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Development and Problems of Vineyard Network in Uzbekistan

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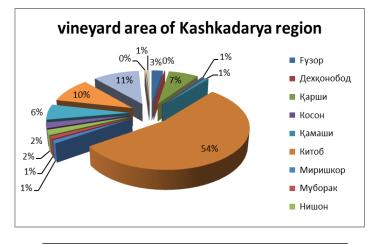
ABSTRACT

The volumes of grapes produced in Uzbekistan make it possible not only to cover the needs of the population, but also to carry out export deliveries in significant volumes. The export potential of grapes in Uzbekistan consists of production capabilities, comparative advantages in terms of yield, quality, and price of grapes in foreign markets. This makes Uzbekistan potentially the main supplier of grapes to the markets of developing CIS countries. At the same time, the current situation is characterized by a number of problems, the solution of which will increase the export potential of viticulture and winemaking.

INTRODUCTION

Uzbekistan is one of the largest producers of grapes in the world, and in the CIS in terms of the volume of grapes grown, it confidently occupies a leading position. According to the FAO, in terms of vineyard area, Uzbekistan in 2016-17 ranked 18th in the world, and in terms of gross volumes of harvested grapes in 2017, it ranked 17th in the world. In 2016, Uzbekistan ranked 15th in terms of total grape harvest, 6th in table grapes, and 5th in dried grapes in the world.

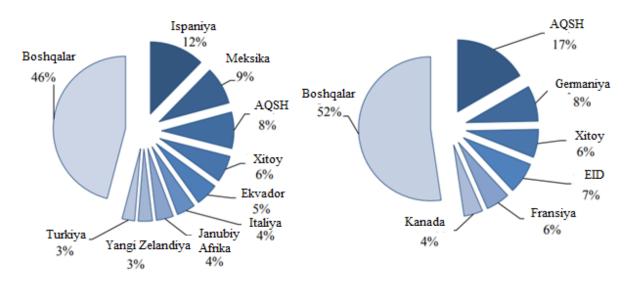
In 2018, the total area of vineyards amounted to 150.7 thousand hectares, having increased by 17% over 5 years. (In 2014 it was 128.9 thousand hectares). The total vineyard area of wine varieties is 11,500 hectares, or 7.6% of the total vineyard area. The main viticulture regions are Samarkand (40.4 thousand hectares), Tashkent (19.2 thousand hectares), Surkhandarya (16.2 thousand hectares), Kashkadarya (15.1 thousand hectares), Namangan and Bukhara (13, 9 and 13.3 thousand ha) areas.



In 2018, 1,564.5 thousand tons of grapes were harvested in Uzbekistan. Of these, 13.2% (206.8 thousand tons) were exported, 9.4% (146.5 thousand tons) were processed by the wine industry, the remaining volumes fell on domestic consumption and processing of the food industry. It is worth noting here that according to the OIV, per capita consumption of table grapes in Uzbekistan is one of the highest in the world.

PROBLEM SETTING:

The yield of grapes in 2018 amounted to 10.4 t/ha. The average yield of wine grape varieties was at the level of 8-10 t/ha. According to the FAO, in China, Turkey, Iran, India and Egypt, the yield of grapes is at the level of 16 to 21 t/ha, while in Iran and Turkey the yield of grapes is lower than in Uzbekistan. In recent years, viticulture in Uzbekistan has been moving along a growth trajectory, the area under vineyards has increased, crop volumes have grown, as well as the supply of grapes for export. So, if in 2012 the share of exports from the harvested volume of grapes was 9.9%, then in 2018 it was 13.2%. In absolute terms, grape exports increased by 87.9 thousand tons, or 73%, over six years. Currently, the export of grapes in the physical volume of exports of fruit and vegetable products of Uzbekistan is 16%.



The development of viticulture is currently receiving increased attention from the state. The programs being adopted are aimed at expanding the area under vineyards, increasing yields and reducing resource costs through the introduction of modern technologies. In particular, the Action Strategy for the Development of the Republic of Uzbekistan for the period 2017-2021. the development of intensive horticulture and viticulture is envisaged through the cultivation of high-yielding, early-ripening dwarf and semi-dwarf orchards and vineyards based on the introduction of modern agricultural technologies. It is envisaged that every year 10% of the available low-margin orchards and vineyards (26.4 thousand hectares of orchards and 14.1 thousand hectares of vineyards) will be transferred to intensive methods of modern agricultural technologies. Drip irrigation will be introduced annually on 5.7 thousand hectares of newly created orchards and vineyards. Due to the increase in plantings and the share of high-yielding intensive vineyards and orchards, it is expected that their yield will increase up to 4 times.

In addition, the Decree of the President of 05.02.2019 provides for in 2019-2021 to bring the total area of vineyards of wine varieties suitable for industrial processing to 29 thousand hectares by creating new vineyards on an area of 23.4 thousand hectares, the harvest from which will fully load the current production capacity of the wine industry.

At the same time, there are certain problems hindering more efficient development of the industry. Among them, the following should be noted. Insufficient development of the raw

material base of wine products, primarily the variety and small scale of production of technical grape varieties. The reduction of vineyards of wine varieties and the decrease in their yield, which do not allow to fully load the processing capacity for the production of finished wine products with high added value. The problem of non-compliance with harvesting and delivery technologies is also relevant, which leads to a significant decrease in the quality of wine. The absence of a specialized chemical protection service for vineyards contributes to the spread of diseases and pests.

A more correct professional selection of grape varieties can contribute to the solution of the problems existing in the industry, which will create the best prerequisites for obtaining high quality wine products. In this regard, it is necessary to use foreign experience more widely.

PROBLEM SOLUTION:

Based on the experience of European Union wine-making legislation, it is advisable at the legislative level to consider the adoption of licensing procedures that allow the planting of new vineyards only if the applicant proves that the new areas will ensure the production of quality wines or table wines with geographical indications.

It is advisable to use the "concept of precision viticulture", or "precision viticulture", adopted in the practice of the EU countries and other countries, which consists in a differentiated approach in the growing process to the specific natural conditions of each grape growing area. The advantage of applying these modern solutions is to reduce the cost of viticulture management by improving the quality and yield of vineyards, traceability of processes and environmental sustainability with the rational use of chemical resources.

It also seems expedient to develop organic, environmentally sensitive and sustainable vineyards in the hot arid climatic conditions of the republic.

The country has accumulated sufficient experience in the production of high-quality wine products, which has been repeatedly noted at international exhibitions and fairs. The average annual growth rate in the production of alcoholic beverages for 2011-2017 averaged 8.7% per year. The value volume for this period increased by 52.2%. Meanwhile, at present, this industry is facing problems of an organizational, structural and systemic nature..

The production capacities of enterprises in 2017 allowed them to process 200 thousand tons of grapes per year and produce 3.7 million deciliters of grape wine, 19.9 million deciliters of alcoholic beverages, 118.5 thousand decalitres of cognac, 187.5 thousand decalitres of champagne wines, 9.3 million deciliters of edible alcohol, but they were not fully used. Thus, grape processing in 2017 amounted to only 45% of production capacity (or 90.4 thousand tons). In 2018, processing increased to 146 thousand tons. At the same time, the capacities for the production of grape wine were used by 66%, alcoholic beverages by 80.7%, food alcohol by 76.7%, champagne wines by 20.4%.

In 2018, the enterprises of Uzsharobsanoat JSC produced 1.8 million deciliters of wine (relative to 2017, there is a decrease in production by 11.1%), 205 thousand deciliters of cognac (an increase of 3.7%), 52 thousand deciliters champagne (down 32%).

In 2018, enterprises belonging to Uzsharobsanoat JSC exported 53.1 thousand decalitres of wine, which is only 2.8% of all wine produced in the country. Cognac exported 6.5 thousand decalitres, or 3.2% of production. At the same time, the export of wine materials, cognac spirit significantly exceeds the export of high value-added products. Thus, in 2018, the export of wine materials amounted to 1.1 million decaliters, and a year earlier, 2 million decaliters. Cognac spirit was exported in 2018 168 thousand decalitres.

Domestic demand for wine and champagne is also not satisfied. According to a questionnaire survey of respondents regarding the consumption of alcoholic beverages, wine consumption in

Uzbekistan amounted to 3.8 million decaliters, and the production of grape wine amounted to 2.1 million decaliters (satisfaction of the domestic demand of the population by the enterprises of Uzvinprom-Holding JSC is only 55%), consumption of champagne - 142 thousand decalitres. against produced - 116 thousand gave. (providing 82%), consumption of cognac by the population - 151.4 thousand decalitres and cognac production amounted to 170 thousand decalitres. (excess of supply over demand by 12%).

Thus, given that the structure of consumption of alcoholic products in the short term, other things being equal, changes slowly, we can expect a growing volume of imports of wine and champagne, due to the untimely coverage of the growing consumption of these products by the population. In this regard, it is very important to conduct a comprehensive study of the domestic market of alcoholic products and the volume of alcohol consumption by the population.

An analysis of the wine industry indicates the presence of the following problems of an organizational and production nature.

Due to the unsatisfactory supply of raw materials, production capacities are currently loaded at a relatively low level. Because of this, the production of wine compared to alcoholic beverages decreased by 2.5-3 times. In this regard, the current workload of existing production facilities does not allow satisfying domestic demand and increasing the supply of products for export;

Over the past two decades, only 25% of enterprises that harvest wine materials have been modernized, while the rest use obsolete and obsolete equipment. Along with this, the insufficient inflow of investments into the industry does not allow technological renewal of wine production;

To bring domestic winemaking to a qualitatively new level, it is not enough to increase the area under technical varieties of grapes and the volume of wine production. Winemaking is an industry where the quality of products for the consumer is of paramount importance. In this connection, it is necessary for the state to ensure effective control over the quality of products.

At present, the state places special emphasis on eliminating existing problems and actively developing the wine industry, which, with an appropriate raw material base, can become one of the leading sectors of the economy and significantly increase the export of high value-added products. The Decree and Resolution on the wine industry, adopted in February this year, will significantly increase the area of industrial vineyards and crop volumes, which will solve the problem of underutilization of the industry's production capacities. In addition, additional licensing requirements, effective from 2020, will oblige producers of vodka and alcoholic beverages to produce wine materials and wine in proportion to 75 percent of the annual production of vodka and (or) alcoholic beverages. Another important point is the establishment of a procedure according to which "the sale of brewing products, sparkling and natural wine of domestic production can be carried out by all trade enterprises, organizations providing hotel services, as well as catering services without a permit for the right to sell alcoholic products."

Along with the above, for the accelerated development of winemaking in Uzbekistan, it is also advisable to implement the following measures.

In the leading wine producing countries, there are systems of classification and labeling of wines approved at the legislative level. Their essence is reduced in general terms to the classification of the quality of wine products, where the main indicators are a certain territory for growing grapes from which wine is made, with its unique natural and climatic features, grape variety, cultivation technology.

Therefore, in order to start the production of original, elite and branded Uzbek wines with a high cost, it is necessary to test vineyards in order to identify high-quality varieties, to determine the specialization of areas for the production of types of wines. (It is known that high-quality dessert wines are produced in the Bukhara region, dry and strong in the Tashkent and Samarkand

regions, etc.). For the medium term, it is proposed to define territories with the assignment of certain varieties of technical grapes to them and the development of effective technologies for the production of fine wines from these varieties, which can be assigned the status of protected geographical indication and appellation of origin.

One of the conditions for the development of winemaking is the access of winegrowers and winemakers to the necessary production equipment. An effective measure could be the creation of material and technical parks for the maintenance and leasing of equipment and agricultural machinery for viticulture and winemaking with their territorial accessibility for producers. For the subsequent modernization of the material and technical base of viticulture and winemaking, it is necessary to take measures to establish domestic and localize foreign production of specialized technological equipment, taking into account modern achievements in the field of winemaking equipment.

An analysis of the current situation in viticulture and winemaking in Uzbekistan in comparison with the leading countries producing grapes and grape products shows that Uzbekistan uses the export potential of the industry at an insufficiently high level. The current level and dynamics of changes in the export potential of viticulture and the wine industry are influenced by both internal and external factors.

In recent years, as part of the reform of the economy and the liberalization of foreign trade in Uzbekistan, measures have been taken to reduce state regulation of the export of fruits and vegetables. The growth in exports of vegetables by 84% in 2018 compared to the same period of the previous year and fruits and vegetables by 53% (in value terms) in the first five months of this year testify to the effectiveness of the policy pursued in this direction. The simplification of procedures for the export of fruits and vegetables, the abandonment of the state monopoly on the export of fruits and vegetables and the regulation of export prices are expected to continue to have a positive impact on increasing the export potential of fruits and vegetables.

The export potential of table grapes in Uzbekistan is objectively constrained by domestic demand, a limited number of large grape producers, as well as underdeveloped infrastructure and logistics. Uzbekistan can increase the export of fresh grapes and increase processing, but if the current level of yield and sown area is maintained, this will lead to a decrease in the volume of grapes in the domestic market, which may cause prices to rise. In order to simultaneously meet domestic demand and increase export volumes, it is necessary to increase the area under vineyards, increase yields and intensify the cultivation of grapes.

The main foreign markets for Uzbek grapes and products of its processing are neighboring countries. The largest importing countries are Kazakhstan and Russia, which account for more than half of all exported grapes. This fact testifies to the low diversification of exports, which makes it possible for importing countries to insist on their own terms and prices.

CONCLUSION

Despite the competitive advantages of Uzbek grapes in terms of price and taste, the markets of China, the Middle East, Europe, and East Asia remain undeveloped for Uzbekistan. The main reasons for this situation are:

- ✓ high requirements for the quality of agricultural products in foreign markets;
- ✓ tariff and non-tariff barriers applied in importing countries;
- ✓ high level of competition in foreign markets;
- ✓ high transport costs.

In the export of wine products, a significant share is occupied by the export of primary processing products - wine materials, cognac spirit. At the same time, the export of finished

products - wine and cognac - remains quite low. This is largely due to the fact that the Uzbek wine-making products are little known, which hinders demand for it in foreign markets.

Bibliography

- 1. D.B.Irgashev., R.X.Tovashov A.R,Sadikov O.T,Mamadiyorov. Technical Analysis of Plug Software When Working Between Gardens // International Journal of Advanced Research in Science, Engineering and Technology Vol. 9, Issue 5, May 2022
- 2. K.Ravshanov,K.Fayzullayev,I.Ismoilov,S.Mamatov, SH.Mardonov.D,B.Irgashev. The machine for the preparation of the soil in sowing of plow crops under film // IOP Conf. Series: Materials Science and Enginereering 883. 22.07.2020
- 3. Fayzullayev Kh.,Mustapakulov.S.,D.B.Irgashev.,Begimkulova.M Raking plates of the combination machine's subsoiler // E3S Web of Conferences 264, 04039 (2021) https://doi.org/10.1051/e3sconf/202126404039 CONMECHYDRO 2021.
- 4. Kh.Fayzullaev, F.Mamatov, B.Mirzaev, D.B.Irgashev., S.Mustapakulov, A.Sodikov Study on mechanisms of tillage for melon cultivation under the film // E3SWeb of Conferences 304, 03012 (2021) https://doi.org/10.1051/e3sconf/202130403012 ICECAE 2021.
- 5. Bobokalonov, M. K., & Khamdamova, D. (2022). USING ARCGIS SOFTWARE TO CREATE A LAND RECLAMATION MAP. *BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI*, 2(11), 385-388.
- 6. Bobokalonov, T. M. K. (2022). The procedure for performing parametric equalization of a triangulation grid using Microsoft Excel. *The Peerian Journal*, 11, 19-30.
- 7. Bobokalonov, M. H. (2020). Planning of Erosti Communications on the Basis of Building Standards in the Planning and Construction of the City. *International Journal on Orange Technologies*, 2(7), 9-10.
- 8. Бобокалонов, М. Х. (2022). МЕТОДОЛОГИЧЕСКИЕ ОСНОВЫ СОЗДАНИЯ ЦИФРОВЫХ КАРТ В УЗБЕКИСТАНЕ В ARCGIS 9.3. Central Asian Journal of Theoretical and Applied Science, 3(12), 194-197.
- 9. Vinceti, B., Elias, M., Azimov, R., Turdieva, M., Aaliev, S., Bobokalonov, F., ... & Loo, J. (2022). Home gardens of Central Asia: Reservoirs of diversity of fruit and nut tree species. *PLoS One*, *17*(7), e0271398.
- 10. Ismoiljon O'g'li, T. N. (2022, October). MODERN MANAGEMENT SYSTEM IN LEADING AMERICAN COMPANIES. In *Archive of Conferences* (pp. 157-160).
- 11. O'g'li, T. N. I. (2022). STRATEGY OF GREAT LEADERSHIP IN RUSSIAN COMPANIES. American Journal of Pedagogical and Educational Research, 5, 1-3.
- 12. Abdirazzakovich, B. A. (2022). Effects of intercropping on soil fertility and yield of winter wheat. *The Peerian Journal*, *13*, 80-82.
- 13. Abdirazzakovich, B. A., & Razzak, O. (2022). EFFECT OF PREVIOUS CROPS ON SOIL FERTILITY AND WINTER WHEAT YIELD. Web of Scientist: International Scientific Research Journal, 3(12), 723-727.
- 14. RIZAEV, S. (2021). THE INFLUENCE OF AGRO-TECHNICAL AND CHEMICAL WEEDS CONTROL MEASURES AND YIELD OF AUTUMN WHEAT IN ZARAFSHON VALLEY OF UZBEKISTAN. *PLANT CELL BIOTECHNOLOGY AND MOLECULAR BIOLOGY*, 38-46.
- 15. Uzaqbaevich, I. D. (2022). EFFECTS OF SHORT-TERM CROP ROTATION SYSTEMS ON THE GROWTH AND DEVELOPMENT OF COTTON.

- 16. Буриев, А. А., & Орипов, Р. (2018). ВЛИЯНИЕ ПРЕДШЕСТВЕННИКОВ НА УРОЖАЙНОСТЬ ОЗИМОЙ ПШЕНИЦЫ В УСЛОВИЯХ ОРОШАЕМЫХ ТИПИЧНЫХ СЕРОЗЁМОВ. In WORLD SCIENCE: PROBLEMS AND INNOVATIONS (pp. 254-256).
- 17. Муродов, М. М., & Чулиев, Л. Э. (2021, October). Турли Объектлар Асосида, Яъни Пахта Тозалаш Корхоналарининг Толали Чикиндилари Ва Павлония Хамда Банан Целлюлозаларидан Е-466 Олиш Технологияси Ва Унинг Физик-Кимёвий, Механик-Структуравий Хоссалари. In "ONLINE-CONFERENCES" PLATFORM (pp. 316-320).
- 18. Kholmuradovich, K. B. (2022). "People's Diplomacy"-An Important Factor for the Development of Regional Cooperation. *The Peerian Journal*, *6*, 71-74.
- 19. Kholmuradovich, K. B., & Kizi, A. G. R. (2020). The Concept Of" People's Diplomacy", Its Content And Significance. *The American Journal of Social Science and Education Innovations*, 2(07), 177-183.
- 20. Raupov, C., Karimova, A., Zokirov, F., & Khakimova, Y. (2021). Experimental and theoretical assessment of the long-term strength of lightweight concrete and its components under compression and tension, taking into account the macrostructure of the material. In *E3S Web of Conferences* (Vol. 264, p. 02024). EDP Sciences.
- 21. Hakimova, Y. T. L., & Daler Doniyor oʻgʻli, R. (2022, October). YANGI OʻZBEKISTON YOSHLARI. In *INTERNATIONAL CONFERENCE DEDICATED TO THE ROLE AND IMPORTANCE OF INNOVATIVE EDUCATION IN THE 21ST CENTURY* (Vol. 1, No. 5, pp. 51-53).
- 22. Shermukhamedov, U., Karimova, A., Khakimova, Y., & Abdusattorov, A. (2022). MODERN TECHNIQUES FOR THE CONSTRUCTION OF MONOLITHIC BRIDGES. *Science and innovation*, *1*(A8), 790-799.
- 23. Mardonov, B., An, E., Shojalilov, S., Khakimova, Y., & Ismoilova, G. (2021). Transverse Vibrations of Underground Pipelines with Different Interaction Laws of Pipe with Surrounding Soils. In *E3S Web of Conferences* (Vol. 264, p. 02035). EDP Sciences.
- 24. Nurmatova, F. B. (2022, October). Integrative Learning of Biophysics in a Medical University. In "ONLINE-CONFERENCES" PLATFORM (pp. 43-46).
- 25. Файзиева, У. Р., & Худойкулова, Э. А. (2017). Эффективность применения препарата АкваДЗетрима при рахите. *Интерактивная наука*, (12), 75-77.
- 26. Tatochenko, V. K. (2021). Community-acquired pneumonia in children—problems and solutions. *Rossiyskiy Vestnik Perinatologii i Pediatrii (Russian Bulletin of Perinatology and Pediatrics)*, 66(1), 9-21.
- 27. Гляделова, Н. П., & Унич, Н. К. (2009). Инспирон: новый этап в патогенетической противовоспалительной фармакотерапии респираторных инфекций у детей. *Современная педиатрия*, (6), 115-115.
- 28. Tatochenko, V. K. (2021). Community-acquired pneumonia in children– problems and solutions. *Rossiyskiy Vestnik Perinatologii i Pediatrii (Russian Bulletin of Perinatology and Pediatrics)*, 66(1), 9-21.
- 29. Халимова, Х. (2022). COVID-19 ЎТКАЗГАН БЕМОРЛАРДА ПАРКИНСОН КАСАЛЛИГИНИНГ КЛИНИК КЕЧИШИ.
- 30. Усманходжаева, А. А., Матмуродов, Р. Ж., & Эгамова, М. Т. (2020). Развитие физиологические движения у детей с детским церебральным параличом. ЖУРНАЛ НЕВРОЛОГИИ И НЕЙРОХИРУРГИЧЕСКИХ ИССЛЕДОВАНИЙ, 1(1).

- 31. Халимова, Х. М., & Матмуродов, Р. Ж. (2016). ЭКСТРАПИРАМИДАЛ КАСАЛЛИКЛАРДА S100B ОҚСИЛ МИҚДОРИНИНГ ХАРАКАТГА БОҒЛИҚ БЎЛМАГАН БЕЛГИЛАР БИЛАН ЎЗАРО БОҒЛИҚЛИГИ. Журнал теоретической и клинической медицины, (2), 91-94.
- 32. Маджидова, Ё. Н., Халимова, Х. М., Раимова, М. М., Матмурадов, Р. Ж., Фахаргалиева, С. Р., & Жмырко, Е. В. (2011). Молекулярно-генетические и некоторые биохимические аспекты болезни Паркинсона. *Международный неврологический журнал*, (1), 91-94.
- 33. Матмуродов, Р. Ж. (2009). Роль NO-системы и дофамина в патогенезе болезни Паркинсона. *Врач-аспирант*, *36*(9), 821-828.
- 34. Матмурадов, Р. (2022). Енгил бош мия жароҳатларидан кейинги даврда когнитив бузилишларнинг динамикаси.
- 35. Raimova, M. M., Khalimova, K. M., & Matmurodov, R. J. (2013). Parkinson's disease: Molecular-genetic investigations in Uzbekistan. *Journal of the Neurological Sciences*, 333, e144.
- 36. Абдуллаева, М. Б., Раимова, М. М., Турсунова, М. О., & Ядгарова, Л. Б. (2021). АТАКАЛАРНИНГ **ТРАНЗИТОР** ИШЕМИК ИШЕМИК ИНСУЛЬТЛАРНИ РИВОЖЛАНИШИДАГИ АХАМИЯТИ, ДИАГНОСТИКАСИ BA ДАВОЛАШ УСУЛЛАРИ. *ЖУРНАЛ* НЕВРОЛОГИИ И НЕЙРОХИРУРГИЧЕСКИХ ИССЛЕДОВАНИЙ, (SPECIAL 1).
- 37. Raimova, M. (2012). Study of the role of environmental factors in development of Parkinson's disease. *Medical and Health Science Journal*, 11, 22-27.
- 38. Халимова, Х. М., Раимова, М. М., & Матмуродов, Р. Ж. (2012). Влияние L-аргинина на когнитивные расстройства у больных хронической ишемией мозга с синдромом паркинсонизма. Український хіміотерапевтичний журнал, (3), 148-150.