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FACTORS OF DEVELOPMENT OF THE FRUIT AND VEGETABLE PRODUCTION SYSTEM

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Abstract:
The article analyzes the role and importance of the horticultural system in providing the population of our country with food, as well as factors for the further development of the horticultural system and increasing its economic efficiency.

Keywords: agriculture, food security, fruit and vegetable production system, farming, market infrastructure.

Introduction

In modern economics, the development of food strategies aimed at increasing production and protecting the consumer market is considered one of the most important scientific research not only in the country, but also in the world. Because "...currently more than 900 million people in the world, that is, one in nine people, are undernourished, and more than 30 percent of the world's population faces the problem of malnutrition [2]. Therefore, the issue of ensuring food security based on the research and effective implementation of new innovative opportunities to increase the volume of agricultural production per capita in accordance with medical standards is relevant.

Research shows that population growth, in turn, creates a socio-economic problem associated with an increase in demand for agricultural products. Due to the high role of dekhkan farms, owners of household plots and farms specializing in growing fruits and vegetables on agricultural lands with a bonitet score of less than 40 points in maintaining the stability of the food supply in our country, large-scale reforms are being carried out to develop these economic entities.

In particular, for the purpose of mutual integration of the processes of production, processing, storage, service and sale (export) of products in the field of fruits and vegetables in our country, development of cluster activities, ensuring food security and increasing export volumes, a Resolution of the President of the Republic of Uzbekistan was adopted on December 15, 2021 No. PQ-52 "On measures to support the state's fruit and vegetable industry, further development of the cluster and the network cooperation system." Based on Appendix No. 3 to this decision, the structure of the Agency for the Development of Horticulture and Greenhouses under the Ministry of Agriculture was approved. The Resolution also introduced a number of organizational and economic preferences for state support of the fruit and vegetable growing system in our country.

Including

- farms, farms and other producers of products - when growing fruits, grapes, vegetables, potatoes, sugar crops, herbs and medicinal plants, legumes and oilseeds - up to 50% of the cost of the harvest on an annual basis in the amount of 14% (including 2% of bank margin) for 6 months, the allocation of loans for a period of 12 months has been determined;
- processors and exporters of fruits and vegetables - a loan was established for a period of 12 months at an annual rate of 14 percent (including 2 percent of bank margin) to replenish working capital necessary for the purchase of grown agricultural products;
- fruit and vegetable growing clusters (cooperatives) and farms, if there is an export contract, are reimbursed 50 percent of the insurance premium paid when using the fruit and vegetable crop risk insurance service, but not more than 1 percent of the insured amount. In this case, the insured amount should not be less than 70 percent of the value of the crop insured against the risk;
- horticultural clusters (cooperatives) through the district departments of the Ministry of Agriculture are compensated for 50 percent of the costs of attracting qualified agronomists, entomologists, and laboratory specialists from abroad, but a portion not exceeding the equivalent of 1 thousand US dollars per specialist per month. At the same time, horticultural clusters are recommended to conduct training seminars on creating gardens and vineyards, growing vegetables, potatoes, melons, legumes and oilseeds for the producers assigned to them;
- On January 18, 2024, Decree of the President of the Republic of Uzbekistan No. PF-15 “On additional measures to improve the procedure for leasing agricultural land” was adopted.

According to this decree, it is now possible to lease agricultural land for up to 30 years through online electronic auctions. In these processes, the emergence of new farms, individual farms specializing in horticulture and vegetable growing will create the opportunity to further increase the volume of fruit and vegetable production in our country. However, research shows that there are a number of problems and shortcomings in the issues of sustainable increase in agricultural production and efficient use of land, especially in farms specializing in growing fruits and vegetables.

Therefore, issues such as carrying out effective structural changes in producers in this area, as well as the consistent development of fruit and vegetable growing, further strengthening the country’s food security, expanding the production of environmentally friendly products, and a significant increase in export potential in this area were set as priority tasks.

The effective implementation of these tasks shows the need for further development of agricultural production in fruit and vegetable farms. According to international data, the Netherlands cultivates 1 million hectares of land annually and exports $102 billion worth of agricultural products. According to today's statistics, there are about 4 million hectares of arable land in Uzbekistan. In addition to cotton and wheat, agricultural land covers approximately 2 million hectares.

About 2 million hectares of agricultural land are farms, lands of private landowners and lands belonging to farms of various types (except for cotton and grain). Today, the fact that

the current activities of agricultural producers do not meet the requirements of a market economy poses a threat to the stability of food security in the future. Because, let's say, someone can grow a product on 1 hectare of land and make a profit of up to 10 thousand dollars by exporting it.

Who else could plant a crop that would bring in $2,000 instead? This situation in science is called irrational land use. After all, some landowner is depriving himself and his country of 8 thousand dollars per hectare. Currently, based on unfounded information provided by some concerned departments, the erroneous ideas that “our people in the villages today do not work on the land, do not even use their land properly” (possibly, but very little) are being instilled in the minds of the public. Actually this is not true. In fact, those who supply our markets with the highest quality fruits and vegetables are the landowners living in our villages and ordinary villagers who grow produce by renting land, and no one else. These same people work on the farms that operate today. The question arises why the economic efficiency of dehkan farms, household plots and private farms is different, i.e. it is high for dekhkan farms, household plots and low for farmers.

In our opinion, if farmers specializing in growing fruits and vegetables had the same economic and technological independence in relation to their property as the owner of dekhkan and household lands, efficiency would be high. Because in this case, the farmer himself would decide a number of issues on his own, such as what to plant on his land, when to plant, where to sell and how to distribute profits? According to the Statistics Committee, by January 1, 2024, the population of Uzbekistan exceeded 35 million 500 thousand people. 50.5% of the population lives in cities and 49.5% in villages. Also, 30.4% of the population of Uzbekistan is below working age, 10.1% is above working age and 59.5% of the population is of working age. According to statistics, today the population of Andijan region has exceeded 3 million 400 thousand people, and the average number of people per square kilometer is 715 people. This figure is on average 74 people in the republic. The region has 201,026 hectares of irrigated arable land, of which 28,836 hectares are gardens and vineyards, 10,041 hectares are vegetables. During the study, we became acquainted with the statistics of fruit growing in the Andijan region. In total, fruits are grown on 28,836 hectares of land in the region. Of these, 26,592 hectares, that is, 92% of orchards are considered fruit gardens.

Today, the total production capacity of the region is 434,296 tons of fruit, which corresponds to an average of 367 grams per day per resident of the region (4,342,96,000 kg/3,011,700=134 kg/person/365 days=367 g/day).). Also, the number of farmers and homestead landowners in the region is 477,374 people, and the area of their land is 24,541 hectares.

Fruit production in the Andijan region. 2022 y.

No.	Name of plants grown in the area	Total area of gardens, ha	Including those that produce crops.	Average yield, c/ha.	Crop grown, tons
1	**2**	**3**		**4**	**5**
Pome fruits					
1.	Apples	13368	12688	166	210812
2.	Pears	578	506	162	8214
3.	Quince	777	721	160	11565
Stone fruits					
4.	Apricots	3015	2798	161	44952
5.	Peaches	3703	3468	169	58684
6.	Plum	1284	1147	176	20157
7.	Cherry	2235	2018	163	32895
8.	Cherry plum	445	395	158	6238
9.	Jujube	94	80	161	1286
Subtropical fruits					
10.	Pomegranate	426	384	151	5805
11.	Anjir	466	419	127	5323
12.	Xurma	658	597	148	8848
Citrus					
13.	Lemon	105	83	162	1351
14.	Mandarin	5	5	135	69
15.	Orange	-	-	-	-
Others					
16.	Strawberry	42	37	153	564
17.	Walnuts	1223	880	150	13228
18.	Almond	414	366	117	4305
19.	Funduk	-	-	-	-
Total :		**28836**	**26592**	**163**	**434296**

Source: Data from the Department of Agriculture of Andijan region.

This figure corresponds to an average of 357 grams per day for each resident of the region (393,119,000 kg/3,011,700=130.5 kg/person/365 days=357 g/day). In its data, the World Health Organization recognizes that the consumption of fruits and vegetables from agricultural products needs to be increased to 400-500 grams per person per day, but, unfortunately, the global average is 150-200 grams. According to the recommendations of international nutritionists, at least 50% of food consumed by a person should be fruits and vegetables.

If the fruits and vegetables grown today in the Andijan region correspond to an average of 724 (367 grams of fruits + 357 grams of vegetables) grams per person per day, if 400 grams

of this indicator per person per day is allocated for consumption according to the standards of the international health organization, 324 grams per person, fruits and vegetables grown can be exported, i.e. 356,284 tons of fruits and vegetables. This ratio corresponds to 53,377 hectares of fruit and vegetable fields with an average export of fruits and vegetables of 6.7 tons per hectare. If 1 kilogram of fruits and vegetables is calculated on average from 5,000 soums, then the export of fruits and vegetables per hectare is 33,500,000 soums or 3,700 US dollars [1]. Comparing this figure with fruit and vegetable exports to the Netherlands (1 hectare/$12,000) shows that we have a lot of work to do in this area.

Today, the agricultural sector is the sector that can act as the locomotive of the economy of Uzbekistan. The land, the hot sun, millions of experienced rural farmers, the high demand for Uzbek fruits and vegetables grown under the hot sun, the presence of large markets near us create the need to create small farms in areas with high population density and high unemployment. The creation of small farms in the production of fruits and vegetables requires a redistribution of the lands of farmers currently working in this direction. But nowadays it is allowed for a farmer who has no family members directly working on the land (there are now many farmers who specialize in growing fruits and vegetables), who in most cases uses hired labor rather than the labor of family members, to keep part of his land, say, with the condition that his will will be left to himself. If you tell him that the other part will be given to his fellow villagers who have a high level of farming experience, he will definitely agree. What's so good about it?. Today:

- the farmer sincerely works on his land for personal gain;
- he thinks carefully about what to grow on the land that belongs to him;
- counts on the product that he plans to grow;
- studies the market;
- strives for innovation;
- strives to have a lot of high-quality products, etc.

The owner of the land, that is, the independent farmer, now conducts his work in an orderly and systematic manner for his benefit and completes every operation on time. Free economic activity reveals a person’s inner potential, sharpens his mind, and invites him to search for new horizons. Only a free peasant entrepreneur can take the image of our agriculture to a new level, turn our villages into economic regions that grow large quantities of high-quality products, and not into suppliers of cheap labor for developing countries.

In conclusion, it can be emphasized that today, due to the diversification of the activities of fruit and vegetable growers, the economic efficiency of their activities increases, first of all, by increasing the production of fruits and vegetables, improving their quality, as well as creating opportunities for the independent introduction of new innovations in the field, creating an opportunity for sustainable development.

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