar Dara district are experienced with their orchard management, such as utilizing various kinds of fertilizers such as Urea, DAP, and/or local soil fertilizers, e.g., from compact fertilizers and/or animal manure.

In the meantime, Orchard formation, Water, and soil Productivity significantly affect the living standards of the people of the Shakar Dara district, with the second highest ‘t’ value of 1.925. This confirms that the people of Shakar Dara district are investing in the formation of peach orchards, which are regarded as a reliable source of income generation. A water dam (Shah Wa Aroos) was also constructed, which is significant in the district's irrigation system. The soil is also fertile enough to grow fruits in the area.

Table- 1: Results of the regression for hypothesis-1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.627[a]	.880	.680	2.54110

a. Predictors: (Constant), Climate change/Natural disasters, Product marketing/value chain/storage, Technology utilization & packaging, Cultivation management (pest/disease control/ experience), Transportation/infrastructure& Labor, Orchards formation, Water & Soil Productivity

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	111.241	6	18.540	21.871	.001[b]
	Residual	1149.375	178	7.490		
	Total	1260.616	184			

a. Dependent Variable: Living standards

b. Predictors: (Constant), Climate change/Natural disasters, Product marketing/value chain/storage, Technology utilization & packaging, Cultivation management (pest/disease control/ experience), Transportation/infrastructure& Labor, Orchards formation, Water & Soil Productivity

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.483	3.856		2.718	.003
	Orchard Formation, Water & Soil Productivity	.154	.080	.206	1.925	.000
	Cultivation management (pest/disease control/ experience)	.232	.065	.337	3.574	.000
	Technology utilization packaging	.111	.151	.066	.737	.002
	Transportation/infrastructure& Labor	.116	.085	.135	1.364	.004
	Product marketing/value chain/storage	-.011	-.058	-.017	-.189	.004
	Climate change/Natural disasters	.183	.110	.166	1.660	.000
a. Dependent Variable: Living standards						

The ‘t’ value of 1.660 obtained for the Climate change/Natural disasters on the living standards confirms that the Shah Wa Aroos Dam has significant positive effects. For example, the water dam has controlled flash floods to an extent that previously damaged many orchards/houses in the Shakar Dara district. It also positively affected lifting the water table underground in many areas of the Shakar Dara district. Shakar Dara is a mountainous district with much snowfall, especially in its mountains. Moreover, the reservoir has provided enough water for irrigation in the district.

More specifically, transportation/infrastructure and labor are found to significantly affect the living standards of the Shakar Dara district with the ‘t’ value of 1.354, confirming that transportation facilities are available in the district/villages, especially during the pruning season. The vehicles are transporting the fruits to the provincial markets. Shakar Dara district's road to Kabul city is also paved, covering most villages so that fruits can be easily transported to the provincial markets. Labor is also available and trained enough to prune and pack the fruits.

At the same time, Technology utilization and packaging also positively affect living standards with a 't' value of 0.737. The packages are made locally with local materials. Three factories/firms are available in the Koh Daman area that supply the packages for the fruits. They are easily accessible and at fair prices. However, as far as technology is concerned, people are using traditional farming. This causes the fruits to be in less quantity. If modern machinery is made available, it will significantly improve production. The government/INGOs have to provide modern machinery to the people to produce large quantities.

The ‘t’ value of -0.189 for the product marketing/value chain/storage negatively affects the living standards of the people of Shakar Dara district. This is because the products are sold at lower prices in provincial markets. The political tensions with neighboring countries, which cause the frequent closure of borders, also play a key role in exporting the fruits outside the country. Additionally, the government and/or NGOs must provide opportunities for people to find suitable markets outside the country. No factories have been established for fruit processing, e.g., for preparing jams, juices, or drying. Very few cold rooms are available, which cannot accommodate many fruits. The farmers must sell their fruits at comparatively lower prices during the on-season.

Farmers' challenges and experiences

The farmers face several challenges in selling their fruits outside the country. According to some farmers, *"During the on-season, the fruits are produced in large quantities; there is no demand for our fruits during the on-season*." Additionally, the political tensions with neighboring countries cause the frequent closure of borders, which also plays an important role in exporting fruits outside the country. Some farmers also stated, *"We have no budget to purchase high-quality fertilizers to produce high-quality products*." No factories are established for fruit processing, e.g., to prepare jams, juices, or dry fruits. Very few cold rooms are available to accommodate the fruits in large quantities, which causes the farmers to sell their fruits at lower prices during the on-season due to less demand and mass supply. The destruction of water resources in some areas due to drought or floods. Lack of awareness of farmers for the modern farming techniques.

Recommendations

- The farmers should be given opportunities and awareness sessions to produce high-density farming techniques.
- The people should be provided opportunities to find suitable markets outside the country.

- The Shah Wa Aroos dam canal system should be enhanced to irrigate much of the land in the Shakar Dara district.
- The water dripping system should be introduced in the district to save a significant quantity of water for adequate irrigation.
- The farmers lack the budget to purchase modern machinery for their fruit production. They should be provided with modern machinery to produce agricultural products in large quantities.
- The private sector should be encouraged to establish factories for fruit processing, e.g., for preparing jams and juices or drying the fruits, to help the development of the agriculture sector and agri-business in the country and contribute to the GDP in general.
- The cold rooms should be constructed to accommodate fruits in large quantities for the off-season.
- Alternative markets should be found apart from the neighboring countries for exporting fruits.

Conclusion

We have been able to conduct this study on the peaches (*Prunus persica*) and apricots (*Prunus armeniaca*) market system in the Shakar Dara district of Kabul province and to comprehend the effects of the peaches and apricots market system on the living standards of the district. 185 farmers were interviewed in the Shakar Dara district of Kabul province during this study. Apricots are a prioritized crop for the MAIL and the fourth and most significant perpetual yield, making income for 6% of country farmers after grapes, almonds, and pistachios. Fewer studies have been conducted on Afghanistan's peaches/apricots market system and agribusiness. The people of the district are investing in forming peach orchards, which are regarded as reliable income generation due to climate and soil fertility. The orchards are managed traditionally, including but not limited to the utilization of fertilizers and pests'/disease controls accessible in the local market generally of lower quality, which not only has negative impacts on producing low-quality fruits but also results in a high possibility of having adverse effects on human health and not eligible to be sold in international markets. Lack of cold storage is another main barrier to the fruit market. Moreover, finally sold internally and to the neighboring countries at extremely low prices. The water dam (Shah Wa Aroos) has a significant role in the district's irrigation system and controls flash floods significantly. Pavered roads, transportation, packaging, and labor availability play a positive role. The large family numbers, mainly 8 – 12 persons, were also a factor in not being able to have savings. However, most people can fulfill their basic needs, such as food, health, and education.

The possibility of 7 living standards dimensions such as orchard formation, Water and soil Productivity, Cultivation management (pest/disease control/ experience), Technology utilization packaging, Transportation/infrastructure & Labor, Product marketing/value chain/storage, and Climate change/Natural disasters identifying the different levels of relationship that can exist with effects of peaches and apricots market system and living standards. The farmers should be supported with modern farming practices such as high-density fruits for mass production, dripping system introduction, and facilitation of modern equipment; high-quality disease controls and fertilizers should only be allowed in the markets to ensure these pesticides/fertilizers are not affecting humans; plants and animal health. The irrigation canals should be improved. Strategies should be developed to improve and expand the fruit market system, such as establishing cooperatives and increasing coordination between farmers, fruit trade unions, mediators and/or other brokers, distributors, and export facilitating agencies. Facilitate the coordination between the stakeholders. The cold room construction is crucial to accommodate large quantities of fruits for the off-season. The farmers/exporters should be encouraged for tax deductions and the provision of export incentives. Land allotment will encourage the private sector to construct cold storage and food processing companies. Laboratories should be established to test the quality of disease control medicines/pesticides and fertilizers. Such kinds of studies are challenging as the respondents sometimes do not provide the correct feedback and/or show to be extremely poor and deserving of assistance as they expect to receive assistance from I/NGOs following answering the questions of the survey questionnaire, which is the same approach as NGOs. Due to its climate, the Shakar Dara district is also well-known for peach production. Considering the above-mentioned recommendations, the production of peaches and apricots will expand with improved production, large quantities, and selling in and outside the country, which will have an enormous impact on the living standards of the Shakar Dara district of Kabul province.

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Conflict of Interest

The writer certifies that no conflict of interest is connected to this publication. The study was conducted separately without any outside third-party financial or non-financial support.

Author Contribution Statement

Design and organization of the research, data analysis, and report writing fall to Mr. Muhammad Zahir Habibi. He collected field and literature review data, significantly changing the book. He also did study design, oversaw the controlled study techniques, and analyzed results. He read over and polished the work for coherence and clarity. The writer looked over and approved the last draft of the book.

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