



ECONOMIC FOUNDATIONS OF FORMING A REGIONAL AGRO-BRAND IN THE POMEGRANATE INDUSTRY (THE CASE OF UZBEKISTAN)

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ABSTRACT

The article analyzes the economic foundations of forming a regional agro-brand in the pomegranate industry. The strategic importance of the pomegranate sector is substantiated in the context of agricultural diversification, increasing export potential, and developing value-added chains. The study examines the development trends of pomegranate cultivation and its regional specialization based on statistical data. In addition, a system of indicators is proposed to assess the potential for forming a regional brand in the pomegranate industry, including production sustainability, product quality and level of specialization, opportunities for access to foreign markets, and economic efficiency. This approach makes it possible to quantitatively evaluate the level of readiness for introducing a regional agro-brand and serves as a practical tool in the decision-making process.

KEYWORDS: Pomegranate Cultivation, Regional Agro-Brand, Branding Potential, Value-Added Chain, Export, Agricultural Economics.

I. INTRODUCTION

In the global economy, agriculture is considered one of the strategic sectors that ensures the stability of the national economy, food security, and employment of the population. Increasing production efficiency in agriculture, developing processing industries, and expanding export potential are among the key factors of economic development. Within the framework of the economic reforms being implemented in Uzbekistan, modernization of the agricultural sector and its transformation into an export-oriented industry that generates high value added have been identified as priority tasks. In particular, as emphasized by the President of the Republic of Uzbekistan, Shavkat Mirziyoyev, modernization of agriculture, expansion of processing activities, and increasing export volumes play an important role in ensuring the effectiveness of economic reforms [1].

The national development strategy Uzbekistan - 2030 Strategy also identifies diversification of agriculture, increasing the production of export-oriented products, and the introduction of international standards as priority objectives [2]. From this perspective, creating additional value through deep processing of agricultural products, rather than merely selling raw materials, is of great importance. As noted by Michael E. Porter, the competitiveness of a product largely depends on the efficiency of the value-added chain, where the integration of production, processing, logistics, and marketing stages ensures economic advantage [7].

Among fruit and vegetable sectors, pomegranate cultivation represents one of the economically and socially significant areas of agriculture. Pomegranates are valued not only as a food product but also for their medicinal properties. Therefore, global demand for pomegranates and pomegranate-based products has been steadily increasing. The agro-climatic conditions, particularly in the southern regions of Uzbekistan, create favorable opportunities for the development of pomegranate cultivation.

Under modern market economy conditions, territorial branding is considered one of the important economic mechanisms for increasing the competitiveness of agricultural products. In economic literature, the concept of a brand is generally interpreted as a means of distinguishing a product or service from its competitors. For example, David A. Aaker explains brand equity through the combination of brand awareness and perceived product quality [4], while Kevin Lane Keller defines a brand as a system of knowledge and associations formed in the minds of consumers [5].

In the agricultural sector, branding is often closely linked to the geographical origin of a product. Alessandro Pacciani and co-authors argue that geographical indications demonstrate the relationship between product quality, reputation, and its place of origin [6]. Moreover, the concept of “origin-linked quality products,” promoted by the Food and Agriculture Organization (FAO), highlights that the quality of a product associated with natural conditions and human factors determines its additional economic value [8]. Filippo Arfini and colleagues also emphasize that origin-based products play an important role in stimulating regional economic development [9].



However, an analysis of the scientific literature shows that most existing theoretical models are primarily aimed at assessing brand equity. In practice, however, many agricultural regions do not yet have fully established brands. Therefore, before implementing territorial branding, it is important to assess the extent to which the necessary economic and market conditions for brand formation exist.

In this regard, the aim of the present study is to analyze the economic foundations of forming a regional agro-brand in the pomegranate sector and to develop a methodological approach for assessing the level of readiness for its implementation.

II. LITERATURE REVIEW

In economic literature, the concept of a brand is generally interpreted as a means of distinguishing a product or service from competitors and creating a stable positive perception in the minds of consumers. One of the main directions in brand theory is the concept of brand equity. For instance, David A. Aaker explains brand equity as a combination of factors such as brand awareness, trust in the brand, and perceived quality [4]. Meanwhile, Kevin Lane Keller interprets brand equity through the system of knowledge and associations about a brand formed in the consumer's mind [5]. These approaches mainly focus on analyzing consumers' attitudes toward a brand.

In agricultural economics, the concept of branding is often considered in relation to the geographical origin of a product. In particular, the concept of Geographical Indications (GI) explains that the quality and reputation of a product are closely linked to the natural conditions, agrotechnology, and production traditions of a specific region. Alessandro Pacciani and co-authors emphasize that geographical indications play an important role in increasing product differentiation in the market and creating additional economic value [6].

At the same time, the quality advantages of agricultural products associated with their geographical origin have been widely studied by international organizations. In particular, the concept of "origin-linked quality products" promoted by the Food and Agriculture Organization (FAO) demonstrates that product quality is closely related to natural conditions, human capital, and local traditions. According to this approach, the territorial characteristics of a product are important factors in increasing its market value and competitiveness [8].

Issues of territorial branding have also been studied from the perspective of rural development. Filippo Arfini and co-authors note that origin-based products contribute to stimulating economic activity in rural areas, increasing the income of local producers, and strengthening regional specialization [9]. From this perspective, territorial branding can be viewed not only as a marketing tool but also as a strategic mechanism for regional economic development.

In economic theory, the concept of the value chain is also important for increasing product competitiveness. As emphasized by Michael E. Porter, the integration of production, processing, logistics, and marketing stages determines the competitive advantage of a product in the market [7].

However, most existing scientific studies primarily focus on evaluating brand equity or institutionalizing geographical indications. In many agricultural regions, however, brands have not yet been fully formed in economic and institutional terms. Therefore, before implementing a territorial brand, it is important to assess whether the necessary production, market, and economic conditions for brand formation exist.

From this perspective, the present study proposes assessing not the existing value of a brand but rather the level of readiness for its formation. This approach allows for a comprehensive evaluation of the potential for establishing a regional agro-brand based on factors such as production sustainability, product quality and specialization level, access to external markets, and economic efficiency.

III. MATERIALS AND METHODS

In this study, a methodological approach was developed to analyze the economic foundations of forming a regional agro-brand in the pomegranate sector and to assess the level of readiness for its implementation. The research employed methods of scientific abstraction, comparative analysis, statistical analysis, and economic evaluation.

The information base of the study consists of data from the Statistics Agency under the President of the Republic of Uzbekistan and relevant scientific literature. The development trends of the pomegranate sector were analyzed based on indicators such as the area of pomegranate orchards, gross harvest, and yield levels.

To assess the potential for establishing a regional agro-brand in the pomegranate sector, a system of indicators covering nine variables was proposed. In particular, production sustainability is evaluated through the growth rate of pomegranate orchard areas (K1) and the stability of yield levels (K2). Product quality and specialization are assessed through the share of export-oriented varieties (K3) and the level of compliance of products with quality standards (K4). Opportunities for access to foreign markets are evaluated through the volume of pomegranate exports (K5), the number of external markets (K6), and the level of development of logistics infrastructure (K7). Economic efficiency is assessed based on the profitability of farming enterprises (K8) and the share of processed



pomegranate products (K9). These indicators allow a comprehensive assessment of the production, market, and economic conditions necessary for forming a regional agro-brand.

This system is aimed not at evaluating the existing value of a brand but at assessing the level of readiness for its introduction.

The evaluation framework includes four main dimensions:

- production sustainability (K1–K2)
- product quality and specialization (K3–K4)
- access to external markets (K5–K7)
- economic efficiency (K8–K9)

Each indicator is calculated based on statistical data and evaluated at three levels: high (2 points), medium (1 point), and low (0 points). Based on the scores of these indicators, the average values of production, quality, market, and economic efficiency indicators are calculated.

At the final stage, the overall regional branding readiness index is determined. If this index **exceeds 1.5**, the region is considered ready to establish a regional agro-brand in the pomegranate sector. If the index ranges **between 1.0 and 1.5**, the region is considered partially ready, while an index **below 1.0** indicates that the economic conditions necessary for branding have not yet been sufficiently developed.

The overall regional branding readiness index is calculated using the following formula:

$$T_{overall} = \frac{T_{production} + T_{quality} + T_{market} + T_{economic}}{4}$$

IV. RESULTS AND DISCUSSION

As a result of the economic reforms aimed at developing the fruit and vegetable sector in Uzbekistan, positive changes have been observed in the development dynamics of the pomegranate industry. In particular, the expansion of pomegranate orchard areas in recent years indicates the growing economic interest in this sector.

Statistical data analysis shows that during the period **2020 - 2024**, the area of pomegranate orchards in the republic demonstrated a stable growth trend. This situation indicates that new pomegranate orchards are being established as a result of measures aimed at developing pomegranate cultivation in the country. These trends are supported by sectoral statistics published by the Statistics Agency under the President of the Republic of Uzbekistan.

Table 1. Dynamics of pomegranate orchard areas in farms of all categories in the republic and by regions (hectares).

	2020 Total Area	2020 Bearing Area	2022 Total Area	2022 Bearing Area	2024 Total Area	2024 Bearing Area
Republic of Uzbekistan	7390	5224	7402	5166	9229	6048
Republic of Karakalpakstan	60	60	10	9	10	10
Regions						
Andijan	564	543	345	337	365	350
Bukhara	410	323	257	242	325	320
Jizzakh	74	62	52	37	49	22
Kashkadarya	789	742	783	724	898	784
Navoi	144	139	121	19	179	123
Namangan	432	380	385	361	643	378
Samarkand	279	258	228	86	119	110
Surkhandarya	2325	1565	2622	1682	3567	1845
Syrdarya	164	127	171	128	429	376
Tashkent	160	126	202	130	176	100
Fergana	1849	768	2139	1125	2371	1542
Khorezm	140	131	88	86	94	88

Source: Author’s calculations based on data from the Statistics Agency under the President of the Republic of Uzbekistan.



According to the data presented in Table 1, the total area of pomegranate orchards in the republic expanded from 7,390 hectares to 9,229 hectares. In particular, Surkhandarya Region is the leading region in pomegranate cultivation, where the total orchard area reached 3,567 hectares in 2024. In addition, positive development trends in the pomegranate sector can also be observed in Fergana Region and Kashkadarya Region.

However, certain changes have been observed in the indicators of production efficiency in the pomegranate sector. In particular, a declining trend in yield indicators has been observed in recent years. This situation highlights the necessity of introducing intensive agrotechnologies and increasing production efficiency in the sector.

Table 2. Dynamics of total harvest and yield of pomegranate orchards in farms of all categories in the Republic of Uzbekistan and by regions.

	2020 Total Harvest (thousand tons)	2020 Yield (centners/ha)	2022 Total Harvest (thousand tons)	2022 Yield (centners/ha)	2024 Total Harvest (thousand tons)	2024 Yield (centners/ha)
Republic of Uzbekistan	82,741	158.4	75,989	124.2	61,537	101.7
Republic of Karakalpakstan	733	122.2	71	83.9	67	70.1
Regions						
Andijan	16,492	303.7	13,231	257.2	7,680	219.2
Bukhara	9,424	291.8	8,839	245.0	7,968	248.9
Jizzakh	776	125.8	803	172.1	473	215.2
Kashkadarya	7,697	103.7	7,565	104.5	6,234	79.5
Navoi	4,157	299.1	3,972	304.8	3,047	246.9
Namangan	5,487	144.4	5,938	164.5	5,618	148.7
Samarkand	6,651	257.8	5,264	198.0	3,247	295.4
Surkhandarya	21,110	134.9	19,426	115.5	13,995	75.8
Syrdarya	1,658	130.5	2,009	157.1	2,719	72.3
Tashkent	1,172	93.0	160.2	123.0	1,114	111.4
Fergana	5,029	65.5	5,474	44.7	7,575	49.1
Khorezm	2,355	65.0	1,794	179.1	1,797	34.2

Source: Author’s calculations based on data from the **Statistics Agency under the President of the Republic of Uzbekistan.**

The data presented in Table 2 show that despite the expansion of pomegranate orchard areas in the country, the indicators of total harvest and yield have demonstrated a declining trend in recent years. In particular, the total harvest decreased from 82,741 thousand tons in 2020 to 61,537 thousand tons in 2024, while the average yield declined from 158.4 centners per hectare to 101.7 centners per hectare during the same period. This indicates that the expansion of cultivated areas has not been accompanied by a proportional increase in production efficiency.

At the regional level, relatively high yield indicators were observed in Andijan Region, Bukhara Region, and Navoi Region, while Surkhandarya Region, despite having the largest orchard area, showed a noticeable decline in yield indicators. These results suggest the necessity of improving agro-technological practices, introducing modern irrigation systems, and strengthening farm management efficiency.

From the perspective of regional agro-brand formation, stable production volumes and consistent product quality are crucial conditions. Therefore, increasing productivity and ensuring sustainable yields remain important prerequisites for enhancing the competitiveness of pomegranate products in domestic and international markets.

V. CONCLUSION

The results of the study indicate that the pomegranate sector in Uzbekistan has demonstrated a stable development trend in recent years, with the expansion of orchard areas reflecting the growing economic significance of this industry. Pomegranate cultivation is primarily concentrated in the southern and eastern regions of the country, where climatic conditions are favorable for this crop.

Statistical analysis also shows that, alongside the expansion of orchard areas, yield indicators have declined in certain years. This highlights the need to implement intensive agrotechnologies, adopt high-yield varieties, and improve agronomic practices to enhance production efficiency.



The study proposes a system of indicators for assessing the potential to establish a regional agro-brand in the pomegranate sector. This approach allows for evaluating readiness for territorial branding based on factors such as production sustainability, product quality, access to external markets, and economic efficiency.

In summary, forming a regional agro-brand in the pomegranate sector is crucial for increasing product competitiveness, developing value-added chains, and expanding export potential. From this perspective, key directions for the development of pomegranate cultivation include specialization of production, introduction of international quality standards, and improvement of processing infrastructure. At the same time, establishing a regional agro-brand contributes to enhancing the competitiveness of agricultural products in international markets and broadening export opportunities.

REFERENCES

1. Mirziyoyev, Sh.M. (2020). *Address of the President of the Republic of Uzbekistan to the Oliy Majlis*. Tashkent. Available at: <https://president.uz>
2. *President of the Republic of Uzbekistan*. (2023). Strategy "Uzbekistan-2030". Decree No. PF-158, September 11. Tashkent. Available at: <https://lex.uz>
3. Mirziyoyev, Sh.M. (2022). *Speech at the meeting on export development and introduction of international standards*. Tashkent. Available at: <https://president.uz>
4. Aaker, D.A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York: Free Press.
5. Keller, K.L. (1993). *Conceptualizing, measuring, and managing customer-based brand equity*. *Journal of Marketing*, 57(1), 1-22.
6. Ismoilov, Z.(2026). *Current status and development prospects of the poultry meat industry in Uzbekistan*. *International Journal of Business Diplomacy and Economy*, 5, 43-49. <https://journal.academicjournal.online/index.php/ijbde/article/view/1089>
7. Pacciani, A., Belletti, G., Marescotti, A., & Scaramuzzi, S. (2001). *The Economics of Geographical Indications*. Florence: University of Florence.
8. Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.
9. FAO. (2024). *Origin-Linked Quality Products and Sustainable Development*. Rome: Food and Agriculture Organization of the United Nations.
10. Arfini, F., Belletti, G., & Marescotti, A. (2017). *Origin-Based Products and Rural Development*. Rome: FAO.
11. Dilmirov, O.G. (2010). *Improvement of the logistics chain for fruit and vegetable marketing in the conditions of economic liberalization*. PhD Dissertation. Tashkent.
12. Ismoilov, Z., Omonov, A. (2023). *Economic efficiency of poultry egg production in Surkhondaryo province, Uzbekistan*. *E3S Web of Conferences*, 371, 01009. <https://doi.org/10.1051/e3sconf/202337101009>.
13. Ismoilov, Z. (2025). *Prospects for the development of the poultry industry in Surkhondaryo region*. *Green Economy and Development*, 3, 752-756. <https://doi.org/10.5281/zenodo.15161750>
14. Murodov, Sh.M. (2020). *Development of cooperation relations in fruit and vegetable marketing*. PhD Dissertation. Tashkent.
15. Eshmatov, S.K. (2021). *Development directions of value chains in fruit and vegetable production*. PhD Dissertation. Tashkent.
16. Ismoilov, Z.(2026). *Economic Efficiency of Poultry Meat Production in Surkhondaryo Region*. *Engineering and Economics*, 1, 878-881. <https://doi.org/10.5281/zenodo.18831937>
17. Achilov, M.U. (2022). *Organizational and economic foundations of modernization of the fruit and vegetable sector*. PhD Dissertation. Tashkent.
18. Karimova, M.N. (2025). *Increasing efficiency of fruit production based on brand formation*. PhD Dissertation. Tashkent.
19. Kholmurodova, G.M. (2025). *Increasing export potential of the fruit and vegetable sector based on international standards*. PhD Dissertation. Tashkent.
20. Ismoilov, Z.(2026). *Analysis of the current state of egg production in Surkhondaryo region*. *Engineering and Economics*, 2, 454-458. <https://doi.org/10.5281/zenodo.18720241>
21. Ismoilov, Z. (2026). *Analysis of the expansion potential of chicken meat production in the surkhondaryo region*. *EPRA International Journal of Agriculture and Rural Economic Research*, 1. <https://doi.org/10.36713/epra26398>