

THE ROLE AND IMPORTANCE OF FRUIT AND VEGETABLE GROWTH IN ENSURING FOOD SECURITY IN UZBEKISTAN

Odiljon Shermatov*

*Head of the Agricultural economics department,
Andijan Institute of Agriculture and Agrotechnologies,
UZBEKISTAN

Email id: shermatovodiljon68@gmail.com

DOI: **10.5958/2249-7137.2022.00373.1**

ABSTRACT

This article is based on the role and importance of fruit and vegetable production in ensuring food security in Uzbekistan. In addition, economic analysis of the results of the study conducted in 2021 on the topic was carried out and scientifically based conclusions and recommendations for improving the economic efficiency of fruit and vegetable growing were developed.

KEYWORDS: *Agriculture, Food Security, Fruit And Vegetable Growers, Fruit And Vegetable Standards, Uzbekistan, Population.*

INTRODUCTION

In today's digital economy, increasing the volume and improving the quality of fruit and vegetable production is important for the effective implementation of reforms aimed at ensuring food security in connection with the sharp increase in agricultural production in Uzbekistan. This is due to the fact that in recent years, the negative consequences of various conflicts between some countries on food security can have a negative impact not only on the world, but also on Uzbekistan, which is widely recognized on social media. It is estimated that one in nine people in the world today is malnourished. According to statistics, Uzbekistan produces more than 21 million tons of fruits and vegetables a year. The fruits and vegetables grown are the sweetest and most beneficial for the human body due to the combination of natural and soil-climatic conditions. In this regard, the fruits and vegetables grown in our country are world leaders in terms of their richness in micronutrients and various biological substances necessary for human health. [1]

According to the statistics, the most important task today is the effective use of organizational and economic mechanisms that encourage the growth of per capita production of food products, including full-vitamins fruits and vegetables, based on medical standards. On December 15, 2021, the President of the Republic of Uzbekistan adopted Resolution No. PP-52 "On measures to support the fruit and vegetable sector, further development of the cluster and cooperation system in the industry." Its purpose is to integrate the processes of production, processing, storage, service and sale (export) of fruits and vegetables in the country, to develop the activities of clusters, to ensure food security and increase exports. On the basis of Annex 3 to this resolution, the structure of the "Agency for Horticulture and Greenhouse Development" under the Ministry of Agriculture was approved. The resolution also introduced a number of

organizational and economic trends in the state support of the fruit and vegetable system in the country. According to this document:

- for farms, personal subsidiary plots and other commodity producers - loans are provided at a rate of 14% per annum (including 2% bank margin) up to 50% of the value of the crop for a period of 12 months, including preferential 6 months, for growing fruits, grapes, vegetables, potatoes, gourds, herbs and medicinal plants, legumes and oilseeds;
- for the processing, storage and export of fruits and vegetables, a loan is provided for 12 months at a rate of 14% per annum (including 2% of the bank margin) to refill working capital necessary for the purchase of agricultural products;
- it has been established that compensation for fruit and vegetable clusters (cooperatives) and farms is 50% of the insurance premium paid when using the fruit and vegetable risk insurance service, but not more than 1% of the sum insured, provided that the sum insured covers the cost of the product by at least 70 percent;
- fruit and vegetable clusters (cooperatives) - 50% of the cost of attracting qualified agronomists, entomologists, laboratory specialists from abroad, but not more than the equivalent of 1 thousand US dollars per person per month through the district departments of the Ministry of Agriculture, including fruit and vegetable production, while it is recommended to conduct seminars and trainings for gardeners and winegrowers, vegetable growers, potatoes, melons, legumes and oilseeds, etc.

Due to the high role of private household farms, landowners, farms specializing in fruits and vegetables and agroclusters in ensuring the stability of food supply in the country, large-scale reforms are being carried out to develop these businesses. However, there are a number of problems and shortcomings in the system of fruit and vegetable growing, the effective use of existing arable land, the introduction of innovations in production processes. Research shows that today in the fruit and vegetable system of Uzbekistan the volume of production and product quality do not meet current market requirements. Yields are very low, especially in orchards and vineyards. For example, in foreign countries 70-100 tons per hectare of intensive orchards and up to 130 tons per hectare are harvested, in Uzbekistan 10-30 tons per hectare, and 4-5 tons per hectare of traditional orchards and vineyards. According to the data, the Netherlands annually cultivates 1 million hectares of its land and exports \$ 102 billion worth of agricultural products. In Uzbekistan, according to current statistics, there are about 4 million hectares of arable land. Of this, about 2 million hectares of agricultural land, except for cotton and wheat, are grown on the basis of state orders. The composition of about 2 million hectares of agricultural land is the lands of dehqan farms, landowners' lands and lands belonging to various types of farms. Today, 31 agro-logistics centers for sorting, packaging, processing and export of fruits and vegetables have been established in Uzbekistan. However, due to lack of working capital and constant production, only 10-15% of the available capacity is used. [2]

The fact that the current activities of fruit and vegetable producers today do not meet the requirements of a market economy poses a threat to the future sustainability of food security. This is because any grower can earn up to \$ 10,000 by growing a certain type of product on 1 hectare of land and exporting it. Someone else could plant a crop that would bring in \$ 2,000 instead. This is called irrational land use in science. After all, some landowners are depriving

themselves and their country of more or less \$ 8,000 per hectare. At this point, the question arises as to why the economic efficiency of fruit and vegetable farms, landowners and farms is different? In our opinion, the efficiency would be higher if farmers specializing in the cultivation of fruits and vegetables had the same economic and technological independence as their own farms and landowners. Because in this case, what does a fruit or vegetable farmer plant on his land, when does he plant, where does he sell the product, and how does he finally distribute the profits? solves a number of issues independently. Based on the above, issues such as the implementation of quantitatively and qualitatively positive changes in the system of fruit and vegetable growing on the basis of effective structural changes in the current activities of producers in this area have been identified as priorities. [3]

In this study, we reviewed statistics on the state of fruit and vegetable growing in Andijan region, which covers 1% of the country's land area but is home to about 10% of the country's population. As of January 1, 2021, the population of Andijan region has exceeded 3,260,000 people and averages 744 people per square kilometer in the region. This figure is an average of 75 people in the country. There are 201026 hectares of irrigated arable lands in the region, of which 28836 hectares are orchards and vineyards, 10041 hectares are vegetable plots. A total of 28,836 hectares of land in the region are used for fruit growing. Of these, 26,592 hectares, or 92 percent, are orchards. In 2021, a total of 683,000 tons of fruits, 1,771,000 tons of vegetables and 93,000 tons of grapes were grown in the region. If we compare these figures for each population of the region: for every inhabitant of the region ($683000 \text{ kg} / 3260000 = 209.5 \text{ kg} / \text{person} / 365 \text{ days} = 574 \text{ gr} / \text{day}$) grown in the region, an average of 574 grams of fruit per day. In the vegetable sector, vegetables grown in 2021 will cost an average of 1,487 grams per day per capita ($1771000/3260000 = 543 \text{ kg} / \text{person} / 365 \text{ days} = 1487 \text{ gr} / \text{day}$). According to the World Health Organization, the per capita consumption of fruits and vegetables from agricultural products should be increased to 400-500 grams per day, but, unfortunately, this norm is 150-200 grams on average worldwide. International nutritionists recommend that fruits and vegetables make up at least 50 percent of the food consumed by humans. [4]

If the average per capita production of fruits and vegetables in the Andijan region is 2061 (574 grams of fruits + 1487 grams of vegetables), then according to the standards of the World Health Organization, 1661 can be used to consume 400 grams per capita per day. And there is the possibility of exporting fruits and vegetables, i.e. 521,000 tons of fruits and vegetables. This ratio corresponds to an average of 9.7 tons of fruit and vegetable exports per hectare for 53,377 ha of fruit and vegetable fields. Fruits and vegetables cost an average of UZS 5,000 per kilogram, while fruit and vegetable exports cost UZS 48,500,000 or US\$4,400 per hectare. These calculations are carried out taking into account the optimal quality and storage of grown vegetables and fruits, the minimum level of losses during transportation. These opportunities in the process of growing fruits and vegetables in the Andijan region show that compared to the export of fruits and vegetables in the Netherlands (\$1/12000), we still have a lot of work to do in this sphere. [5]

According to the results obtained in the process of scientific research on increasing economic efficiency in the fruit and vegetable industry, in order to increase the production of fruits and vegetables, improve their quality at the level of today's demand, effectively introduce innovations into the industry and increase the economic efficiency in this industry to the optimal level, we propose the following:

- effective formation of a cluster system that stimulates the mechanism of "cultivation-preparation-storage-processing, transportation, marketing" in the activities of fruit and vegetable growers in agriculture;
- Introduction of justified innovations in the field of fruit and vegetable growing farms and landowners;
- increasing the material interest of growers on the basis of mechanisms that adjust the quantity and quality of fruit and vegetable products to market requirements;
- to take measures to optimize costs through the digitization of the fruit and vegetable system;
- formation of an assortment of quality products in the system on the basis of diversification of fruit and vegetable systems, etc.

In conclusion, it should be noted that today the improvement of fruit and vegetable growers through digitalization and diversification will increase their economic efficiency, first of all, increase the production of fruit and vegetables, improve their quality and independently introduce new innovations in the industry.

REFERENCES:

1. Abduganiev A, Abduganiev A. Agricultural economics. Tashkent, TDIU, 2010.
2. Shermatov O, Nosirov B, Imomov R, Qobulova M.. Problems of effective usage of lands in agriculture for ensuring food security. South Asian Journal of Marketing & Management research, 2020;10(4):71-76.
3. Shermatov O, Imomov R.. Economic efficiency in agriculture and factors affecting it. Актуальная наука. 2019;29(10): 21-22.
4. Nosirov B, Rakhmonova B. Organization of production of walnuts in an industrial volumes. International online conference ECLSS Economics and Social sciences. Proceeding book. Istanbul, Turkey, June 28-29, 2020. pp. 59-67.
5. Nosirov B. Basis for the development of the regional food market. ACADEMICIA: An International Multidisciplinary Research Journal. 2021;11(11):65-71