

A Research on the Socioeconomic Structure and Perspectives of Agricultural Products Exporters in Afghanistan

Mohammad Sharif RAHIMI^{1*} 

Metin ARTUKOGLU² 

^{1,2} *Ege University, Department of Agricultural Economics, İzmir/TÜRKİYE*

¹<https://orcid.org/0000-0002-4231-1718>

²<https://orcid.org/0000-0003-4800-5209>

*Corresponding author (Sorumlu yazar): m.sharif.rahimi@gmail.com

Received (Geliş tarihi): 05.06.2023 Accepted (Kabul tarihi): 17.06.2023 Online: 29.06.2023

ABSTRACT: *In this study, which assessed Afghanistan's agricultural exports from the perspective of agricultural exporters, face-to-face interviews were conducted with 62 of a total of 600 identified exporters. Exporters were separated as fresh vegetable and fruit exporters and dried fruit and medicinal plant exporters, which constitute the main items of Afghanistan's exports, and the data were evaluated. According to the exporters, the biggest obstacle for them to increase exports is the energy problem, followed by the problems of finding a market, cash shortage, bureaucracy, goods transport, unjustified excuses of civil servants, lack of international certificates, lack of standard places for processing and packaging, and insufficient warehouse. Potential risks and security issues directly or indirectly affect the business world. However, one of the most important obstacles to the growth of trade and the private sector is the market structure, where various conflicts are experienced and intervened in. The main solutions are effective and sustainable marketing services, practices that encourage foreign trade, incentives for investors, policies to reduce tariffs and customs clearance costs, strengthening the country's economic infrastructure, and increasing security measures. It is clear that the suggestions put forward by the research will make significant contributions to the economic development of Afghanistan.*

Keywords: *Agriculture, export, exporters views, export structure, export obstacles, storage problem.*

Afganistan Tarım Ürünleri İhracatçılarının Sosyo-Ekonomik Yapısı ve İhracata Bakış Açuları Üzerine Bir Araştırma

ÖZ: *Afganistan'ın tarımsal ihracatını, tarımsal ihracatçıların bakış açısı ile değerlendiren bu çalışmada, belirlenen toplam 600 ihracatçıdan örneğe giren 62'si ile yüz yüze görüşme yapılmıştır. İhracatçıları Afganistan ihracatının ana kalemlerini oluşturmanı yaş sebze ve meyve ihracatçıları ve kuru meyve ve tıbbi bitki ihracatçıları olarak ayrılmış ve veriler değerlendirilmiştir. İhracatçılara göre; daha çok ihracat yapımlarındaki en büyük engel, enerji sorunu olup, bunu sırasıyla pazar bulma sorunu, nakit sıkıntısı, bürokrasi, mal nakli, devlet memurlarının sebepsiz mazeretleri, uluslararası sertifikaların olmaması, işleme ve paketleme için standart yer olmaması ve depo yetersizliği izlemektedir. Potansiyel riskler ve güvenlik sorunları, iş dünyasında doğrudan veya dolaylı olarak etkilemektedir. Bununla birlikte ticaretin ve özel sektörün büyümesinin önündeki en önemli engeller arasında, çeşitli çatışmaların yaşandığı ve müdahale edilen piyasa yapısı olarak gösterilmektedir. Etkin ve sürdürülebilir pazarlama hizmetleri, dış ticareti teşvik eden uygulamalar, yatırımcılara yönelik teşvikler, tarifeler ve gümrükleme masraflarını azaltıcı politikaların izlenmesi, ülkenin ekonomik altyapısının güçlendirilmesi, güvenlik önlemlerinin artırılması önerilerin başlıca çözümlerdir. Araştırma ile ortaya konulan önerilerin Afganistan'ın ekonomik olarak gelişmesine önemli katkıları olacağı açıktır.*

Anahtar kelimeler: *Tarım, İhracat, ihracatçıların görüşleri, ihracat yapısı, ihracat engelleri, depolama sorunu.*

INTRODUCTION

The global demand for agricultural products has risen significantly due to the strong economic growth in developing economies, resulting in the emergence of new agricultural exporters and importers. The growing importance of emerging economies, including Brazil, China, India, Indonesia, and the Russian Federation, has led to significant developments in world agricultural markets. From 2000 to 2016, trade in agricultural products grew by an average of over 6% annually, from US\$570 billion to US\$1.6 trillion (FAO, 2018; Statista, 2019). In 2018, the world's total exports amounted to \$19.5 trillion, with agricultural exports accounting for \$1.5 trillion, representing a 7.7% share of total exports. By contrast, Afghanistan's total exports amounted to \$875 million, of which \$646 million were agricultural products. As a result, agriculture accounts for 79% of Afghanistan's total exports. The country mostly exports fresh and dried fruit, with raisins, figs, grapes, pistachios, and almonds being the top five agricultural products that contribute 30.77% to total exports. Afghanistan's share in the world's total agricultural exports is only 0.05% (NSIA, 2019; ITC Trademap, 2018; WTO OMCDATA, 2019).

A limited number of studies have been conducted on Afghanistan's agricultural foreign trade. According to Habibyar (2014), security issues, administrative corruption, financial resource deficiencies, lack of access to land, transportation problems, and constant threats towards Afghan traders and investors are the biggest obstacles to Afghanistan's exports and investments. Habibyar (2014) suggests the establishment of cold storage facilities for agricultural products, facilitation of long-term credit access for producers to improve and enhance their production levels and informing exporters about regional and global markets and the standards required by those markets. Bakhshi (2016) listed the obstacles to Afghan exports as transportation problems, lack of processing and packaging facilities, absence of facilities for collecting and maintaining products such as

storage in the country, and internal security issues. Danesh (2017) stated that agriculture has great potential for growth and development in Afghanistan and can be a significant driving force for economic growth in the country. Rocha (2017) emphasized that the biggest problem in Afghanistan's trade is insufficient production capacity and pointed out that increasing competitiveness in high-potential sectors such as agriculture would help meet domestic demand in the short and medium term, replace imports, and potentially encourage exports. Merzakhil (2018) stated that Afghanistan has great opportunities for nuts and nut exports, emphasizing that Afghan dried fruits and nuts are natural with unique aroma, taste, and texture, and as a result of these characteristics, are in high demand worldwide. Ahmadyar (2021), on the other hand, emphasized that Afghan exports are based on limited items in terms of diversity and value and that export destinations should be diversified. The export of agricultural products is very important for Afghanistan, and there is a tremendous need for studies to better evaluate the potential in this field. This study aims to examine the position, structure, and competitiveness of Afghanistan agriculture in exporting countries in the world agriculture from the perspective of exporters. In this context, the study accomplished the following objectives.

- Evaluation of export potential, especially in terms of agricultural products exports, by revealing the place of Afghanistan in world foreign trade,
- Attempting to identify the main factors affecting Afghanistan's exports.
- Examination of Afghanistan's agricultural exports in terms of agricultural exporters.
- Identification of the problems related to Afghanistan's agricultural exports, propose solutions, and policy proposals.

MATERIALS AND METHOD

The research's primary data were collected through questionnaires administered to agricultural product

exporters in Kabul, Afghanistan, and interviews with officials from relevant institutions. The exporters surveyed were selected based on suggestions from Afghan government officials, as well as input from the President of the Chamber of Agriculture and Livestock, the Presidents of the Fresh Fruits and Vegetables Exporters' Union, the President of the Nuts and Medicinal Plants Exporters' Association, and officials from the General Directorate of Export Development. The questionnaire was administered to both vegetable and fresh fruit exporters, as well as exporters of dried fruits and medicinal plants, which play a significant role in Afghanistan's export and economy. The questionnaire consisted of 38 questions, focusing mainly on Afghanistan's agricultural export capacity, firm profile, storage and packaging, marketing issues, the best and competing countries for Afghanistan's agricultural products, problems faced by exporters, potential solutions, and future forecasts. The study utilized the proportional sampling formula to determine the appropriate number of exporters to be interviewed (Rahimi and Artukoğlu, 2021). Based on the fact that there were 600 exporters operating within the specified target groups (Rahimi, 2019), the sample size was determined using a 90% confidence interval and a 10% margin of error, as indicated below.

$$n = \frac{Np(1-p)}{(N-1)\sigma_{px}^2 + p(1-p)}$$

population proportion (p) = 50%, population size (N) = 600, σ_{px}^2 = variance of ratio (%90 confidence interval and %10 margin of error), Sample size (n) = 62

In the context of data analysis, the initial procedure encompassed categorizing exporter companies into two distinct groups: fresh fruit and vegetable exporters and exporters of dried fruits and medicinal plants, which are vital items of Afghanistan's export portfolio. Consequently, a total of 26 interviews were conducted with fresh fruit and vegetable exporters, while 36 interviews were conducted with dried fruit and medicinal plant exporters. For data analysis, the statistical programs SPSS, R, and MS Excel were used.

Descriptive statistics were utilized to examine the socio-economic factors of these exporters. To evaluate the exporters' views and behaviors on various issues, qualitative data were collected using a five-point Likert scale, where 1 indicated "I don't pay attention/strongly disagree" and 5 indicated "I definitely pay attention/strongly agree". The Likert rating scale measures the severity or level of agreement with statements. Agricultural exporters' opinions on several issues were analyzed using Fisher's Exact Probability Test, a Chi-Square Test component. Fisher's Exact Probability Test was utilized because it provides a more accurate approximation than the chi-square distribution in smaller sample sizes. When frequency values are less than five in every cell of the crossover table, the chi-square test should not be utilized. Fisher's Chi-square Exact Probability Test was created as a substitute for the chi-square test in small samples, providing more precise results in cases where the sample size is less than 20, while this statistical test is commonly employed for 2 X 2 tables derived from small samples, it can also be used for other large tables obtained from large samples.

This research was conducted with approval from the Scientific Research and Publication Ethics Committee of Ege University with document protocol no 588 dated 15/04/2020.

RESULTS AND DISCUSSION

Socio-Economic Structure with Exporters

In the past two decades, particularly since the establishment of the Islamic Republic government in 2000, there has been a notable scarcity of women involved in establishing companies for the purpose of export and trade. It is predominantly men who undertake the task of initiating companies for trading and exporting. Furthermore, most company owners and managers are uneducated. This also applies to the interviewed exporters (Table 1).

After examining the ownership structure of the companies owned by the exporters, it becomes apparent that a significant proportion of them are

limited liability companies (LLC) (56.43%), followed by sole proprietorship companies which constitute 33.87% of the ownership structure, while partnership and corporation companies account for 9.67% of the total. Turning to the employment situation within these companies, we find that they employ both permanent and temporary (seasonal) workers. In terms of permanent employment, companies typically have between 6 and 10 employees, as indicated in Table 2.

The number of temporary workers in the fresh fruit and vegetable group is higher than in the other product group. In general, when the distribution of temporary employees is examined, the ratio of companies with 1-50 temporary employees is 38.71%. This is followed by companies with 101-150 temporary employees (25.81%) and companies employing 51-100 temporary employees 19.35% (Table 3).

Table 1. Demographic characteristics of exporters.

Gender	98.4% male - 1.6% female
Average age	47.6 years
Education level	3.22% postgraduate, 45.16% undergraduate, and 51.62% uneducated
Average export experience	17.1 years

Table 2. Number of permanent employees in firms.

Companies	Number of Employees	Number of companies	Share in Group (%)	Share in All companies (%)
Fresh fruit and vegetables exporters	1-5	2.00	6.90	3.23
	6-10	19.00	65.52	30.65
	11-20	6.00	20.69	9.68
	20+	2.00	6.90	3.23
	Sub Total	29.00	100.00	46.77
Exporters of dried fruits and medicinal plants	1-5	10.00	30.30	16.13
	6-10	15.00	45.45	24.19
	11-20	7.00	21.21	11.29
	20+	1.00	3.03	1.61
	Sub Total	33.00	100.00	53.23
Grand total	1-5	12.00	-	19.35
	6-10	34.00	-	54.84
	11-20	13.00	-	20.97
	20+	3.00	-	4.84
	Total	62.00	-	100.00

Table 3. Number of temporary employees in companies.

Companies	Number of Employees	Number of companies	Share in Group (%)	Share in All companies (%)
Fresh fruit and vegetables Exporters	1-50	1.00	3.45	1.61
	51-100	6.00	20.69	9.68
	101-150	13.00	44.83	20.97
	151+	9.00	31.03	14.52
	Sub Total	29.00	100.00	46.77
Dried fruits and medicinal plants exporters	1-50	23.00	69.70	37.10
	51-100	6.00	18.18	9.68
	101-150	3.00	9.09	4.84
	151+	1.00	3.03	1.61
	Sub Total	33.00	100.00	53.23
Grand total	1-50	24.00	-	38.71
	51-100	12.00	-	19.35
	101-150	16.00	-	25.81
	151+	10.00	-	16.13
	Total	62.00	-	100.00

According to the survey data, 85.48% of exporters indicated having received training on export. Those exporters who reported receiving training mentioned their participation in various educational sessions, including workshops and seminars, as well as receiving information from both official and non-governmental organizations such as the Afghanistan Chamber of Commerce and Industries (ACCI), the United States Agency for International Development (USAID), (FAO), the International Trade Centre (ITC), and foreign countries such as India and Uzbekistan...

Supply Status of Exported Products

Approximately 99% of Afghanistan's exported products comprise locally produced goods. Only 1% of the exported items are sourced from foreign production. Certain fresh fruits, including bananas, mangoes, and citrus fruits, are cultivated in Pakistan and acquired by Afghan traders, who subsequently reexport them to Middle Eastern countries. Upon examining the exporters' forecasts concerning export volume, demand conditions, and

export prices for future product shipments, it is observed that 95.16% of exporters firmly believe that export volume will experience a definite increase, while the remaining 4.84% were unable to make any predictions on this matter. Similarly, 74.19% of exporters anticipate an increase in foreign demand for their exported products, and 59.67% predict a rise in the prices of the products they export (Table 4).

Storage and Storage Problems

According to Table 5, 44.13% of exporters possess their own storage facility while 38.83% rent warehouses (storage), and 17.04% employ other storage arrangements such as utilizing state storage or committing to purchase storage from a third party.

Upon examination of the types of warehouses utilized by exporters, it becomes apparent that open warehouses are predominantly preferred by exporters (Table 6).

Table 4. Exporters' forecasts for the future of the products they export

Future forecasts	Export volume		Demand for Exported Product		Price for Exported Product	
	Number of Exporters	%	Number of Exporters	%	Number of Exporters	%
Will rise	59.00	95.16	46.00	74.19	37.00	59.67
Will decrease	-	-	4.00	6.45	9.00	14.51
I can't foresee	3.00	4.84	12.00	19.35	16.00	25.80
Total	62.00	100.00	62.00	100.00	62.00	100.00

Table 5. Storage possibilities of exporters' products.

Stored Product	Ownership of Storage (Warehouses)	Number of Responses*	(%)
Fresh fruits and vegetables	Own	22.00	68.75
	Rental	3.00	9.38
	Other	7.00	21.88
	Subtotal	32.00	100.00
Dried fruits and medicinal plants	Own	8.00	19.51
	Rental	28.00	68.29
	Other	5.00	12.20
	Subtotal	41.00	100.00
General	Own	30.00	44.13
	Rental	31.00	38.83
	Other	12.00	17.04
	Total	73.00	100.00

*There were exporters who preferred more than one

Table 6. Types of storage used by exporters.

Stored product	Storage Types	Cold storage	Open top warehouse	Open warehouse	Other*	Subtotal
Fresh fruits and vegetables	Number of Answers	5.00	11.00	23.00	26.00	65.00
	(%)	7.69	16.92	35.38	40.00	100.00
Dried fruits and medicinal plants	Number of Answers	0.00	-	27.00	33.00	60.00
	(%)	0.00	-	45.00	55.00	100.00
General	Number of Answers	5.00	11.00	50.00	59.00	125.00
	(%)	3.85	8.46	40.19	47.50	100.00

*Other: such as store, hangar, etc.

In the global context, there are more modern types of storage such as cold storage, controlled atmosphere storage, modified atmosphere storage, and hypobaric storage (Kaur et al., 2021), but due to infrastructure problems, electricity shortages, limited capital and investment opportunities, and the lack of some essential services such as security and others in Afghanistan, exporters only use a few types of storage, especially traditional storage types. On the other hand, some exporters have stated that they export their products directly without storage. According to a survey conducted among exporters 80% of them reported facing issues related to storage. The survey further inquired about the nature and degree of importance of these problems. The respondents emphasized that the inadequacy of cold storage facilities is a critical problem affecting their export operations (Table 7). The lack of proper cold storage facilities was identified as a significant challenge by a majority of exporters, as it can lead to spoilage and damage of perishable goods during transportation. This can result in significant financial losses for the exporter, impacting their profitability and long-term sustainability. The survey results indicate that there is a pressing need for improved storage infrastructure and facilities to support the export industry and ensure the safe transportation of goods.

Based on the results, the biggest concern for the exporters is the absence of cold storage followed by insufficient storage space, high storage expenses, energy deficiencies, and no standard warehouse. In the case of fresh fruit and vegetable exporters, the absence of cold storage, energy

supply, and standardized storage facilities are the most significant challenges.

Table 7. Storage problems.

Problems	Likert Mean*
Insufficient storage space	3.26
High storage costs	3.12
Warehouse away from the packaging facility	1.91
Mixed storage of the product with other products	1.42
No cold storage	3.56
Energy deficiencies	3.01
No standard warehouse	2.67

*Likert Scale: 1: very little. 2: little. 3: moderate. 4: much. 5: very much.

Standardization of Exported Products

According to the findings presented in Table 8, a substantial portion of exporters indicated non-compliance with global standards pertaining to their export products: 30.6% of the exporters stated that their products are unsuitable (not at all suitable) with world standards and 17.7% of the exporters reported that their exported products are less suitable with global standards. In contrast, only 8% of the exporters expressed their confidence that their products are very suitable with world standards and only 19% of the exporters reported that their products are suitable for the global market. However, a sizeable proportion of the exporters 24.2% reported that their products are at a medium level of compliance with world standards.

Export-Oriented Practices of Governments

When the agricultural exporters' group and the participants' government practices for exports were

examined together in terms of the emphasized feature according to the Chi-Square test conducted, it was observed that the relationship between the variables was significant ($p < 0.001$). Agricultural exporter groups and governments are more likely to export dried fruits and medicinal plants (72.2%). Approximately half of the exporters think that governments take steps to facilitate exports (Table 9).

According to exporters, governments have implemented various steps to facilitate exports. Some of these steps encompass the opening of trade fairs, the establishment of laboratories, the signing of agreements with neighboring countries and Afghanistan as a member of specific organizations, the creation of air corridors, the digitization of the tax system, and the implementation of strategies to mitigate the challenges confronted by traders involved in transactions with Pakistan.

Marketing

Approximately 92% of exporters sell their products under their own brand name, while 8% sell their products under a different brand name. Almost all dried fruit and medicinal plant exporters sell their

products under their own brand names. On the other hand, approximately half of the exporters carry out advertising campaigns for their products (Table 10). To investigate the relationship between agricultural exporters and their advertising campaigns, we performed a Chi-Square test on the variables based on the emphasized feature. The analysis showed no significant relationship between the two ($p = 0.867$).

The advertising strategies employed by exporters to promote their products encompass various media, such as magazines, television, social media, and promotional items like pens, notebooks, calendars, and watches. A significant majority of exporters (95.16%) have participated in at least one national or international fair. The study revealed that these exporters attended fairs held in diverse countries including India, Uzbekistan, the Emirates (Gulffood), Tajikistan, the USA, Germany, China, Kazakhstan, and South Africa and the fairs were supported by official institutions, civil society organizations, and capital institutions like Azizi Bank. Exporters reported obtaining information about foreign markets from public institutions (10.90%), merchants (41.79%), agencies (3.12%), and fair or festival visits (23.97%). Additionally, 20.20% of exporters received information from other organizations such as ACCI, USAID, UNAMA, RADAP, and ITC through their domestic and foreign delegations (Table 11).

Table 8. Exporters' opinions on exported products with world standards

Product Group	Not at all suitable	Less suitable	Moderate	Suitable	Very suitable	Total
Fresh fruits and vegetables	17.00	7.00	4.00	1.00	0.00	29.00
Dried fruits and medicinal plants	2.00	4.00	11.00	11.00	5.00	33.00
Total	19.00	11.00	15.00	12.00	5.00	62.00
	30.64	17.75	24.19	19.35	8.07	100.00

Likert Scale :1: not at all suitable. 2: less suitable. 3: moderate. 4: suitable. 5: very suitable

Table 9. The Relationship Between Agricultural Exporter Groups and Governments' Export-Oriented Practices.

Agricultural exporter groups	export-oriented practices of government			Total
	Yes	No	Total	
Fresh fruit and vegetables exporters	Number	7.00	19.00	26.00
	%	26.90	73.10	100.00
Exporters of dried fruits and medicinal plants	Number	26.00	10.00	36.00
	%	72.2	27.80	100.00
Total	Number	33.00	29.00	62.00

$X^2 = 12.443$; p -value $< .001$

Table 10. Relationship Between Agricultural Exporter Groups and Advertisements.

Agricultural exporter groups	Advertisements			Total
		Yes	No	
Exporters of fresh fruit and vegetables	Number	11.00	15.00	26.00
	%	42.30	57.70	100.00
Exporters of dried fruit and medicinal plants	Number	16.00	20.00	36.00
	%	44.40	55.60	100.00
Total	Number	27.00	35.00	62.00

$X^2 = 0.28$; p-value = 0.867

Table 11. Information Resources of Exporters on Foreign Markets.

Exporter Groups	Institution/Organization from Which Information Was Obtained	Number of Answers*	Within-group Ratio (%)	Overall Rate (%)
Fresh fruits and vegetables	From public institutions	11.00	51.56	17.19
	From traders	21.00	98.44	32.81
	From agents	4.00	18.75	6.25
	Fair/festival visits	11.00	51.56	17.19
	Other	17.00	79.69	26.56
	Subtotal	64.00	300.00	100.00
Dried fruits and medicinal plants	From public institutions	3.00	13.85	4.62
	From traders	33.00	152.31	50.77
	From agents	0.00	0.00	0.00
	Fair/festival visits	20.00	92.31	30.77
	Other	9.00	41.54	13.85
	Subtotal	65.00	300.00	100.00
General	From public institutions	14.00	-	10.90
	From traders	54.00	-	41.79
	From agents	4.00	-	3.13
	Fair/festival visits	31.00	-	23.98
	Other	26.00	-	20.20
	Total	129.00	-	100.00

*Multiple options are marked

Effects of Commercial Agreements

According to Table 12, findings indicate that 37.10% of exporters affirmed the government-signed agreements with neighboring countries on their export activities. The agreements they cited are: the opening of air corridors, 24/7 accessibility to the Torcham border with Pakistan, improved relationships with foreign traders, the facilitation of road infrastructure, and the establishment of favorable trade relationships with other countries. Conversely, a majority of exporters, constituting 62.90% did not believe that such agreements particularly those with neighboring countries had a positive impact on their exports. To determine whether a relationship existed between the effects of agricultural exporter groups and international agreements, a Chi-square test was conducted.

However, the results indicated that the relationship between these variables was not statistically significant ($p = 0.731$). A considerable proportion of exporters reported that membership in international and regional organizations particularly the South Asian Association for Regional Cooperation (SAARC) and the Economic Cooperation Organization (ECO) did not have a significant impact on their exports (Table 13). Fisher's exact test was conducted under the Chi-Square test to analyze the relationship between the group of agricultural exporters and the benefits of being a member of international and regional organizations for their exports. Upon examining the results, it was observed that the relationship between the variables was not statistically significant ($p = 0.689$). Nonetheless, it is noteworthy that the groups of agricultural

exporters who deal with dried fruits and medicinal plants may find membership in international and regional organizations to be more relevant to the benefits of their own exports (Table 12).

According to Moghaddasi and Rahimi's (2012) research on ECO countries, it has been suggested that although free trade agreements have a positive impact on trade value, Afghanistan has not fully benefited from these collaborations. The findings indicate that 88.71% of exporters have reported that membership in regional organizations such as SAARC and ECO had no discernible effect on increasing exports or addressing their challenges. Furthermore, exporters who perceive such organizations to be beneficial tend to believe that this benefit mostly applies to larger exporters. Several obstacles to increased export have been

identified by exporters. Energy problems ranked as the biggest barrier to exporting more followed by difficulties in finding markets, cash shortages, and insufficient warehousing. In contrast, temporary labor shortages, insufficient product supply, lack of technical personnel, and challenges in finding products of the desired quality are relatively less problematic (Table 13).

Export Structure

The distribution of the products exported and value in million \$ by the exporters on the basis of countries is given in Table 14.

On the other hand, the payment method for the products is given in Table 15.

Table 12. Views of agricultural exporters on the effects of international agreements on their exports and being a member of international and regional organizations.

		Exporters of fresh fruit and vegetables		Exporters of dried fruit and medicinal plants		Total		X ² (p-value)
		Number	%	Number	%	Number	%	
Effects of International Agreements	Yes	9	34.6	14	38.9	23	37.1	0.118 (0.731)
	No	17	65.4	22	61.1	39	62.9	
	Total	26	100	36	100	62	100	
Benefits of being a member of international and regional organizations on exports	Yes	2	7.7	5	13.9	7	11.29	0.579 (0.689)
	No	24	92.3	31	86.1	55	88.71	
	Total	26	100	36	100	62	100.00	

Table 13. Problems Preventing Exporters from Exporting More.

Problem	Likert*
The requested quantity of products cannot be found	1.16
The requested quality product cannot be found	1.71
Lack of technical staff	1.52
Casual (Temporary) workers shortage	0.96
Energy problem	4.15
Market finding problem	3.94
Cash problem	3.74
Insufficient warehouse	3.63
Other**	3.59

*Likert Scale: 1: Not at all 2: Few 3: Moderate 4: many problems 5: too many problems

** Cold storage, packaging, and labeling

Table 14. Distribution of Exports by Country (2017-2019).

Product	Country	2017	2018	2019	Product	Country	2017	2018	2019	Product	Country	2017	2018	2019
Asafetida	India	44.4	45.4	49	Green cumin	India	1.99	4.3	11.2	Almond without shell	India	8.7	6.2	6.09
	BAE	0.05	0.08	0.47		Pakistan	1.7	1.7	1.89		UAE	0.8	0.99	3.6
Abjosh raisins	India	14.4	12.1	17.1	Sesame seeds	Iran	0.28	0.19	0.23	Saffron	Turkey	0.04	0.72	5.67
	Poland	0.04	0.05	0.02		UAE		0.8			India	1.95	5.8	6.9
Black raisins	India	7.2	7.3	9.8	Pomegranate	Turkey			0.67	Onion	Saudi Arabia	3.09	3.11	3.67
	Iran	0.08	0.3	0.26		Iraq	4.3	4.1	4.1		UAE	0.08	0.19	0.48
	Pakistan	4.01	0.03	0.03		Iran	3.8	4.1	1.8		Pakistan	5.4	2.9	8.97
	UAE	0.46	0.64	0.56		Pakistan	5.2	9.7	9.7		India	0.02	0.19	11.3
Green raisins	India	6.9	5.3	5.1	Elma	India	0.1	0.24	0.19	Shakarpar a	India	11.75	10.2	4.5
	Pakistan	0.8	0.31	0.04		Pakistan	6.8	3.89	4.2		China	0.04	0.21	1.09
	USA	0.06	0.06	0.11		India	1.2	1.85	0.13		Pakistan	0.13	0.28	0.05
Red raisins	Turkey	17.5	2.8	3.1	Apricot	Pakistan	2.1	7.45	5.4	Black cumin	India	5.2	5.4	
	Pakistan	1.02	5.3	0.2		India	1.3	0.1	0.11		Pakistan	5.7	0.43	
	Kazakhstan	1.1	1.7	1.09		China		7.2	13.5		Turkey			0.38
	Russia	0.7	0.6	1.09		India	0.87	0.35	0.1		Pakistan	4.1	0.7	0.19
Dried fig	India	35.7	27.2	36.4	Cucumber	Pakistan	2.97	4.8	4.3	Dried apricots	Iraq	0.6	0.6	0.75
	UAE	0.09	0.12	0.7		Tajikistan	0.13	0.27	0.1		Pakistan	0.31	0.65	0.3
Grape	Pakistan	4.3	45.9	17.7	Ansrdana (medicinal plant)	Turkey	0.74	0.13		Potatoes	Uzbekistan	0.4	0.25	0.03
	India	0.21	0.8	5.78		India	0.2	0.45			Turkmenistan	0.09	0.19	0.12
Tomatoes	Pakistan	19.6	23.9	17.2		USA	0.51		Almond with shell		Pakistan	3.79	2.5	2.4
											India		0.14	3.9

Table 15. Payment Methods by Countries.

Payment method	Fresh fruits and vegetables	Dried fruits and medicinal plants
Advance payment	-	India
Payment after shipping	India, Pakistan, Kazakhstan	India, Turkey, Iran, Pakistan, USA, Europe, Saudi Arabia, UAE
Payment by letter of credit	Pakistan	-

Based on the research findings, fresh fruit and vegetable exports from India, Pakistan, and Kazakhstan are typically made using accredited payment methods after sending each lot. Payment methods vary, with some exporters receiving payment via currency exchange, while others receive payment via money transfer one or two weeks after shipment. For dried fruits and medicinal plants, cash payment is the standard payment type in India. In contrast, payment for exports from India, Turkey, Iran, Pakistan, America, Europe, Saudi Arabia, and the Emirates is made after each batch is sent, while a portion of exporters receives 50% prepayment and 50% post-export payment. Other payment methods are not commonly used in Afghanistan. Exporters were also queried on the factors that influence export prices. Exporters reported that the Ministry of Commerce determines export prices based on Customs Laws. Factors that determine export prices include market rates, demand, commodity

shortages, seasonal and climatic conditions, production, and product stability. Afghanistan is a landlocked country, for this reason, foreign trade is directly dependent on relations with neighboring countries. In general, Afghanistan's agricultural products, especially fresh fruits, and vegetables, are mostly exported to Pakistan, while dried fruits and medicinal plants are sent to India and Arab countries. Saffron, which is among the medicinal plants, is produced and exported mostly in Afghanistan after Iran. Central Asian countries, Iran and the USA are among the closest competitors in grapes, raisins, and almonds, which have a large share in Afghanistan's agricultural exports. Table 16 provides the opinions of exporters based on the exported products as well as their opinions of the best-importing countries and competitor countries.

Afghan exporters believe that Afghanistan's agricultural products cannot compete with those of other nations in terms of quality. They feel that

they need to exert more effort to persuade importers to acknowledge the organic and high-quality characteristics of their products. In particular, exporters consider Pakistan which shares land borders with Afghanistan and India, to be the most desirable importer for nearly all products due to the absence of standard processing and packaging. Among these two countries, Pakistan is deemed the more suitable importer for fresh fruits and vegetables, whereas India is regarded as the optimal choice for dried fruits and medicinal plants.

Problems Faced by Afghanistan Agricultural Products Exporters

According to Table 17, findings indicate that 93.55% of the exporters think that they encounter problems while exporting, whereas only 6.45% think that they have no problems while exporting. To investigate whether there is a correlation between the type of agricultural exporter and the

challenges faced by them, Fisher's Exact Test was employed within the framework of the Chi-Square Test. The analysis revealed that when the problems experienced by agricultural exporters and their characteristics are considered together, the relationship between these variables is not statistically significant ($p = 0.633$).

According to exporters, their exporting poses significant challenges including transportation, transit, customs, corruption, extortion by government officials and police, bureaucratic hurdles, difficulties in goods transport, unjustifiable delays caused by civil servants, lack of international certifications, and inadequate facilities for processing and packaging. These obstacles can impede the smooth flow of exports and hinder exporters from reaching their full potential in the global marketplace. The challenges encountered by the 29 fresh fruit and vegetable and 33 dried fruits and medicinal plants exporters that participated in the survey are given in Table 18.

Table 16. Afghanistan's Top Importer and Competitor Countries for Agricultural Exports.

Products	Top Importing Countries	Competitor countries in terms of exports
Almond	India, Pakistan	USA, Syria
Pistachio	-	Iran, Turkey
Walnut	-	China
Raisin	India, Pakistan, Turkey	Uzbekistan, Iran, Turkey China, India
Pinecone	China, India	-
Fig	India, BAE	-
Apricot	Pakistan, India	Turkey
Black raisins	India, Iran, Pakistan	Uzbekistan
Grape	Pakistan, India	Middle Asia, China, Tajikistan, Iran
Tomatoes	Pakistan	Pakistan, India, and Iran
Apple	Pakistan, India	China and Iran
Pomegranate	Pakistan, India	Turkey, Iran, and India
Cucumber	Pakistan, Tajikistan	Iran
Saffron	India, Saudi Arabia	Iran
Asafetida	India, UAE	-

Table 17. Whether or Not the Exporters Have Export-Related Problems

Agricultural exporter groups		Problem		Total
		Yes	No	
Exporters of fresh fruit and vegetables	Number	25.00	1.00	26.00
	%	96.20	3.80	100.00
Exporters of dried fruit and medicinal plants	Number	33.00	3.00	36.00
	%	91.70	8.30	100.00
Total	Number	58.00	4.00	62.00

$$X^2 = 0.504; p\text{-value} = 0.633$$

Table 18. Problems of Fresh Fruit and Vegetable Exporters.

Problems	Proportion of exporters expressing the problems	
	Fresh fruit and vegetable exporters (%)	Dried fruit and medicinal plant exporters (%)
Afghanistan's geographical location, highways, and transportation problems	93.11	69.69
Problems related to marketing services	86.21	100.00
Lack of incentives for investors	82.76	90.91
Problems in commercial relations with neighbors	72.42	21.21
Ongoing civil war and lack of security	72.42	75.75
The problem of adaptation to the global marketing system	68.97	84.85
Problems related to education and communication	51.73	33.33
Quality control system of goods and services	8.55	51.51
Border security problem	8.55	-
Misunderstanding of the free market economy	6.41	3.03

With a very weak export base, Afghanistan can currently focus on only a few limited markets. Although the country is heavily dependent on imports, only some products can be produced domestically at a lower cost. Afghanistan's basic strategy should be to develop and implement dynamic policies in the field of education, health, and law, which will provide the basic infrastructure conditions for investment by using its own resources effectively and taking into account the dynamics of the country. The development of agriculture-based industry will also enable the production of high-quality and competitive products for the foreign market. At this point supporting private sector investments and creating this environment will positively affect exports in the medium and long term.

Potential risks and security issues directly or indirectly affect the business world. However, among the most important obstacles to the growth of trade and the private sector is the market structure, where various conflicts are experienced. Afghan currency has a relatively better value compared to other South Asian countries. In this respect, Afghanistan's export is more expensive than other countries. Imports are quite high in the balance of trade; and in this context, the high level of assistance in the areas of reconstruction and development played an important role. At the same time, the cost of non-professional jobs in Afghanistan is higher than in other countries and its income is not suitable for private investment. In

order to increase the value of agriculture and agro-industrial products, there is a need to improve warehouse capacity and improve processing processes. If these deficiencies are eliminated, the agricultural export potential is quite high. In this context, the new role and activities of the Afghanistan Export Promotion Agency (EPAA) should be determined. The EPAA can play a larger role in export promotion, support services, technical assistance, capacity building and marketing. As can be seen in the study, exporters of fresh vegetables and fruits (about 96.2%) and exporters of dried fruits and medicinal plants (91.72%) stated that they had problems in exports, so the government should take measures. In this context, the modernization of customs and border management will have the greatest impact on reducing trade costs in Afghanistan. Customs procedures should be clearer, simpler and compatible with global procedures. Defining a customs clearance model for Afghanistan will also affect the design of the country's customs office.

CONCLUSIONS AND RECOMMENDATIONS

From the study, it is seen that the agricultural products exported by Afghanistan do not comply with the standards to a large extent. In order to consistently comply with international standards in global markets, its products must meet certain health, safety, environmental and technical standards. The government and investors must

make significant investments in new infrastructure, equipment, management systems, human resources and the establishment of laboratories necessary for food safety. The Afghan National Standards Office is responsible, among other things, for supporting manufacturers who must comply with technical standards and regulations. In order for these producers not to encounter technical barriers in trade and specially to prepare agricultural products in accordance with hygiene conditions and standards, new animal and plant hygiene laws should be established and the barriers to trade should be addressed holistically.

Afghanistan still lacks adequate banking and insurance services to support international trade. The difficulty of obtaining financial services is a major obstacle to the growth and development of trade. Access to trade and export finance loans by Afghan companies, especially export companies, should be increased. Integration into the regional economy is a key factor in Afghanistan's transformation. Thus, Afghanistan will ensure the development of regional trade and communication and export levels. Subsequently, this will facilitate Afghanistan's access to global markets. In other words, bilateral and regional trade agreements are valuable for Afghan producers not only because they provide access to new markets, but also because Afghanistan, as a landlocked country, provides transit routes through neighboring countries. Afghanistan is currently a member of SAARC and the South Asia Free Trade Area, the Central Asian Regional Economic Cooperation Program (CREC) and the Intervention & Coiled Tubing Association (ICoTA). About 70 percent of Afghan products are currently exported to India and Pakistan. These countries have relatively high tariff rates. Although Afghanistan enjoys the advantages of preferential tariffs to India under the preferential tariff concession scheme, seasonal changes in tariffs in practice hinder the export of products for which Afghanistan has a competitive advantage. Of course, these competitive products can be a good source of income. If foreign markets are more open, Afghan producers and traders will

be able to export more to these markets. Despite significant improvements, regional trade still faces numerous tariff barriers (for example, the list of sensitive goods under the South Asian Free Trade Area program) as well as a number of non-tariff barriers, including infrastructure restrictions, hygiene requirements, rules of origin, and delays. These barriers need to be removed for Afghan exporters to be successful in regional markets. Similarly, trade in services, in general, is not covered by agreements, although trade in services is still discussed in the SAARC. Finally, it should be noted that transit trade measures are particularly important. In some cases, political conflicts with neighboring countries arising from policies aimed at protecting local production, or sometimes the immediate closure of borders, are major barriers to Afghanistan's trade. These specific policies are inconsistent with set goals such as open trade, predictability, and rules in the region. Significant progress has been made in recent years, including the signing of the Afghanistan-Pakistan Transit Trade Agreement (APTA) and the ChahBahar Port Agreement with India and Iran in 2016, which provides an alternative transit route for Kabul. Meanwhile, Azerbaijan has recently signed a Lapis Lazuli transit route agreement with Georgia, Turkey and Turkmenistan, allowing Afghan traders to export their products to the Black Sea and European markets. However, there are some problems in some of these agreements, such as the Afghanistan-Pakistan Transit Trade Agreement, so more work needs to be done in this area. The majority of exporters believe that international and regional agreements or being a member of some organizations such as SAARC and ECO do not have an acceptable effect on exports. Further development of regional trade and transit agreements means strengthening Afghan products and taking advantage of trade opportunities in strategic regional markets to promote healthy competition in regional markets and exports. In addition to reducing the list of sensitive goods under existing trade agreements, agreements have expanded the export of Afghan products. The

design of transit priorities and the implementation of transit agreements will reduce Afghanistan's dependence on a single port and stabilize trade trends in the region.

Long-term and comprehensive strategies should be developed to facilitate the implementation of agreements signed or negotiated and for Afghanistan to operate effectively in trade agreements. This should include a quantitative analysis of Afghanistan's bilateral trade issues, including competitive advantage and investment flows, and the spending and production structure in the counterparties. All newly proposed trade agreements should be analyzed for their economic impact before negotiations begin, as well as the potential impact of existing trade agreements and agreements to be negotiated. The implementation process of all bilateral, multilateral and regional transit agreements aimed at reducing transit costs should be accelerated. It is essential to negotiate and take bilateral measures with countries that import Afghan products, especially Pakistan, in order to avoid the implementation of seasonal tariffs and other unnecessary trade barriers. It is clear that the suggestions put forward by this research will make significant contributions to the economic development of Afghanistan.

Afghanistan's current export structure is extremely undeveloped and limited with only a few commercial products exported to many commercial markets. Exports of agricultural products account for more than three-quarters of the country's exports. Afghanistan has reduced its commercial dependence on Pakistan in recent years and has developed its commercial activities in Asia, Central Asia/North Africa. Afghanistan's

largest exports are products such as seeds, medicinal plants and dried fruits, and the contents and amounts of exports have changed in recent years. Afghanistan's business growth in Asia, Central Asia and North Africa can be characterized as a mix of new products and new markets. Trade growth in Asia and Europe and Central Asia (ECA) is mostly based on new products sent to countries with trade relations, which increase the export of traditional products (by increasing the number of exports). Exporters face the most harvest-related problems when sourcing products. To solve this problem, modernization and mechanization of the product is a must. Also, the problem can be reduced by teaching the farmers the right harvesting techniques. Afghanistan's exports are very costly and competitive. One of the main reasons for this is that the raw materials required for production are based on imports. Delays in imports can be compensated through transfers and warehousing activities but raw materials must be produced locally in order to reduce foreign dependency. The findings show that Afghanistan cannot be opened to foreign markets with high-cost, low-value-added products.

One of the biggest obstacles to material supply and private sector development in Afghanistan is the lack of infrastructure and infrastructure services. Due to the huge infrastructure gap, it has the greatest impact on the creation of its services. Investments in electricity and transportation should be increased. It is necessary to continue to improve domestic electricity generation capacity. Regional electricity trade should be strengthened. Investing in roads will be beneficial in reducing the cost and travel time of land transport, but this investment needs to be made in a sustainable way.

REFERENCES

- Ahmadyar, T. 2021. Major Challenges of Afghanistan Exports, Afghanistan Chamber of Commerce and Investment (ACCI), <https://acci.org.af/en/president-biography>. (Available Date: 01.03.2023).
- Bakhshi, R. 2016. Export problems in Afghanistan, Afghanistan Economics.
- Danesh, Z. 2017. The role of agriculture in the economy. 8 am media. <https://8am.media/the-role-of-agriculture-in-the-economy/>. (Available Date: 13.03.2023).
- FAO. 2018. The State of Agricultural Commodity Markets 2018. Agricultural trade, climate change and food security. Rome. Gbetnkoum, D. and S. A. Khan. 2020, Determinants of agricultural exports: The case of Cameroon, (Doctorate thesis. AERC).

- Habibyar, N. 2014. Afghanistan Exports; Good Economic Model for Business System Development. BBC news, https://www.bbc.com/persian/afghanistan/2014/09/140930_k03_economic_challenges_of_new_govt, (Available Date: 23.02.2023).
- ITC Trademap. 2018. Trade Statistics of International Business Development. List of Import and Export Products. <https://www.trademap.org>. (Available Date: 11.02.2023).
- Kaur, J., Aslam, R., & Saeed, P. A. (2021). Storage structures for horticultural crops: a review. *Environment Conservation Journal*, 22(SE), 95-105.
- Merzakhil, O. 2018. The export opportunities and challenges of Afghanistan dried fruits and nuts. Master's thesis, Kabul University. pp. 16-89. Kabul-Afghanistan.
- Moghaddasi, R. and R. Rahimi. 2012. Impact of free trade agreements on bilateral agricultural trade for ECO countries.
- NSIA (National Statistics and Information Authority), 2019. Agriculture Economy Statistics. Annual Trade. 2011-2018. <https://Nsia.Gov.Af>. (Available Date: 04.11.2023).
- Rahimi, A. F. 2019. Regional Agricultural Development Program- East (RADP-E). Agribusiness List.
- Rahimi, M. S. and M. Artukoğlu, 2021. Problems Facing Agricultural Product Exporters and Solutions: A Case Study from Afghanistan. *Tarım Ekonomisi Dergisi*, 27(2), 101-112.
- Rocha, N. 2017. Trade as a Vehicle for Growth in Afghanistan. <https://www.worldbank.org/en/country/afghanistan/publication/trade-as-a-vehicle-for-growth-in-afghanistan>. (Available Date: 01.03.2023).
- Statista. 2019. Trends in Global Export Volume of Trade in Goods. Empowering people with data. Insights and facts across 170 industries and 150+ countries. <https://www.statista.com>. (Available Date: 15.03.2023).
- WTO OMCDATA. 2019. International Trade Statistics. WTO Data-Information on trade and trade policy measures. <https://data.wto.org/>. (Available Date: 31.02.2023).