



THEORETICAL AND PRACTICAL ASPECTS OF PRODUCTION MODERNIZATION IN HORTICULTURE

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Article history:	Abstract:
Received: 10 th February 2023 Accepted: 10 th March 2023 Published: 17 th April 2023	The article reveals, in detail, the theoretical aspects of modernization of production in horticulture, having studied the point of view of many scientists, the author's definition of modernization of production is given. The factors influencing the modernization of production in horticulture are systematized and scientifically substantiated, dividing them into three groups according to the nature of their origin. Practical recommendations and proposals have been developed for the modernization of production in horticulture in the future.

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

Our country has been developing the agrarian sector in recent years with special attention. The consistent introduction of market relations in all spheres of the economy and the development on the basis of healthy competition is one of the priority tasks of the ongoing agrarian policy. It is known that fruit and vegetable production is an important branch of Agriculture. Because this sector plays an important role in meeting the demand of the population of the country for food and industry for raw materials. According to scientists, in 2025, the population can reach 8.5 billion by 2050, and 11 billion by 2050 [9]. In order to provide the population of this amount of food products and industrial raw materials, fruit and vegetable production requires to find internal and additional resources to increase the production capacity and to move to the more intensive and innovative methods of farming. This segment not only satisfies the needs of the population of our country, but also the demand of the food industry for raw materials. As a result of the export of fruit and vegetable products to foreign markets, the foreign exchange reserves of our country are strengthened. In the economy of Uzbekistan, including in the implementation of measures to develop the fruit and vegetable sector in agriculture, of course, the issue of its radical modernization also plays an important role. In this regard, special attention is paid to the gradual improvement of reforms in this complex in the years of independence, the development of a wide range of regulatory and legal measures at the government level.

First of all, it is necessary to determine, theoretically, the essence and content of modernization of rural agriculture, in particular, the fruit and vegetable sector. In general, the lexical meaning of the word "modernization" in English means "modern",

"advanced", "updated". There are a lot of types of modernization, which can be cited as an example of technological modernization, technical modernization, economic modernization, social modernization, political modernization, cultural modernization and others [10].

According to some scientists, "modernization and diversification of economic sectors is the basis for increasing competitiveness." Modernization is a technological renewal process aimed at increasing the competitiveness of the products (work and services) in which production is being prepared. The results of modernization, technical and technological innovation determine the condition for the rapid development of high-tech, competitive production. Modernization is characterized by such criteria as the improvement, update, renovation of a particular object, its adaptation to new requirements and norms, technical conditions, quality indicators [3].

Alternatively, American sociologist scientist T. Parsons, in the interpretation of the modernization process, in his views on the process of modernization in the 1960s, the main emphasis was placed on Western European culture. In his opinion, in terms of historicity in Western European countries - the process of modernization is more competitive than in other countries. In the classical theories, including the models of T.Parsons, E. Shills, the main emphasis was put on the implementation of modernization mechanism imported from developed countries. The views of neoclassical theory co-founders Sh.Eysenshtadt, A.G. Frank notes that the main focus was put on its characteristics within the country [4].

Professor V.S.Belikx believes that on the basis of the concept of "modernization of the economy", we must understand the implementation of a set of

economic activities or measures aimed at improving economic relations to the extent that they meet modern requirements [5]. This concept of modernization has a general description, it is relatively clear and special concepts can also be found in the literature. For Example, I. V. Makarova, in her definition, it is understood that "modernization of the economy" is an innovation process that is in line with the new system of interests, values and priorities in society [6].

A.S.Afanaseva said in her description that modernization is not only the process of changing production technology, but also the introduction of

modern methods into economic systems; "modernization is not only the process of purposeful change of production technology, but also the creation of conditions for the development of socio-economic and political institutions necessary for its implementation"[7].

In this concept, it is possible to distinguish a number of distinctive signs of modernization, namely: the formation of a modern model of the economy, the basis of which is innovation, and the essence of modernization is compliance with a new system of interests, values and priorities in society (Figure 1).

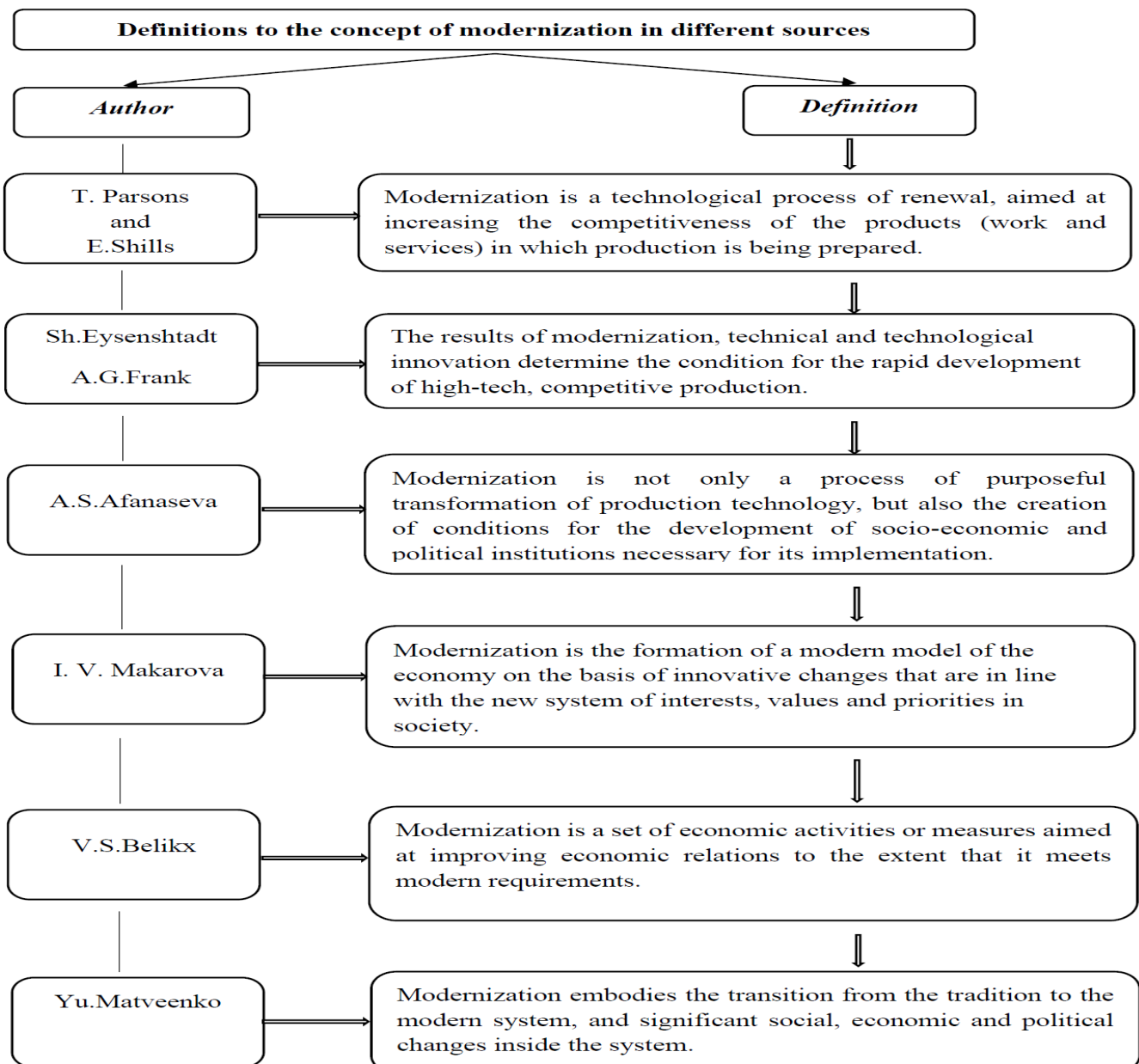


Fig.1. Definitions, given to the concept, of modernization by economist scientists.



Scientists have noted in their scientific views that it is necessary to carry out three main directions in the process of modernization, namely, to update the outdated material and technical base of production, to see the economy in a structural way, that is, to reduce the production of raw materials in it, and to increase the share of sectors (scientific-voluminous, high-tech industries).

According to many scientists, when it comes to modernizing the fruit and vegetable sector, it is understood the more technical and technological re-equipment, updating the processes of the production of fruit and vegetable products. But such an approach cannot fully reveal its essence. Because modernization includes not only the technical and technological re-equipment of production processes, but also the broadening of new innovative methods in organizational and economic relations and management that take place in the production process, for example, modern methods of cooperation, cluster, management, marketing, as well as the wide introduction of scientific achievements (scientific developments, scientific products, resource-saving technologies, etc.).

Therefore, we have entered the author's definition of ***modernization of production in fruit and vegetable production this is an indicator of the constant application of new innovative methods in the organization and management of production, as well as increasing the share of processed products in relation to raw materials by updating the material and technical base and scientific developments in the production of fruit and vegetable products.*** It is evident, that in our opinion, in order to have a modernization process in fruit and vegetable production, it is necessary to carry out three main components: firstly, to update the existing material and technical base and, together with this, to use it more effectively, secondly, it is necessary to carry out measures aimed at increasing the processed products in fruit and vegetable production, and in the third, to introduce new innovative methods and forms in the economic system

We believe that this definition will give an opportunity to a broader expression of its essence by introducing a number of clarifications into the concept of modernizing the production of fruits and vegetables. In general, the concept of modernization of production in fruit and vegetable production is a comprehensive and multifaceted concept, and until today, discussions between scientists on the basis of different approaches to this concept continue in science.

Another important issue is that the question of what should be the system of the main directions of modernization of fruit and vegetable production in the conditions of innovative economy in the Republic and

what should be the synergistic effectiveness of this complex of mutually related measures should also be answered theoretically and from the point of view of practice. Of course, when modernizing the production in fruit and vegetable production, it may not give the expected effect that this or that measure will be carried out separately. Therefore, it is necessary to approach the issue of modernization with regard to each other and, if necessary, with regard to a set of complementary measures as a holistic system. In our opinion, we believe that it is worthwhile to carry out such activities as technical and technological renewal of production in fruit and vegetable production, improvement of production composition and specialization of climates according to natural and climatic conditions, introduction of new forms of organizational and economic and managerial relations, improvement of the system of scientific support of the sphere. Below we have developed a systematic model of the implementation of measures for the modernization of production in fruit and vegetable production (Figure 2).

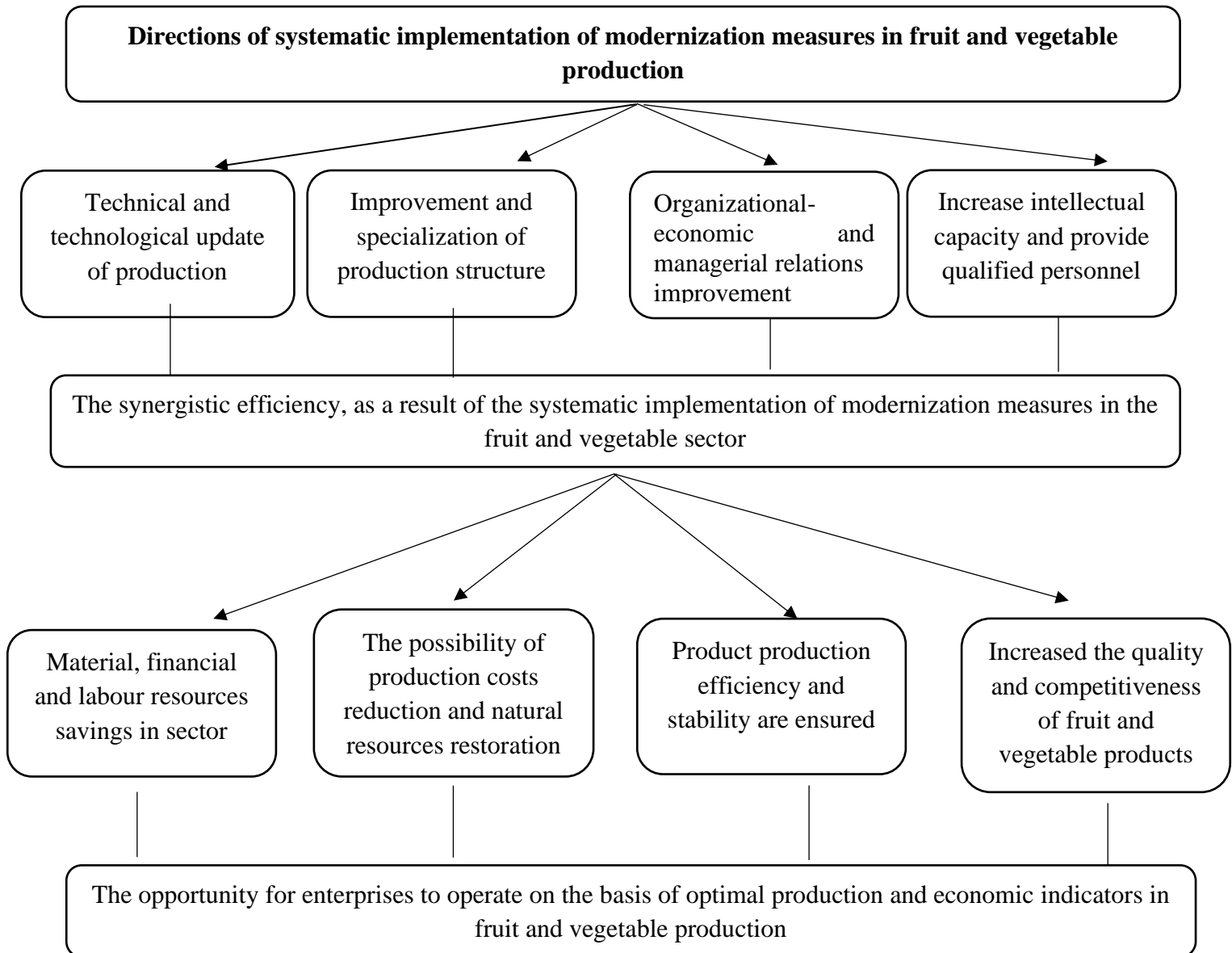


Fig.2. A systematic model for the implementation of modernization measures in the fruit and vegetable sector

In the agribusiness system in the conditions of the market economy should take the main place in the interests of the subjects who grow the product. Because, it is the supplier of raw materials to the processing enterprise, and the activities of the processing enterprise will depend on the product grower. Also, the quality of the product of the processing enterprise depends on the quality of the products grown by farms. Therefore, it is the suppliers of raw materials that ensure the continuity of the activities of processing enterprises. Therefore, it should be considered as the main link in the system of

processing and storage of products to the same subjects (growers).

It should be said that in the conditions of innovative economy it will be desirable to introduce new forms of organizational and economic relations tested in foreign countries, namely, a wide range of cooperative processes between fruit and vegetable growers and processing enterprises, which in turn will allow increasing the income of the enterprise that grows and processes products. In addition, in the formation of cooperative relations in the development of fruit and vegetable production, it is necessary to focus on possible reduction of intermediate joints on the road of



product movement, that is, reduction of disposal, transport and other costs, increasing the efficiency of the use of basic funds and labor resources. This product plays an important role in increasing the efficiency of the activities of growers, processing enterprises. Therefore, the organization and development of agribusiness should be viewed as an object-oriented process that creates the necessary conditions for the development of productive forces, increasing labor productivity.

But, when modernizing the production in fruit and vegetable production, it is necessary to take a complex approach to the issue, not to develop with special approach in the above directions.

It is known that the modernization of production in fruit and vegetable production is influenced by a number of factors. In our research, we

divided the factors affecting the modernization of production in fruit and vegetable production into three main groups: 1) factors affecting the technical and technological renewal of the network, 2) factors affecting the rational use of production and natural resources, 3) factors affecting the management of the sector and the establishment of organizational and economic relations (Figure 3).

Factors affecting the technical and technological renewal of production include: creation of favorable conditions for the wide attraction of investments aimed at technical and technological renewal of production; provision of modern technical means of production; equipment that allows the introduction of new technologies equipment; supply of modern refrigerated storage facilities, supply of material and technical resources, etc.(Figure 3)

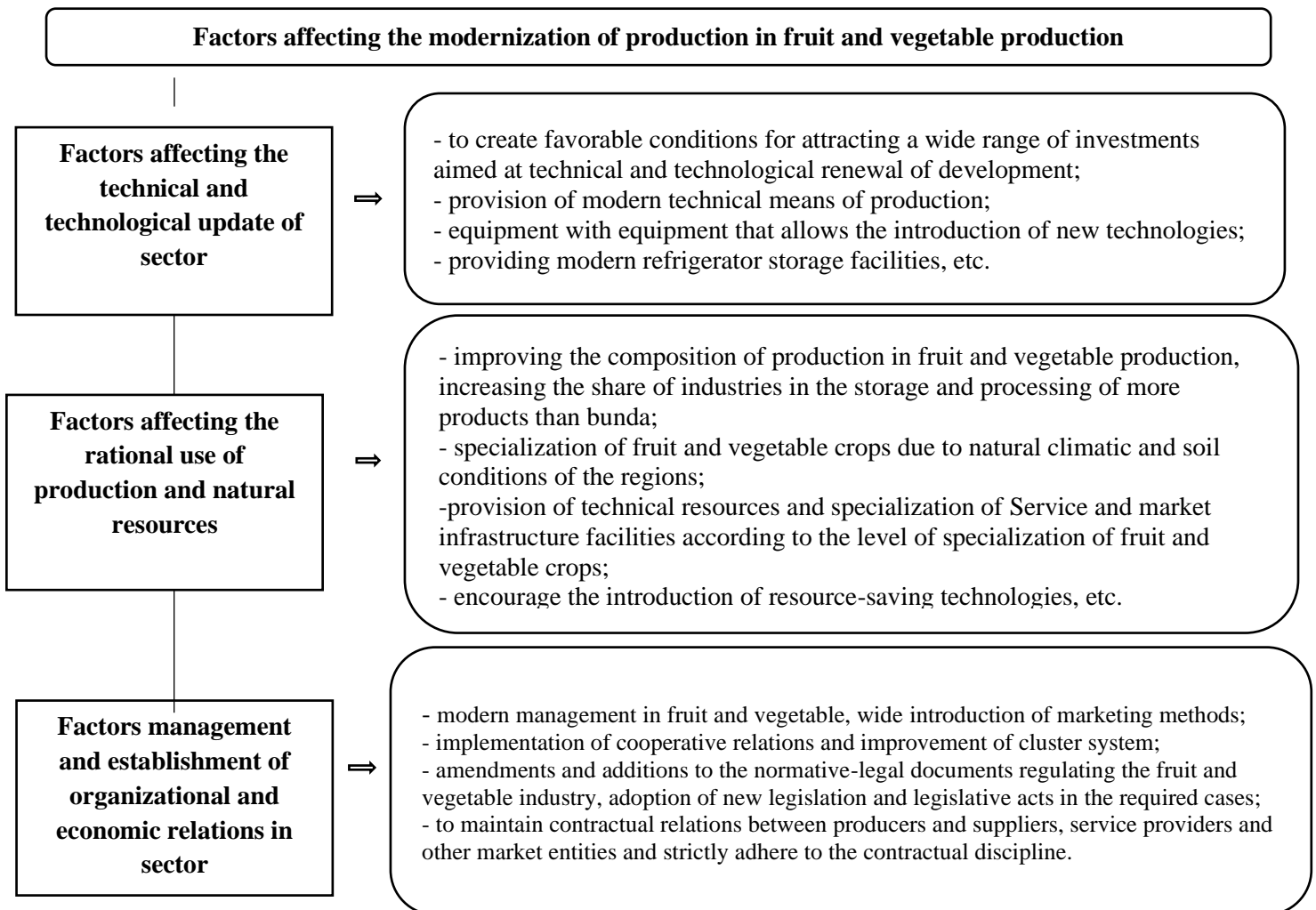


Fig.3. System of factors affecting the modernization of production in fruit and vegetable production.



It consists of topical issues such as the provision of technological factors, special techniques and varieties of fertile seedlings, the timely implementation of agro technical activities and the introduction of advanced technologies.

While these factors make it possible to grow a quality product and increase it in size by providing fresh fertile, disease-resistant varieties of fruits and vegetables, the provision of special techniques makes it possible to harvest the grown crop without loss. It is also possible to radically increase the level of sector development by introducing modern techniques and technologies, as well as improving the planting system. The issue of providing production with modern technical means and innovative technologies is one of the factors that strongly influence the development of the sector, in the conditions of transition to market relations; their prices are required to be in proportion with the purchase prices of the products being grown. However, the modernization of production in fruit and vegetable production is also tied to the effective and rational use of available material and technical resources. Lack of effective use of material and technical resources will lead to a decrease in the amount of products grown, for example, untimely conduct of agro technical activities such as land expulsion, pest control, etc.

As the factors affecting the rational use of production and natural resources that are improving the composition of production in fruit and vegetable production, increasing the share of industries in the storage and processing of more products; specialization of fruit and vegetable crops due to the natural-climatic and soil conditions of the regions; provision of technical resources and provision of services and; it is possible to encourage the introduction of resource-saving technologies and bring others. It should be said that the effectiveness of agriculture depends on the natural-climatic conditions. The constant change of natural and climatic conditions in terms of periods of the year is limited by other factors, including the possibility of management, in contrast to technological, organizational and economic factors. And also, for example, violation of the ecological status, of course, causes the gardens to not bear fruit.

The factors of sector management and establishment of organizational and economic relations are as follows: modern management in fruit and vegetable production, broad introduction of marketing methods; introduction of integration and cooperative relations and improvement of the cluster system; modification and introduction of additions to the normative legal acts regulating the fruit and vegetable sector, adoption of new legislation and legislative acts

in; it includes measures to improve the contractual relationship between manufacturers and suppliers, service providers and other market entities and to strictly adhere to the contractual discipline, as well as to wider implementation of incentives in financial, credit, value, tax and insurance systems. The legal and normative documents adopted for the development of the sector determine the level of economic relations carried out in the field. Development of the sector cannot be achieved without the proper organization of economic relations. From this point of view, the objective is to determine the goals and objectives of the legal and normative documents adopted and applied for the development of fruit and vegetable production based on the requirements of the market economy based on social relations.

Along with the above factors, a number of external factors can also influence the modernization of production in fruit and vegetable production. That is, the situation in the world market of fruit and vegetable products, the economic and legal conditions created to attract foreign investment, various force majeure cases, for example, the coronavirus pandemic, which has caused concern all over the world now, and a number of other factors can indirectly influence the level of sector development.

In the modernization of the fruit and vegetable sector in the conditions of the market economy, special attention should be paid to the development of mutual integration relations between the producers of products and the processing enterprises, ensuring the continuity of the relationship in the chain of "production-processing-sale of agricultural products", taking into account its peculiarities and organizational-economic, natural, technological and legal ones. This will provide the population of our country with fruits and vegetables at the level of normality and will be able to achieve by a full satisfaction with the processed products.

In conclusion, in the conditions of the transition of our republic to the innovative economy, the task of studying and improving the following theoretical and practical aspects of modernization of the fruit and vegetable sector is put to be discussed before the agrarian economists, practitioners and specialists, including:

- Improvement of theoretical basis of modernization of fruit and vegetable sector and increase of fundamental researches in this regard;

- a step-by-step analysis of the reforms carried out in recent years on modernization of the fruit and vegetable sector and development of the strategy of its further development on the basis of necessary scientific conclusions;



- development and implementation of incentives for the attraction of investments and innovative works in the modernization of production in fruit and vegetable production;

- review and improvement of the method of assessing the impact of modernization of fruit and vegetable production on the stability of the economy of farmer farms;

- development of scientific and practical proposals and recommendations on improving the state support of modernization of the fruit and vegetable sector;

- preparation of recommendations on ways of improving the normative and legal basis of implementation of integration and cooperative relations in the modernization of fruit and vegetable production;

- development and implementation of scientifically-based simulations on the main directions of using the experience of foreign countries in the modernization of production in fruit and vegetable production in accordance with the conditions of Uzbekistan;

- further improvement of the scientific support system of modernization of the fruit and vegetable sector and further introduction of scientific innovative works into practice, etc.

The development of long-term state programs on the scale of the Republic in the above directions and the consistent introduction into practice will serve as an important factor in its sustainable development by radical modernization of the fruit and vegetable sector in the future.

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