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Current Status Of Vegetable Production, The Role And Importance Of Greenhouse Vegetable Growth

S.T. Iskandarov
Andijan Institute of Agriculture and Agrotechnology, Uzbekistan

ABSTRACT

This article developed scientifically based proposals and practical recommendations for improving the economic base for the development of vegetable growing in the context of agricultural modernization.

KEYWORDS

Vegetable growing, protected land vegetable growing, efficiency, cost-effectiveness, medical norm.

INTRODUCTION

The sustainable development of the vegetable industry is directly characterized by the characteristics of agricultural production, including the processes occurring during the seasonal cultivation of vegetables, their cultivation, harvesting, storage, transportation and delivery to consumers. At the same time, overcoming the existing problems through organizational and economic measures will increase the efficiency of vegetable growing and further expand the possibilities of producing marketable products.

The formation of economic relations based on the laws and principles of a market economy in

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the country's economy, including in the agricultural sector, shows the need to develop some ideas and approaches put forward by agricultural economists, along with an analysis of research on the development and effectiveness of vegetable growing.

MAIN PART

Agrarian economists who conducted research in these areas approached the problem differently and in their own way. One of these approaches is the regional approach to solving problems, implemented by J. Hecker and S. Mazurin. Due to the division of the country into economic zones depending on climatic and economic conditions, their specialization and production activities also cause great differences. This problem also creates certain difficulties in determining the production and economic efficiency of the vegetable sector[2. 3].

In particular, according to J. Hecker, "within the framework of solving the problem of increasing the efficiency of agricultural production, it is worth considering them at the level of administrative structures. Because it is at this moment that a connection arises between aggregate demand and the real capacity of farms. Many issues of socio-economic development in rural areas will be addressed with the full manifestation of the processes of inter-farm cooperation at the level of administrative structures" [3]. It is noted that the solution to this problem should be carried out mainly in summer cottages, with good results when implemented due to the narrow specialization of summer cottages and vegetable farms.

RESULTS AND DISCUSSION

In recent years, measures taken by the country's leadership to ensure uninterrupted supply of the country's population with vegetable products throughout the year and to increase exports have significantly increased the volume of vegetable production in the country. According to the results of the analysis, in 2006-2018, the area under vegetables in the country increased by 52.2 thousand hectares (159.8 thousand hectares in 2006, 212.0 thousand hectares in 2018), and the volume of production increased by 2.2 times (4669 in 2006, 9 thousand tons, in 2018 increased by 10128.1 thousand tons) (Table 1).

From the data in the table it can be seen that the growth rates of vegetable production have a tendency in almost all regions of the country. However, there are sharp differences between the regions of the country in terms of productivity, which naturally reflects the efficiency of vegetable production. In particular, in 2018, the average yield in the Republic of Karakalpakstan was 183.3 quintals, in Jizzakh region - 208.4 quintals, in Samarkand region - 330.0 quintals, in Andijan region - 301.0 quintals, in Fergana region - 282.0 quintals. This means that the issue of vegetable development is not the same in all regions of the country. Of course, the specifics of the regions also have some influence on this. However, in Navoi region in 2006 the average yield of vegetables was 349.0 quintals, in 2018 - 271.0 quintals, in Surkhandarya region - 376.0 and 212.0 quintals, respectively. The analysis of data confirms that the cultivation of vegetable products in almost all regions of the country does not have a stable growth rate and the existing potential is not fully and effectively used.

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Table 1.

The main indicators of vegetable production in the Republic of Uzbekistan (2006-2018) [1]

Regions	Vegetable field, thousand.			Productivity, in/ts			Gross yield, thousand tons		
	2006 year	2012 year	2018 year	2006 year	2012 year	2018 year	2006 year	2012 year	2018 year
The Republic of Karakalpakstan	7,4	6,8	12,0	135	155	183,3	99,6	145,5	288,5
Andijon	12,8	14,5	20,4	426	272	301,0	596,1	952,4	1410,6
Bukhara	7,8	8,3	9,8	335	249	259,0	261,6	391,2	578,7
Jizzakh	11,7	8,6	9,6	150	199	208,4	175,3	258,2	377,2
Kashkadarya	12,4	14,4	17,6	176	220	255,1	218,5	362,8	497,3
Navoi	3,0	3,3	5,4	349	252	271,7	104,6	171,3	295,2
Namangan	11,1	13,0	15,8	302	229	270,1	334,8	488,7	662,5
Samarkand	23,2	25,7	28,4	359	349	330,9	833,8	1149,2	1563,7
Surkhandarya	9,3	13,2	14,8	376	237	212,6	349,7	540,1	867,0
Syrdarya	4,7	4,3	5,8	274	258	270,7	128,8	195,7	293,8
Tashkent	31,3	31,8	35,2	300	266	274,2	937,7	1418,0	1942,7
Tashkent	12,3	17,0	20,8	290	232	282,2	357,1	520,1	784,1
Khorezm	11,6	12,2	16,4	235	234	242,3	272,3	400,5	566,8
Total across the country	**159,8**	**175,4**	**212,0**	**282**	**263**	**298,3**	**4669,9**	**6994,0**	**10128,1**

This situation is reflected in the picture below. In other words, according to the medical norm, the consumption of 146 kg of vegetables per capita is 141.0 kg / person in the Republic of Karakalpakstan and 182.7 kg / person in Kashkadarya region, while in Andijan region - 538.8 kg per capita, in Samarkand 484.1 kg of vegetables were produced in the region. This also indicates that the process of development of the vegetable sector of the country gives different results in different regions.

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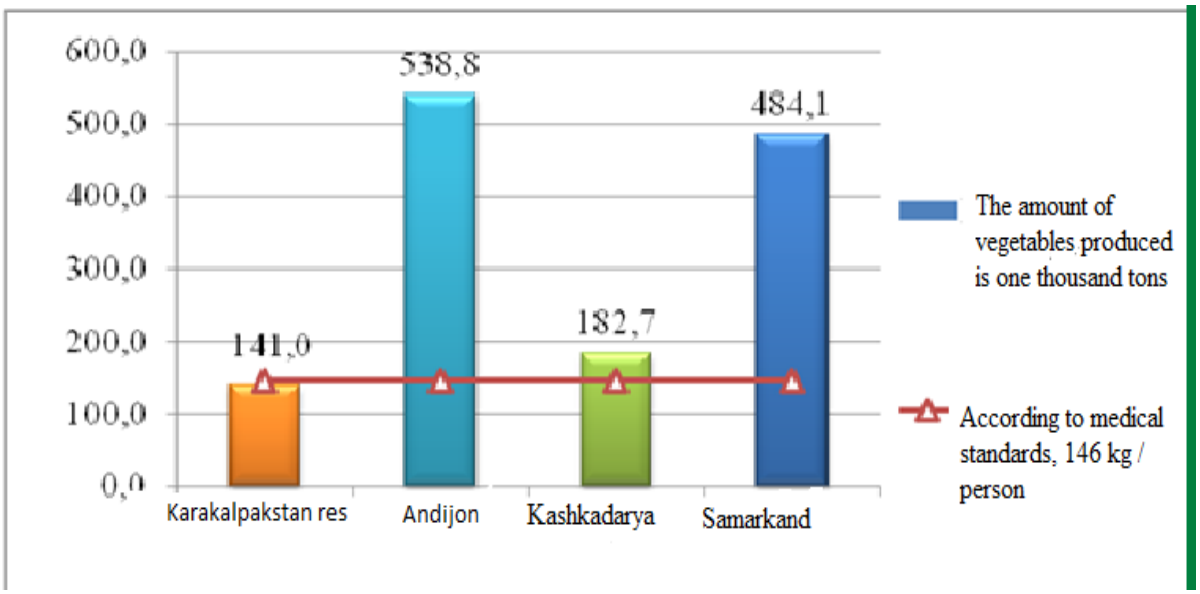

Figure 1. Status of vegetable production in some regions of the country in relation to medical standards (2018).

The high level of supply of vegetable products in Andijan region, where the monograph was conducted, in comparison with the standards recommended by medicine, indicates that there are untapped opportunities for processing and export of vegetables in the region. Because today a certain part of vegetable production falls on private farms, mainly farms, farms and private entrepreneurs (now the main producers of vegetables in modern greenhouses are private entrepreneurs).

In the region, vegetable products are grown mainly as an auxiliary crop. In 2016, 51.2% of gross vegetable production was grown as secondary, 5.9% as intermediate, 41.2% as main, and in 2015 53.8% as secondary, 6.4% as intermediate and 39.8 % as main crops. In addition, 2.1% of vegetables grown in 2013 were for seed, 9.8% for processing, 1.6% for export, 86.5% for the domestic market, and in 2018, 2.1% for seed and 11.6% for processing. 3.6% was directed to exports and 82.7% to the domestic market and storage (Table 2).

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Table 2.

Dynamics of cultivation and distribution of vegetable products in Andijan region [1].

Indicators		2016		2017		2018		In 2018 compared to 2016	
		volume (thousand tons)	relative to total,%	volume (thousand tons)	relative to total,%	volume (thousand tons)	relative to total,%	(+,-)	%
Gross product		**1203,4**	**100**	**1308,9**	**100**	**1410,6**	**100**	**207,2**	**117,2**
Sh.j.	Basic	495,8	41,2	564,3	43,1	562,1	39,8	127,9	125,8
	Intermediate	71,0	5,9	81,6	6,2	90,8	6,4	18,7	126,4
	repetitive	636,6	52,9	662,9	50,7	761,7	53,8	60,4	109,5
Distribution									
For seeds		25,2	2.1	28,0	2,1	29,8	2,1	4,5	117,9
To processing enterprises		117,9	9,8	135,3	10,3	163,7	11,6	45,7	138,8
For export		19,2	1,6	18,3	1,4	502,	3,6	30,9	260,9
To Tashkent city and other fairs		6,0	0,5	7,9	0,6	0,3	0,2	-3,3	44,5
To health, educational and other institutions		4,8	0,4	3,3	0,3	9,6	0,7	4,8	200,6
For the domestic market and consumption (with added storage)		1030,1	85,6	1116,0	85,3	1154,5	81,8	124,4	112,1

The role of greenhouse vegetable growing in the uninterrupted supply of the population of the republic with vegetable products is significant and its development is of great importance.

During the period from 2008 to 2018, there is a sharp increase in greenhouse areas in the country, in particular, greenhouse areas in Khorezm region 121 times (96.3 hectares), Syrdarya region 57 times (252.2 hectares), Navoi region 27.4 times (258.9 hectares).),

Increased 25.5 times (446.3 hectares) in Andijan region, 18.6 times (492.4 hectares) in Fergana region [1; 4].

Today, the cultivation of vegetables in greenhouses depends only on forms of management based on private property, that

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is, farms and dekhkans, private land plots and private entrepreneurs. It should be noted that in most of these forms of management, partially glazed film greenhouses of local production are used.

In particular, as of 2018, there are a total of 35052 greenhouses in the country with a total area of 8052.2 hectares, including 768 glass greenhouses (area 362.4 hectares), 34284 film greenhouses (area 7689.8 hectares) [1; 5].

They are divided into heated (main body) and non-heated (Chinese technology) film types, respectively. There are also hydroponic greenhouses, covered with a two-layer film, built according to Korean technology, heated by air and operating according to modern Dutch, Israeli technologies and with very little small-sized nutrient substrate.

Due to the large amount of funds required for the construction of glass greenhouses, the share of this type of greenhouses in the total number of greenhouses is only 2.2%. The number of film greenhouses is 97.8%, and the share of total greenhouse areas is 95.5%.

It can be concluded from the results of a comparative assessment of the use of greenhouse types of farming forms. However, the analysis shows that the number of greenhouses for growing vegetables (89.4%) and the bulk of the volume falls on the share of farms and household plots. Farms (6.4%) and private entrepreneurs (4.2%) still grow vegetables in greenhouses. Also, the average yield of tomatoes was 511.2 t / ha, the average yield of cucumbers was 464.2 t / ha, of which tomatoes, respectively, on farms - 625.8 t / ha, cucumbers - 518.6 t. / ha, in farms and household plots - 434.3 t / ha, cucumbers - 322.1 t / ha, and in private entrepreneurs - 634.9 t / ha, cucumbers - 967.8 t / ha. corresponds to.

When growing vegetables in a greenhouse, it can be seen that farms and private entrepreneurs achieve higher yields than farms and private farms, thanks to the effective use of modern technologies, new varieties, hybrid seeds and similar agricultural technologies.

It should be noted that today much attention is paid to the development of greenhouse vegetables based on modern technologies.

CONCLUSION

In short, the use of modern technology is essential to ensure the sustainable development of greenhouse vegetables. The introduction of modern technologies is determined by the state's provision of a wide range of benefits and opportunities based on the support of producers. This, in turn, not only ensures the sustainability of growing greenhouse vegetables, but also provides the population with fresh vegetables at stable prices throughout the year, expanding the possibilities for increasing foreign exchange earnings by increasing the export potential of these products.

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