



ECONOMIC EFFICIENCY STORAGE AND SALES VEGETABLE PRODUCTS

Farrux Polvonov

Doctoral Student 2nd year,

Scientific Research Institute of Agricultural Economics and Food Industry, Tashkent, Uzbekistan

ABSTRACT

The purpose of the work is to summarize the theoretical foundations and develop practical recommendations for improving the efficiency of production, storage and sale of potatoes in the region. To achieve the goal, the following tasks were set and solved - the theoretical and methodological foundations for increasing the efficiency of production, storage and sale of potatoes were summarized; substantiated a set of indicators characterizing the economic efficiency of production, storage and sale of agricultural products; an economic assessment of the current state is given and factors of efficiency in the production, storage and sale of potatoes in the region are identified; proposed a system of measures to reduce potato losses on the basis of a specific agricultural organization; substantiates the need to improve the organizational and economic mechanism for building a potato market in the region; a set of measures has been developed to improve the efficiency of production, storage and sale of agricultural products.

KEYWORDS: *storage and sale, agricultural organization, organizational and economic mechanism, economic efficiency.*

INTRODUCTION

Economic efficiency shows the final beneficial effect from the use of the means of production and living labor, that is, the return on total investment. In agriculture, this is obtaining the maximum amount of production per unit area at the lowest cost of living and materialized labor. This is achieved through the rational use of resources. To assess economic efficiency, specific indicators are needed that reflect the influence of various factors on the production process. In order to obtain commensurate values of costs and production results, the volume of production output is converted into cost form. Profitability is the most important economic category that is inherent in all enterprises. It means profitability, profitability of the enterprise. Income - part of the value of gross output remaining after reimbursement of costs for its production. To characterize the comparative economic efficiency of the production of certain types of products, industries and farms, the absolute value of profit is not enough. It is necessary to compare the received profit with production costs. For these purposes, a relative indicator is used - the level of profitability - this is the percentage of profit to the amount of material and labor costs associated with the production and sale of products.

MATERIALS AND METHODS

The problem of reducing product losses at all stages of reproduction and, as a result, increasing its efficiency occupies an important place in the

scientific and economic literature. This problem was given great importance by well-known scientists - agrarians not only in Central Asia, but throughout the world. There are many scientific papers that clarify the various aspects of this topical, vital problem for the economy of Uzbekistan. A great contribution to the scientific development of its individual aspects was made by V.R. Boev, I.N. Buzdalov, D.V. Vermel, Gataulin A.I., V.A. Dobrynin, Zinchepko A.P., V.A. Klyukach, V.V. Kuznetsov, A.F. Serkov, Serova, I.G., B.I. Poshkus, N.T. Hvatkim, R.B. Ushachev, A.A. Shutkov A.I. Altukhova, G.V. Bezplownogo, SB. Ognivtseva, N.B. Terebilenko, N.N. Kulakova. Among the works devoted to the economics of vegetable and potato growing, Yu.I. Agirbova, T.I. Averina, N. Ya Kovalenko, L.V. Fedorova, V.V., Tulcheeva, L.P. Silaeva and others. Regional and interregional problems of the development of the agro-industrial complex, specialized markets are reflected in the works of R.Khusanov, S.Usmonov, Q.Choriev, O.Umurzakov, T.Farmonov, N.Khushmatov, O.Jumaev, H.Khushvaqtova and others. At the same time, it should be noted that relatively little attention is paid to the issues of reducing product losses at all stages of reproduction in relation to a certain subject of Uzbekistan at the present stage. In the new economic conditions, further research is required on the complex of factors that affect the efficiency of production, storage and sale of potatoes. This requires deeper research, which should reflect the totality of natural-climatic, socio-economic, technical, technological and other conditions for the



functioning of agriculture, as well as a decrease in seasonal price fluctuations inherent in a particular region and product.

RESULTS AND ANALYSIS

Vitamins and minerals play an important role in human health and its full functioning. Vitamins, mineral salts and organic acids that enter the human body are provided only by fruits and vegetables. For this reason, it is important to provide the population with fruits and vegetables and their processed products throughout the year. Performance of this task is directly related to the quantity and quality of daily delivery of vegetables and fruits.

Vitamins and minerals play an important role in human health and its full functioning. Vitamins, mineral salts and organic acids that enter the human body are provided only by fruits and vegetables. For this reason, it is important to provide the population with fruits and vegetables and their processed products throughout the year. Performance of this task is directly related to the quantity and quality of daily delivery of vegetables and fruits.

Fruits are not grown in greenhouses. Lemon is no exception. Therefore, in order to fully meet the demand of the population of our country for fruit and vegetable products, there is a need to store vegetables. Fruits and vegetables can be stored almost until a new harvest if the correct agronomic techniques are used and its preservation properties are taken into account correctly.

It is known that the human body comes in the spring and requires a wide variety of vitamins and mineral salts. To meet the body's needs with the required vitamin and mineral salts, we need to consume large amounts of fruits, vegetables and greens. We consume so many fruits and vegetables that are mostly preserved. We can store fruits like apples, pears, bexies, grapes from April to May.

We can store cabbage and carrots from vegetables until the second half of May, onions from early onions until ripening, radishes and turnips from tubers until April, and meet our people's demand for spring produce. In this way, we can strengthen the health of our people, improve their labor performance, or bring up the next generation to be physically healthy. This is of great practical importance for the development of our country.

In hot weather, products such as meat, milk, fish, eggs, as well as fruits and vegetables are quickly digested. In winter, they freeze. This is why people have been thinking about the problem of storing these products. In Central Asia, salting, fermenting, vinegaring, burying or hanging, stamping, and drying were used to store products. It is widely used to store onions and cucumbers in vinegar, to bury vegetables

and fruits, to hang fruit in the snow, to hang melons, to make peels from fruits, tomatoes, melons, and to dry peppers and greens. Dried fruits are stored in dry containers. Carrots were preserved in ancient Russia by dipping them in honey.

Fruits and vegetables cannot be grown all year round in our conditions, as the growing season of plants is seasonal. Therefore, there is a need for storage and processing of fruits and vegetables to ensure a continuous supply of the population. In nature, some types of fruits and vegetables are resistant to storage, while others spoil in a day or two. This is due to their chemical composition, the less dried fruit they contain and the more water they contain, the more resistant they are to storage.

But there are also resistant and non-resistant forms of storage within each type of crop. For this reason, we need to get a navlvri that is fit for storage. But there are crops that cannot be stored fresh in normal conditions. Such crops include berries, cucumbers, various greens.

Cabbage can be stored for 6-8 months, onions for 8-10 months, tubers for 5-6 months, apples for 5-6 months, grapes for 8 months. Some types of vegetables and fruits can be stored in dried, salted state for a long time, even for years - melon peel, apricots, raisins, dried peppers and others.

A certain amount of fruits and vegetables is wasted during storage. There are several types of waste, the external ambient temperature, the level of harvest is extremely important. There are usually two types of waste in fruits and vegetables:

1) Quantitative waste; 2) Waste related to quality change.

These two types of waste are inextricably linked, and waste that occurs with a change in quality in the organization leads to quantitative waste.

Fruits and vegetables are the most wasted during storage, depending on the storage period. The amount of waste can range from a few percent to 50-60 or even 70-80%, depending on the quality of the product stored, the degree of ripening, shelf life, storage method, humidity and temperature in storage, cooling conditions.

In this case, the product may have a different quality, depending on the type of storage facilities, naturally cooled, artificially cooled, the proportion of gas in it, the type of container stored, and so on.

Therefore, careful collection of apple peels and wrapping them in napkins allows you to preserve the product for a long time. In addition, the agro-technical measures taken during the growing season have different effects on the preservation of the product. The following table shows the effect of fertilizer rates and ratios on the preservation of cabbage.



Table-1. The effect of fertilizer rates and ratios on the preservation of cabbage

№	Fertilization rate and ratio	Stored cabbage (kg)	The amount at the end of storage	Natural loss (%)	Quality cabbage		Unfit cabbage	
					(kg)	%	m	%
1	Without control fertilizer	500	475,5	4,9	379	80	97	20
2	N ₁₈₀ P ₁₀₀ K ₅₀	500	473,5	5,3	331	70	143	30
3	N ₁₀₀ P ₁₀₀ K ₂₀₀	500	475,0	5,0	395	83	80	17
4	N ₂₂₀ P ₁₀₀ K ₂₅₀	500	472,5	5,5	376	79	97	21

CONCLUSIONS AND SUGGESTIONS

Main conclusions and suggestions. The study of the works of domestic and foreign scientists who devoted various aspects of economic efficiency led to the conclusion that the efficiency of production and sales of products shows not only the degree of rational use of various resources, but also comes down to ensuring their expanded reproduction. An exceptional role in this process belongs to the storage of potatoes, the need for which is determined by the low elasticity of supply and demand, as well as the influence of natural and climatic factors. As a result of the study, four different types of fruit growing efficiency were identified: 1) economic, characterizing the implementation of a system of economic interests; 2) technological, characterizing the use of production resources; 3) social - as the degree of achievement of the normative level of development of rural socio-territorial communicate; 4) ecological, i.e. the degree of conservation and improvement of the land and natural potential. Each type of efficiency corresponds to a certain system of economic indicators.

BIBLIOGRAPHY

1. Umarov, S. R., Durmanov, A. S., Kilicheva, F. B., Murodov, S. M. O., & Sattorov, O. B. (2019). Greenhouse vegetable market development based on the supply chain strategy in the Republic of Uzbekistan. *International Journal of Supply Chain Management*, 8(5), 864–874.
2. Durmanov, A., Bayjanov, S., Khodjimukhamedova, S., Nurimbetov, T., Eshv, A., & Shanasirova, N. (2020). Issues of accounting for organizational and economic mechanisms in greenhouse activities. *Journal of Advanced Research in Dynamical and Control Systems*, 12(7 Special Issue), 114–126. <https://doi.org/10.5373/JARDCS/V12SP7/20202089>
3. Nurimbetov, T., Umarov, S., Khafizova, Z., Bayjanov, S., Nazarbaev, O., Mirkurbanova, R., & Durmanov, A. (2021). Optimization of the main arameters of the support-lump-breaking coil. *Eastern-European Journal of Enterprise Technologies*, 2(1–110), 27–36. <https://doi.org/10.15587/1729-4061.2021.229184>
4. Khaustova, Y., Durmanov, A., Dubinina, M., Yurchenko, O., & Cherkesova, E. (2020). Quality of strategic business management in the aspect of growing the role of intellectual capital. *Academy of Strategic Management Journal*, 19(5), 1–7.
5. Durmanov, A., Umarov, S., Rakhimova, K., Khodjimukhamedova, S., Akhmedov, A., & Mirzayev, S. (2021). Development of the organizational and economic mechanisms of greenhouse industry in the Republic of Uzbekistan. *Journal of Environmental Management and Tourism*, 12(2), 331–340. [https://doi.org/10.14505/jemt.v12.2\(50\).03](https://doi.org/10.14505/jemt.v12.2(50).03)
6. Shaulska, L., Kovalenko, S., Allayarov, S., Sydorenko, O., & Sukhanova, A. (2021). Strategic enterprise competitiveness management under global challenges. *Academy of Strategic Management Journal*, 20(4), 1–7.
7. Shamborovskiy, G., Shelukhin, M., Allayarov, S., Khaustova, Y., & Breus, S. (2020). Efficiency of functioning and development of exhibition activity in international entrepreneurship. *Academy of Entrepreneurship Journal*, 26(Special Issue 4), 1–7.
8. Durmanov, A., Kalinin, N., Drobyazko, S., Yanishevskaya, K., Shapovalova, I. (2019). Strategic support of innovative activity of modern enterprises. 34th IBIMA Conference: 13-14 November 2019, Spain
9. Atakhanova N., Almuradova D., Khakimov G., Usmonova S., & Durmanov A. (2020). Values of a mathematical model for predicting the survival of patients with triple negative breast cancer depending on androgen receptors. *International Journal of Pharmaceutical Research*, 12(3), 695-704. <https://doi.org/10.31838/ijpr/2020.12.03.104>
10. Durmanov, A., Kalinin N., Stoyka, A., Yanishevskaya, K., & Shapovalova, I. (2020). Features of application of innovative development strategies in international enterprise. *International Journal of Entrepreneurship Issues*, 1(24), 1-9.
11. Aliev Y.E., Kasimov, S.S., Ruzieva, D.I., Nigmatullaeva G.N., Abdurakhmanov P.M. Durmanov A.S. (2020). Agriculture provides sustainability issues of agricultural market development. *International Journal of Psychosocial Rehabilitation*, 24 (8), 7508-7529. <https://doi:10.37200/ijpr/v24i8/pr280764>
12. Ubaydillayev A.N., Kholmuratova G.M., Umarov S.R., Muradov R.A., Durmanov A.S. (2020). Heat and Energy-Economic Analysis for Greenhouses of the Republic of Uzbekistan. *International Journal*



- of *Advanced Science and Technology* Vol. 29, No. 8, (2020), pp.3285-3298
13. Durmanov, A., Bayjanov, S., Khodjimukhamedova, S., Nurimbetov, T., Eshv, A., Shanasirova, N. (2020). *Issues of accounting for organizational and economic mechanisms in greenhouse activities. Journal of Advanced Research in Dynamical and Control Systems*, Vol. 12, No 07-Special Issue pp. 114-126 doi: 10.5373/jardcs/v12sp7/20202089
 14. Дурманов А.Ш. Инновационные технологии и методы обучения в профессиональные образования. “Фан, таълим ва ишлаб чиқариш интеграциясини ахборот коммуникация технологиялари асосида ривожлантириш муаммолари” Республика илмий-амалий анжуман материаллари тўплами. Қарши, 2012, 97-99 с.
 15. Дурманов А.Ш. “Формирование инновационной стратегии аутсорсинга”. “Иқтисодий ва модернизациялаш шароитида хизмат кўрсатиш соҳаси самарадорлигини ошириш ва инновацион фаолиятни такомиллаштириш муаммолари” мавзусидаги республика анъанавий илмий-амалий конференция. Самарқанд-2014, 219-221 с.
 16. Дурманов А.Ш. «Развитие предпринимательства и социального партнерства в Узбекистане». «Ижтимоий ҳамакорлик қисодий муносабатларни эркинлаштириш омили» мавзусидаги илмий-амалий конференция, Тошкент-2014, 135-138 с.
 17. Дурманов А.Ш. «Инвестиционная политика и ее реализация в сельском хозяйстве Республики Узбекистан». «Ўзбекистон агросаноат мажмуасининг рақобат бардошлигини ошириш ва экспорт салоҳиятини юксалтириш» мавзусидаги республика анъанавий илмий-амалий конференция, Тошкент-2014, 271-274 с.
 18. Durmanov A. Sh. *Cooperation as a basis for increasing the economic efficiency of production of open ground vegetables. «Бюллетень науки и практики»* 2018 г. 9
 19. Durmanov A. Sh. *Foreign experience the organizational-economic mechanisms of improving the activities of greenhouse farms. Economics and Finance.* 2018. 7
 20. Белый В.С. *История гарнизона Васьково. В книге: Арутюнова Г.И., Атаев З. В., Белый В.С., Братков В.В., Галаутдинова В.В., Григорьева Т.М., Дурманов А.Ш., Железная А.Б., Кудина М.В., Лапина С.Б., Ли М.Р., Мельников С.В., Минаков А.В., Мыльникова Е.М., Нагибина Н.П., Рудюк М.Ю., Тулабоев А.К., Холуденева А.О., Чекайкин С.В., Черновалова Г.А. и др. Интеллектуальный капитал и инновационное развитие экономики, науки и образования. Монография. Пенза, 2019. С. 99-119.*
 21. Toxirov A., Durmanov A. *The development of the education and training system, innovative management and organizational factors // Наука и современное общество: взаимодействие и развитие. – Уфа: Ника, 2015. – No 1 (2). – С. 87–89.*
 22. Umurzakov, U., Ibragimov, A., & Durmanov, A. (2017). *Development of organizational-economic mechanism and development of scientific-methodical and theoretical bases of increase of efficiency of the industry of rice cultivation to ensure food security of the country. Bulletin of Science and Practice*, (11), 103-118 doi:10.5281/zenodo.1048318
 23. Umurzakov U.P., Ibragimov A.G. And Durmanov A.Sh. *Factors of Stability of Development of Regional Agricultural Rice Production. International Journal of Management, IT & Engineering. November s2017 Volume-7, Issue-11. – 4-6 p.*