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STUDY OF THEORETICAL AND PRACTICAL ASPECTS OF PRODUCTION MODERNIZATION IN HORTICULTURE IN LAND MANAGEMENT

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Abstract. The article provides a comprehensive analysis of the theoretical aspects pertaining to the modernization of production in horticulture. Through an extensive study of various perspectives from numerous scientists, the author presents their own definition of modernization of production. Furthermore, the factors influencing the modernization of production in horticulture are systematically categorized and scientifically supported, classified into three distinct groups based on their origins. Additionally, practical recommendations and proposals have been formulated for the future modernization of production in horticulture.

Keywords: modernization, fruit and vegetable sector, regulatory documents, innovation, technology, economic system, model, material and technical base, high technology products.

Аннотация. В статье представлен комплексный анализ теоретических аспектов, касающихся модернизации производства в садоводстве. Благодаря обширному изучению различных точек зрения многочисленных ученых автор представляет собственное определение модернизации производства. Кроме того, факторы, влияющие на модернизацию производства в садоводстве, систематически классифицированы и научно обоснованы, разделены на три отдельные группы в зависимости от их происхождения. Кроме того, были сформулированы практические рекомендации и предложения для будущей модернизации производства в садоводстве.

Ключевые слова: модернизация, плодоовощная отрасль, нормативные документы, инновации, технологии, экономическая система, модель, материально-техническая база, наукоемкая продукция.

Annotatsiya. Maqolada bog'dorchilikda ishlab chiqarishni modernizatsiya qilishning nazariy jihatlarini har tomonlama tahlil qilingan. Ko'plab olimlarning turli nuqtai nazarlarini keng qamrovli o'rganish orqali muallif ishlab chiqarishni modernizatsiya qilishning o'ziga xos ta'rifini taqdim etadi. Bundan tashqari, bog'dorchilikda ishlab chiqarishni modernizatsiya qilishga ta'sir etuvchi omillar tizimli ravishda tasniflanadi va ilmiy jihatdan qo'llab-quvvatlanadi, kelib chiqishiga ko'ra uch xil guruhga ajratiladi. Shuningdek, bog'dorchilikda ishlab chiqarishni kelgusida modernizatsiya qilish bo'yicha amaliy tavsiya va takliflar ishlab chiqildi.

Kalit so'zlar: modernizatsiya, meva-sabzavot sohasi, me'yoriy hujjatlar, innovatsiyalar, texnologiya, iqtisodiy tizim, namuna, moddiy-texnika bazasi, yuqori texnologiyali mahsulotlar

INTRODUCTION

The development of the agricultural sector has received a lot of attention lately in this in Uzbekistan. The continuous agrarian policy places a high priority on promoting healthy competition and applying market relations consistently throughout the economy. The cultivation of fruits and vegetables, a vital aspect of agriculture, is essential to feeding the nation's population and providing raw materials. Scientists project that the global population may reach 8.5 billion by 2025 and 11 billion by 2050 [9]. Therefore, to ensure an adequate supply of food products and industrial raw materials for this growing population, fruit and vegetable production must utilize internal and additional resources to enhance productivity and transition towards more intensive and innovative farming methods.

The sector not only satisfies domestic demand but also contributes to the food industry's need for raw materials by exporting its products to foreign markets, thereby bolstering our country's foreign exchange reserves. The modernization of Uzbekistan's economy, including the advancement of the fruit and vegetable sector in agriculture, relies on the thorough reform of this domain. Consequently, considerable attention is being dedicated to the progressive improvement of reforms within this sector during the years of independence, along with the formulation of a comprehensive set of government-level regulatory and legal measures. First and foremost, it is essential to theoretically determine the essence and content of modernization in rural agriculture, specifically in the fruit and vegetable sector. In general, the lexical meaning of the term “modernization” in English implies “modern”, “advanced” and “updated”. There are various types of modernization, such as technological modernization, technical modernization, economic modernization, social modernization, political modernization, cultural modernization, among others[10].

According to certain scholars, “modernization and diversification of economic sectors provide the foundation for enhancing competitiveness”. Modernization is a process of technological renewal that aims to increase the competitiveness of products (work and services) in the process of production. The outcomes of modernization, technical and technological innovation, establish the conditions for the rapid development of high-tech and competitive production. Modernization is characterized by criteria such as improvement, updating, and renovation of a specific object, its adaptation to new requirements and norms, technical specifications, and quality indicators[3].

METHODS

Professor V.S.Belikx argues that the concept of “modernization of the economy” refers to a collection of economic activities or measures aimed at improving economic relations to meet contemporary requirements [5]. This concept of modernization has a general description that is relatively clear, and specific concepts can also be found in the literature. For instance, I.V.Makarova defines “modernization of the economy” as an innovative process that aligns with the new system of interests, values, and priorities in society [6].

A.S.Afanaseva further explains that modernization encompasses not only changes in production technology but also the integration of modern methods into economic systems. According to her, modernization involves purposefully changing production technology and creating conditions for the development of socio-economic and political institutions necessary for its implementation [7].

This concept of modernization can be identified by several distinct characteristics, namely the establishment of a modern economic model based on innovation and the alignment with a new system of interests, values, and priorities in society (see Figure 1).

Scientists have acknowledged in their scientific perspectives the imperative to pursue three key avenues in the process of modernization: firstly, to revamp the antiquated material and technical infrastructure of production; secondly, to adopt a structural approach towards the economy, specifically, by curbing the production of raw materials and augmenting the proportion of sectors pertaining to scientific-intensive and high-tech industries.

According to numerous scientists, the modernization of the fruit and vegetable sector entails not only technical and technological re-equipment of production processes, but also the integration of innovative methods in organizational and economic relations and management. This includes the implementation of modern approaches such as cooperation, clustering, and effective marketing strategies. Additionally, the widespread adoption of scientific advancements, such as scientific developments, products, and resource-efficient technologies, is crucial in achieving successful modernization.

Definitions to the concept of modernization in different sources	
Author	Definition
T. Parsons and E.Shills	Modernization is a technological process of renewal, aimed at increasing the competitiveness of the products (work and services) in which production is being prepared.
Sh.Eysenshtadt A.G.Frank	The results of modernization, technical and technological innovation determine the condition.
A.S.Afanaseva	Modernization is not only a process of purposeful transformation of production technology.
I. V. Makarova	Modernization is the formation of a modern model of the economy on the basis of innovative changes that are in line with the new system of interests
V.S.Belikx	Modernization is a set of economic activities or measures aimed at improving economic relations to the extent that it meets modern requirements.
Yu.Matveenکو	Modernization embodies the transition from the tradition to the modern system, and significant social, economic and political changes inside the system.

Fig.1. Definitions, given to the concept, of modernization by economist scientists selected by bibliographic analyse.

According to scientific perspectives, modernization of the economy must follow three main paths: updating the outmoded technological and material bases of production; restructuring the economy to decrease raw material production; and increasing the proportion of sectors (scientific-voluminous, high-tech industries).

RESULTS

We believe that this definition will provide an opportunity for a more comprehensive understanding of the concept of modernizing the production of fruits and vegetables by introducing several clarifications. In general, the concept of modernization in fruit and vegetable production is complex and multifaceted, and discussions among scientists regarding different approaches to this concept continue to this day.

Another important issue is determining the main directions of modernization in fruit and vegetable production within the context of an innovative economy in the Republic. It is crucial to answer this question both theoretically and practically, considering the synergistic effectiveness of a comprehensive set of measures. It is worth noting that modernizing production in fruit and vegetable production may not yield the expected results if each measure is implemented in isolation. Therefore, it is necessary to approach modernization as a holistic system, with each measure complementing one another when required. In our opinion, it is worthwhile to carry out activities such as the technical and technological renewal of production, improving production composition and specialization based on natural and climatic conditions, introducing new forms of organizational and economic management, and enhancing the system of scientific support in this field. We have developed a systematic model for implementing measures to modernize production in fruit and vegetable production (see Figure 2 below).

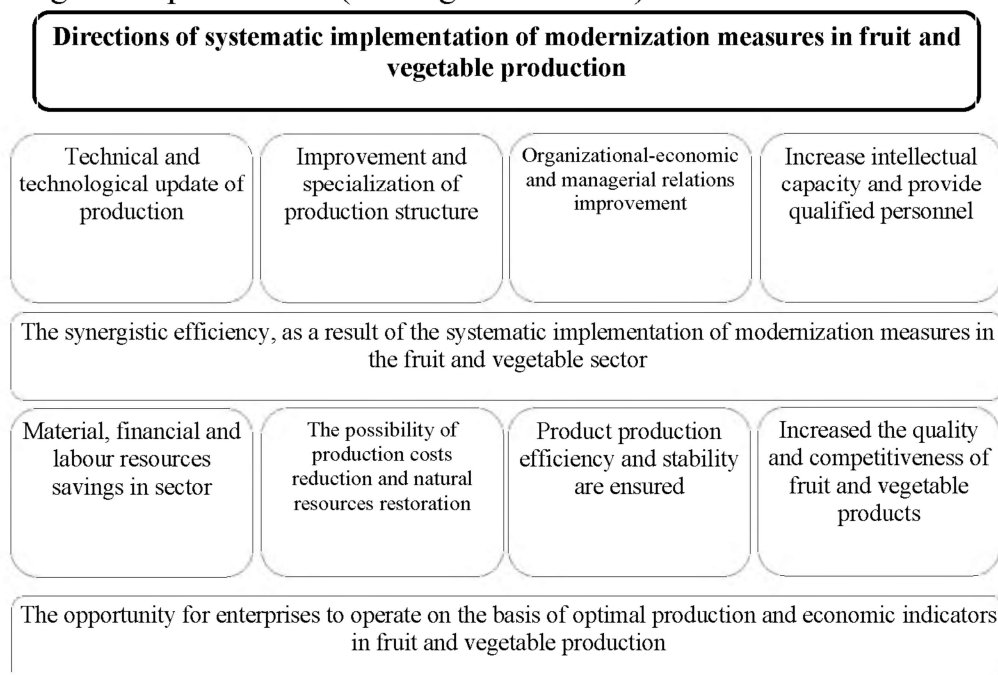


Fig.2. Suggested by the author a systematic model for the implementation of modernization measures in the fruit and vegetable sector

Under market economy conditions, the interests of the people who cultivate the commodity should come first in the agricultural system. Because it provides the processing business with raw materials, and the processing business's operations are dependent on the product farmer. Additionally, the caliber of the items cultivated by farms determines the caliber of the goods produced by the processing company. Thus, the raw material suppliers are the ones who make sure that processing companies' operations continue. As such, it need to be regarded as the principal link in the chain of product processing and storage for the same subjects (growers).

It should be noted that in the context of an innovative economy, it is desirable to introduce new forms of organizational and economic relationships that have been tested in foreign countries. Specifically, a wide range of cooperative processes between fruit and vegetable growers and processing enterprises should be considered. This collaboration will ultimately lead to an increase in the income of enterprises involved in both growing and processing products. Moreover, when establishing cooperative relationships in the fruit and vegetable production sector, it is essential to focus on reducing intermediate steps in the product movement process. This reduction includes minimizing disposal, transportation, and other related costs, while simultaneously increasing the efficiency of capital and labor utilization. Such measures play a crucial role in enhancing the efficiency of both growers and processing enterprises. Therefore, the organization and development of agribusiness should be approached as a goal-oriented process that creates the necessary conditions for the advancement of productive forces and the enhancement of labor productivity.

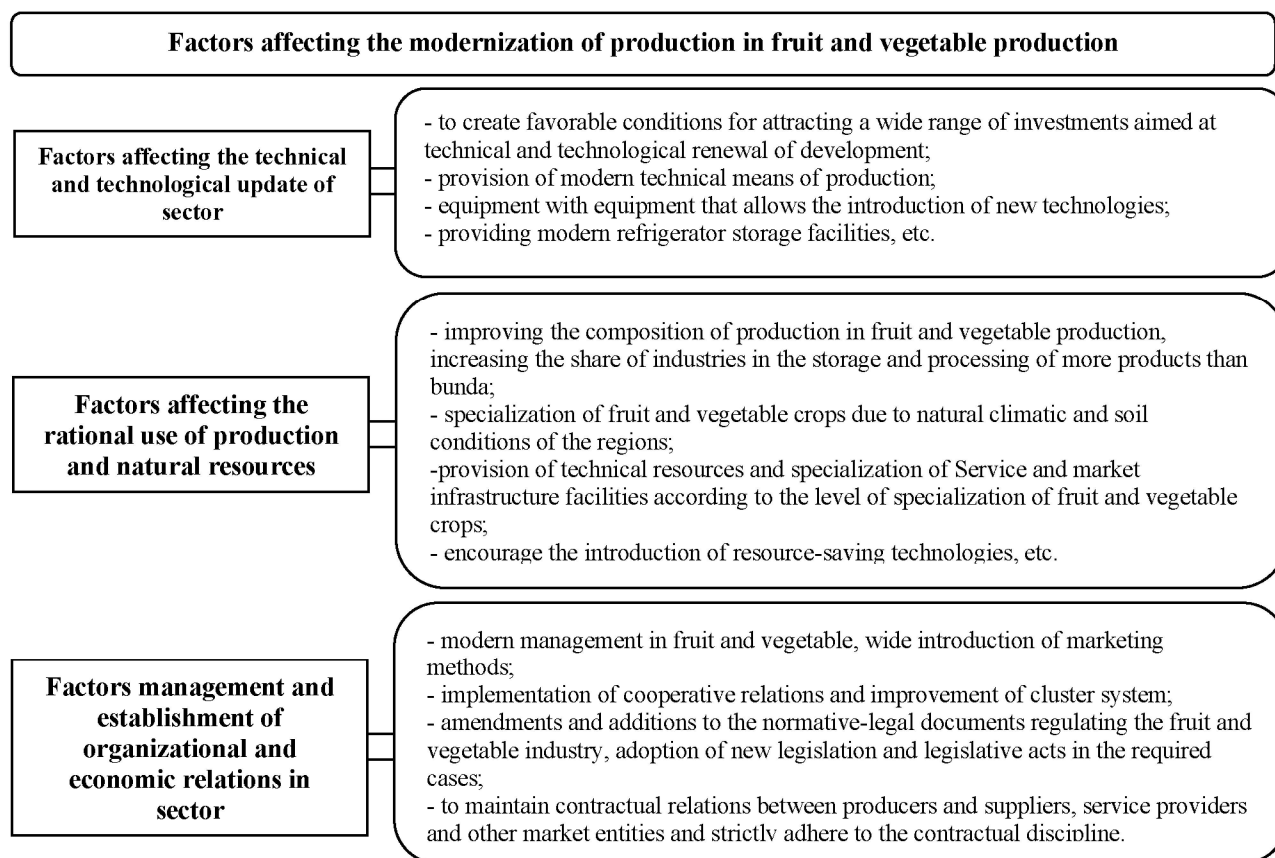


Fig.3. System of factors affecting the modernization of production in fruit and vegetable production

The modernization of fruit and vegetable production can also be influenced by a variety of external factors in addition to the previously mentioned ones. This means that a variety of factors, such as the state of the global market for fruits and vegetables, the legal and economic framework designed to draw in foreign investment, various instances of force majeure as the coronavirus pandemic, which is currently causing concern worldwide—and other factors can all have an indirect impact on the degree of sector development.

In the process of modernizing the fruit and vegetable industry under market economy conditions, particular attention should be given to the development of mutual integration relationships between product producers and processing companies, ensuring the relationship's continuity in the "production-processing-sale of agricultural products" chain while taking into account the industry's unique organizational-economic, technological, natural, and legal characteristics. This would allow our nation's population to have access to fruits and vegetables at a normal level and ensure that they are completely satisfied with the processed goods.

CONCLUSION

In conclusion, as our republic transitions to an innovative economy, it is important to discuss and study various theoretical and practical aspects of modernizing the fruit and vegetable sector. This task should involve agrarian economists, practitioners, and specialists, and focus on the following areas:

- Enhancing the theoretical basis of modernizing the fruit and vegetable sector and conducting fundamental research in this field.

- Conducting a step-by-step analysis of recent reforms in the modernization of the fruit and vegetable sector, and developing a strategy for further development based on scientific conclusions.

- Developing and implementing incentives to attract investments and promote innovative practices in fruit and vegetable production.

- Evaluating and improving the methods used to assess the impact of modernizing fruit and vegetable production on the economic stability of farmer farms.

- Developing scientific and practical proposals and recommendations to improve state support for modernizing the fruit and vegetable sector.

- Providing recommendations on improving the regulatory and legal framework for implementing integration and cooperative relationships in fruit and vegetable production.

- Developing and implementing scientifically-based simulations to learn from the experiences of foreign countries in modernizing fruit and vegetable production, in line with the conditions of Uzbekistan.

- Further enhancing the scientific support system for modernizing the fruit and vegetable sector and integrating scientific innovative practices into practical applications, among other measures.

The development of long-term state programs at the national level in these areas, and their consistent implementation, will play a crucial role in ensuring sustainable



development through the radical modernization of the fruit and vegetable sector in the future.

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