да олиб борилаётган иқтисодий ислоҳотларнинг навбатдаги босқичи назарий асосларини такомиллаштириш; аграр соҳага мослаштирилган давлат инновацион сиёсатини ишлаб чиқиш; товар маҳсулоти етиштирувчи фермер ва деҳқон хўжаликлари учун янги техника ва технология ишлаб чиқиш; соҳа харажатларни бошқаришни такомиллаштириш, соҳа маҳсулотлари рақобардошлигини ошириш; аграр соҳаси ривожланиши барқарорлигини таъминлаш асосида олиб бориш лозим.

Тадқиқот натижаси аграр соҳани инновацион ривожлантиришни инновацион қўллаб-қувватлашнинг назарий умумлаштирилиши ва уларни илмий муаммоларини янги ечими сифатида илмий-амалий натижалар асосида фойдаланиш бўйича тавсиялар қуйидагилардан иборат. Қишлоқ хўжалигида инновацион фаолият илғор техник-технологик, ташкилий-иқтисодий ечимларини жорий этиш, юқори маҳсулдор навлар, чорва моллари, элита уруғлари, юқори самарали қишлоқ хўжалик машиналари ва агрегатларини яратишнинг мураккаб жараёни сифатида тавсифланади. Қишлоқ хўжалигини инновацион ривожланиш йўлига йўналтирилганлиги корхонани, фермер ва деҳқон хўжаликларини янгиликка бўлган қобилияти, имкониятларини ва тайёрлигини таҳлил қилиш орқали аниқлаш мумкин.

Аграр соҳани инновацион ривожлантириш стратегияси юқори технологияларга асосланган ишлаб чиқаришни қўллаш, ишлаб чиқаришнинг энергия, моддий ва меҳнат харажатларини камайтириш, қишлоқ хўжалиги маҳсулотларининг рақобатбардошлигини ошириш, инновацион илмий маҳсулотни тарғиб қилиш, ахборот-маслаҳат тизимларини яратишни назарда тутади.

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ҚИШЛОҚ ҲУДУДЛАРИ ТОМОРҚА ХЎЖАЛИК ФАОЛИЯТИДАН КЕЛАДИГАН ДАРОМАДЛАРГА ТАЪСИР ЭТУВЧИ РЕСУРСЛАР ВА ХИЗМАТЛАРНИ ИҚТИСОДИЙ БАҲОЛАШ

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Аннотация. *Мазкур илмий тадқиқот ишида қишлоқ ҳудудларида томорқа хўжалик фаолиятидан келадиган даромадларнинг ўрни ва аҳамияти ўрганилган. Шунингдек, томорқа хўжалик фаолиятидан келадиган даромадларнинг шаклланишига таъсир этувчи омилларга tobit регрессияси орқали иқтисодий баҳо берилган ва уларнинг мултиколлинеарлигини аниқлашда VIF (Variance inflation factor) тест ўтказилган. Таҳлилда Самарқанд вилоятининг 4 та туманида 170 та томорқа ер эгаларидан ўтказилган аноним сўровнома маълумотларидан фойдаланилган. Томорқа хўжаликлари фаолиятидан келадиган даромадларнинг ошишида, томорқа экин майдони ҳажми, органик ва минерал ўғитлар сарфи, уруғлик ва кўчат харажатлари, экин майдонини экишга таёрлаш харажатлари ҳамда томорқа хўжалигидан "Томорқа хизмати" МЧЖгача ва минерал ўғит шаҳобчасигача бўлган масофа ҳамда томорқа ер эгалари ёши 1 фоиз (p<.01)ликда статистик муҳим аҳамиятга эгалиги аниқланган.*

Шунингдек, томорқа ер эгаларининг экин майдонларини суғоришда сув таъминотидан қониқиши, томорқа ер эгаси маълумоти, 0-3 ёшгача бўлган оила аъзолар сони 5 фоиз (p<.05)ликда статистик муҳим аҳамиятга эгалиги илмий асосланган. Бироқ, томорқа хўжаликлари фаолиятидан келадиган даромадларни ошишида томорқа ер эгалари жинси ва оила аъзолари сони статистик муҳим аҳамиятга эга эмаслиги аниқланди. Олинган натижалар асосида, қишлоқ ҳудудлари аҳолиси томорқа хўжаликлари фаолиятидан келадиган даромадларни ошириш борасида илмий асосланган таклифлар ишлаб чиқилган.

Калит сўзлар: *томорқа хўжаликлари, томорқа хўжалик фаолиятидан келадиган даромадлар, қишлоқ хўжалик маҳсулотлари, tobit регрессия модел, VIF тест.*

ЭКОНОМИЧЕСКАЯ ОЦЕНКА РЕСУРСОВ И УСЛУГ, ВЛИЯЮЩИХ НА ДОХОДЫ, ПОЛУЧАЕМЫЕ ОТ СЕЛЬСКОХОЗЯЙСТВЕННОЙ ДЕЯТЕЛЬНОСТИ В СЕЛЬСКИХ РАЙОНАХ

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Аннотация. *В данной научно-исследовательской работе изучены роль и значение доходов от приусадебной деятельности населения сельских территорий, их особенности. Также была проведена экономическая оценка факторов, влияющих на формирование доходов от деятельности на приусадебных участках, с помощью регрессии тобита и проведен тест VIF (Variance inflation factor) для определения их мультиколлинеарности. В анализе использованы данные анонимного опроса 170 владельцев приусадебных участков в 4 районах Самаркандской области. При увеличении доходов от деятельности приусадебных хозяйств возраст владельцев приусадебных участков, объем посевных площадей приусадебных участков, расход органических и минеральных удобрений, затраты на семена и рассаду, расходы на подготовку посевных площадей к посеву и расстояние от приусадебного хозяйства до ООО "Томорка хизмати" и пункта минеральных удобрений увеличиваются на 1 процент (p<.01) установлено статистически значимое значение в лик. Кроме того, образование владельца приусадебного участка, количество членов семьи в возрасте от 0 до 3 лет, удовлетворенность владельцев приусадебного участка водоснабжением при орошении посевных площадей составляет 5 процентов (p<.05) научно обоснована статистическая значимость в лик. Однако было установлено, что пол владельцев приусадебных участков и количество членов семьи статистически не важны для увеличения доходов от деятельности приусадебных участков. На основе полученных результатов разработаны научно обоснованные предложения по увеличению доходов населения сельских территорий от деятельности приусадебных хозяйств.*

Ключевые слова: *приусадебные участки, доход от приусадебной деятельности, сельскохозяйственная продукция, модель регрессии tobit, Vif test.*

THE ECONOMIC ASSESSMENT OF RESOURCES AND SERVICES AFFECTING TOMORKA (SMALL HOUSEHOLDS) FARM IN RURAL AREAS AND THEIR INCOME

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Abstract. *The research examines the role and importance of income from tomorka (small household) farm activities in rural areas. The factors influencing the formation of income from tomorka farm activities were also assessed economically through tobit regression model, and a VIF (Variance inflation factor) test was performed to determine their multicollinearity. Anonymous surveys of 170 landowners in 4 districts of Samarkand region have been used in the analysis. The increase in income from tomorka farm is due to the increase in farmland area, consumption of organic and mineral fertilizers, seed and seedling costs, crop preparation costs, and the distance from tomorka farm to 'Tomorqa Xizmati' LLC and mineral fertilizer outlets, and the age of landowners is 1 percent (p). <.01) was found to be statistically significant. It is also scientifically substantiated that the satisfaction of landowners with water supply in irrigating their arable lands, the information of the landowner, the presence of family members aged 0-3 years are statistically significant at 5% (p <.05). However, it was found that the gender and number of family members of landowners were not statistically significant in increasing the income from the activities of tomorka farm. Based on the results obtained, scientifically based proposals have been developed to increase the income of the rural population from tomorka farm activities.*

Key words: *tomorka farm, income from tomorka farm activities, agricultural products, tobit regression model, VIF test.*

Introduction. For a long time, rural development policy[1], especially measures aimed at improving the welfare of the population in rural areas, reducing poverty, was reflected in the strategy of agricultural development actions[2]. Almost 46 percent of the world population lives in rural areas,[3] and poverty has declined significantly over the past two decades. However, the pandemic period had a negative impact on the well-being of the world population, with world income decled and by 2021 the number of poor people has been estimated at 150 million[4]. 80 percent of the world's poor live in rural areas[5] and their income from basic activities remains dependent on agricultural activities[6].

In this regard, it is important to diversify risks in agricultural activities[7], changes in seasonal incomes and financing the purchase of agricultural products (resources), sustainable development of production efficiency. The sustainable development of small household farms is important in ensuring the food security of population, preserving and protecting the environment, and reducing poverty[8]. However, the fact that about 1.5 billion rural people live on small households farm activities[9] requires the identification of opportunities to make efficient use of available resources to meet the growing needs of the world population.

Tomorka (small household) farm is a labor activity related to the cultivation (processing) of agricultural products on private plots of land for family economic needs, for sale on the market [10]. Tomorka farm business is not considered, it does not require state registration. However, a person may obtain the status of a self-employed person in accordance with the procedure established by the employment legislation.

Tomorka farms are the main source of income for the population living in remote rural areas, as well as making a significant contribution to ensuring food security of the population of the country. The production activity of tomorka farm and the level of interest in the result obtained from it is higher than other forms of agricultural activity[11]. As a result, in 2019, vegetables, melons, potatoes, fruits and grapes were grown in the main part of the tomorka farms in the country, the volume of production amounted to 19,153.5 thousand tons. 70.7 % of these vegetables, 83.7 % of potatoes, 59.7 % of melons, 60 % of fruits and 56.2 % of grapes are grown by tomorka farms landowners.

However, at a time when the average yield of vegetables was 27.6 tons per hectare in tomorka farms, this figure was 21.0 tons per hectare in farmers, 24.6:17.0 tons in potatoes and 24.9: 13.4 tons in melons. tons, in fruit growing – 20.5:8.6 tons, in viticulture – 22.7:11.5 tons.

While farmers are superior tomorka farms in fertilizer, water, machinery, capital, and other necessary supplies, the average yield from farmer is lower than tomorka farm.

On April 26, 2018, the President of the Respublic of Uzbekistan has established a management system to ensure the efficient use of households and full planting of high-yielding crops. As a result, all conditions have been created for the citizens to use their tomorka farm efficiently and earn income and supply their crops first to their families and then to the farmers' markets with cheap and high-quality agricultural products. Also, the Law of the Republic of Uzbekistan "On tomorka farms", approved on April 1, 2021, further strengthened the legal interests of households. Although the average land area in the country at the expense of tomorka farm is 0.089 hectares, the efficiency of use of more than 480 thousand hectares of arable land remains low[12]. In addition, 63.3 % of the able-bodied population in rural areas is employed non-officially, and more than 15 % of them are poor [13]. However, there are opportunities to grow agricultural products in all household areas, the efficiency of their use remains low.

The share of tomorka farms in the production of agricultural products in Uzbekistan is 70.1 %[14], which plays an important role in the country's economy. Today, the number of tomorka farms is more than 5 million, which is 1.5 times more than in 2000. The area of agricultural land in Uzbekistan is 3686.7 thousand hectares, of which 13.0% is arable land used by tomorka farms.

The main purpose of our research is to develop a scientifically based conclusion and proposal by conducting an economic assessment of the factors affecting the income from the activities of tomorka farms.

Research methodology. Based on the purpose of the research, a public survey was conducted in tomorka farm in Samarkand, Jambay, Taylak and Urgut districts, which have achieved high results in agriculture in the Samarkand region.

43 respondents from Samarkand (12) district, 45 respondents from Jambay (3) district, 44 respondents from Taylak (13) district and 38 respondents from Urgut (14) district took part in the social survey (Figure 1). The survey took into account the income from tomorka farm, their age, level of education, number of family members, crop area, resource consumption, the status of water resources, the distance to the service station as factors directly affecting tomorka farm activities (Table 1).

The respondents who planned to sell agricultural products (potatoes, fruits, vegetables, grapes) grown on tomorka farmland are participated in the survey. However, an unconventional approach was used in determining the income from agricultural products grown for the needs of the family in tomorka farm crop area. In this case, the expenses that could be spent by the family members on food consumption in the absence of agricultural production in the area of household crops were considered by tomorka farm landowners as income. As a result, 102 out of 170 respondents, or 60%, earned up to 10 million sums a year from tomorka farm crops. However, 68 or 40% of the participants had up to 5 acres of farmland.

Table 1

Description of respondents*

The name of the variable	Groups	Respondents	
		Number	Percent
Tomorka farm income from arable land (income)	1=min/10 million sum	102	60,0
	2=10/20 million sum	60	35,3
	3=21/max million sum	8	4,7
Tomorka farm crop area (crop_area)	1=min/5 sotix	68	40,0
	2=6/10 sotix	72	42,4
	3=11/max sotix	30	17,6
Cost of organic fertilizer (organic_fer)	1=min/100 thousand sum	51	30,0
	2=101/300 thousand sum	78	45,9
	3=301/max thousand sum	41	24,1
Cost of mineral fertilizers (mineral_fer)	1=min/50 thousand sum	54	31,8
	2=51/120 thousand sum	52	30,6
	3=120/max thousand sum	64	37,6
Cost of seeds and seedlings (ss)	1=min/300 thousand sum	99	58,2
	2=301/1000 thousand sum	65	38,3
	3=1001/max thousand sum	6	3,5
Costs of field preparation (field_pre)	1=min/150 thousand sum	80	47,1
	2=151/400 thousand sum	74	43,5
	3=401/max thousand sum	16	9,4
Distance to 'Tomorqa Xizmati' LLC (TX_LLC)	0 = max /10.1 km (very long)	20	11,8
	1 = 10 / 5.1 km (long)	38	22,3
	2 = 5 / 3.1 km (medium)	40	23,5
	3 = 3 / 1.1 km (close)	43	25,3
	4 = min / 1 km (very close)	29	17,1
Distance to mineral fertilizer station (dis_mineral_fer)	0 = max / 10.1 km (very long)	23	13,5
	1 = 10 / 5.1 km (long)	36	21,2
	2 = 5 / 3.1 km (medium)	31	18,2
	3 = 3 / 1.1 km (close)	50	29,4
	4 = min / 1 km (very close)	30	17,7
Satisfaction with water supply in the irrigation (water_sup)	0 – Yes	100	58,8
	1 – No	70	41,2
Age of small tomorka farm landowner (age)	1 = min / 40 age	44	25,9
	2 = 41/50 age	51	30,0
	3 = 51/60 age	59	34,7
	4 = 61 / max age	16	9,4
Gender of small household (tomorka) landowner (gender)	0 - female	14	8,2
	1 - male	156	91,8
Education level of tomorka farm landowner (education)	0–general secondary education	46	27,1
	1 – secondary specialized, vocational education	90	52,9
	2 – higher education	34	20,0
Presence of family members aged 0-3 years (0-3 age)	0 – Yes	93	54,7
	1 – No	77	45,3
Number of family members (members)	3 members	2	1,2
	4 members	30	17,7
	5 members	41	24,1
	6 members	60	35,3
	7 members	23	13,5
	8 members	10	5,9
	9 members	4	2,3

** Survey data conducted by the author*

In most cases, income from tomorka farm arable land depends on the consumption of resources directly involved in the production process. In the case of tomorka farm, the costs associated with the cultivation of agricultural products, organic and mineral fertilizers, seeds and seedlings, as well as the preparation of the field for planting were taken in value form. Also, since organic fertilizer for tomorka farm crops is obtained from livestock raised on their tomorka farm, its cost is expressed in terms of the selling price of organic fertilizer by the household landowner. Crop area preparation a tomorka farm for planting, crop processing and other work processes were also evaluated in the price of services in the area.

We did not have clear information on the fact that tomorka farm landowners who participated in the social survey regularly used the services of

'Tomorqa Xizmati' LLC and mineral fertilizer sales outlets to grow agricultural products on household arable land. However, the distance from the crop areas of tomorka farm to these services was formulated in the survey. Timely implementation of agrotechnical measures in the cultivation of agricultural products has a positive effect on crop yields. In particular, the satisfaction of tomorka farm landowners with water supply when irrigating crops also affects crop yields. 100 respondents or 58.8% expressed dissatisfaction with the water supply. However, we do not know how this situation affected the income from household crop area.

59 respondents or 34.7 percent of tomorka farm landowners were 51-60 years old. However, we do not have information on how the age of tomorka farm landowners affects income from household crop area. However, the presence of children under the age of 0-3 in the family may affect income from a tomorka farm, which may limit the labor costs of family members in tomorka farm activities.

Improving production efficiency in tomorka farm, the introduction of innovations in the activity may depend on the knowledge (level of education) of tomorka farm landowners. In particular, in the social survey, tomorka farm landowners data were divided into general secondary, secondary special, and higher education categories. 80 percent of the respondents in the survey have general secondary and secondary special education, and 20 percent have higher education. That is, in rural areas, tomorka farm landowners with higher education accounted for 1/5 of the household landowners.

An increase in the number of family members in a tomorka farm can affect the employment of able-bodied family members in non-agricultural activities, limiting their employment in tomorka farms. Household landowners accounted for 60 people, or 35.3 percent, of 6 family members. However, we can know from the model analysis how the impact of family members on income from tomorka farm crop area will be.

Income from household arable land is directly related to tomorka farm arable land, with tomorka farm landowners earning an average of 9.605 million soums from an average of 7,670 acres of arable land.

In econometric analysis, these indicators were expressed in quantitative terms. Also, the age of household landowners, the number of family members and the consumption of resources (organic and mineral fertilizers, seeds and seedlings, preparation of arable land for planting) were expressed in quantitative (value) terms. However, the distance to "Tomorqa Xizmati" LLC and the mineral fertilizer station was expressed in terms of quality to eliminate "bias" in the use of the model. Also, the quality of household landowners was expressed in terms of gender, education, availability of family members under 0-3 years of age, and satisfaction or dissatisfaction with water supply when irrigating household crops.

The level of education of household landowners is important in conducting productive activities in tomorka farm or in the efficient use of resources. However, an increase in the number of family members in a household can lead to a particular family member working in another field or a decrease in labor productivity on a farm. According to a survey of respondents, the largest number of family members in households was 9.

Since the dependent variable (Y) is expressed in terms of quantity, the tobit model was used to economically assess the extent to which an independent variable (X) affects it, i.e., to analyze the factors affecting income from a tomorka farm[23]. The tobit model is useful in cases where the dependent variable has the property of moving to zero or another limit separately. It is not only required to include all observations in the model, but also to evaluate the responses obtained as a result of the change of each independent variable[24]. The mathematical expression of this model is expressed as follows [25].

$$\rho_i^* = \beta_0 + \sum_{j=1}^{i} \beta_j x_{ij} + \varepsilon_i$$

$$\rho_i = \rho_i^* \qquad 0 \le p_i^* \le 1$$

$$\rho_i = 0 \qquad p_i^* < 0$$

$$\rho_i = 1 \qquad p_i^* > 1$$

In this case, ρ_i^* – unforeseen variables;

ρ_i – dependent variable;

x_{ij} – independent variable;

β_0 – invariable;

β_j – correlation vector coefficient;

Using this method, an economic assessment was made based on the results of the analysis of income from tomorka farms and the factors influencing it in the program "STATA-16".

To ensure that our results are consistent, the VIF (Variance inflation factor) test for independent variables in determining multicollinearity was performed[22]. The VIF test is a measure of the amount of multicollinearity in a set of many regressive variables. Mathematically, for a regression model variable, VIF is equal to the ratio of the total model variance to the variance of the model containing only one independent variable. This ratio is calculated for each independent variable. A high VIF indicates that the dependent independent variable is interrelated with other variables in the model. However, according to the results of the VIF test obtained from us, its average value is 2,595 indicating that there is no multicollinearity between the variables.

The results of the analysis obtained do not

mean that tomorka farm landowners have effectively used the costs incurred in growing agricultural products. This is because the results of the analysis provide a statistically economic assessment of the importance of the resources expended in increasing the income from tomorka farms.

Analysis and results. According to the results of the analysis (Table 4), the increase in income from tomorka farms is due to the age of household landowners, household crop area, consumption of organic and mineral fertilizers, seed and seedling expenditures, crop preparation costs, and land and mineral resources, the distance to the fertilizer station is statistically significant at 1 percent (p <.01).

Table 4

Economic assessment of factors affecting income from small household

Income	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
crop_area	.352	.058	6.13	0	.239	.466	***
organic_fer	.008	.002	4.77	0	.004	.011	***
mineral_fer	.017	.003	5.47	0	.011	.023	***
ss	.004	.001	4.65	0	.002	.006	***
field_pre	.006	.001	3.91	0	.003	.008	***
TX_ LLC	.44	.159	2.77	.006	.126	.753	***
dis_min_fer	.474	.15	3.16	.002	.177	.77	***
water_sup	.671	.303	2.21	.028	.072	1.27	**
age	.063	.018	3.47	.001	.027	.099	***
education	.452	.225	2.01	.046	.007	.897	**
gender	-.161	.455	-0.35	.724	-1.06	.738	
0-3 age	-.597	.269	-2.22	.028	-1.128	-.067	**
members	.161	.118	1.37	.173	-.071	.394	
Invariable	-5.307	.966	-5.50	0	-7.214	-3.4	***
var(e.income)	2.535	.275	.b	.b	2.046	3.14	

Mean dependent var	9.605	SD dependent var	6.489
Pseudo r-squared	0.427	Number of obs	170.000
Chi-square	476.733	Prob > chi2	0.000
Akaike crit. (AIC)	670.554	Bayesian crit. (BIC)	717.591

**** p<.01, ** p<.05, * p<.1*
*Survey data conducted by the author

However, the gender and number of family members of household landowners are not statistically significant. However, the presence of family members aged 0-3 years is statistically significant at 5% (p <.05), and an increase in family members aged 0-3 years by 1 person reduces income from tomorka farms by 59.7%. In other words, the employment of able-bodied family members with children under the age of 0-3 is due to the reduction of labor costs in tomorka farms. Also, the data of tomorka farm landowners and the satisfaction of household landowners with water supply for crop irrigation are statistically significant at 5 percent (p <.05).

According to these results, the increase in the age of household landowners by 1 year increases the income from tomorka farms by 6.3%, that is, the increase in the age of household landowners increases the income. Retired, able-bodied household landowners may also see an increase in income. However, income may be reduced for landowners of retirement age who are unable to work. Income from tomorka farms depends on the size of the household crop area, and an increase in household crop area per unit by landowners increases the income from it by 35.2 percent.

However, the size of household crop area is limited and the possibility of extensive reproduction is low. This is because household landowners may be affected by the size of housing, infrastructure, and construction facilities to feed livestock in the farmland. However, intensive use of household arable land is associated with organic and mineral fertilizers, fertile seeds and seedlings, and crop preparation. A corresponding increase in the consumption of organic and mineral fertilizers by household landowners per unit can increase income from tomorka farms by 0.8:1.7 percent. In addition, an increase in the consumption of seeds and seedlings by household landowners will have a positive effect on the increase in income from tomorka farms by 0.4% and the cost of land preparation by 0.6%.

The increase in income from tomorka farms is directly related to the distance to the 'Tomorqa Xizmati' LLC and the mineral fertilizer sludge. That is, a 1-unit reduction in the distance to 'Tomorqa Xizmat' LLC and the mineral fertilizer plant could increase the income from tomorka farm by 44: 47.4 percent, respectively.

The Strategy for Agricultural Development for 2020-2030[26] aims to diversify production,

improve land and water relations, create a favorable agribusiness environment and high value chain, support the development of cooperative relations, expand market mechanisms, information and communication technologies, as well as the effective use of scientific achievements and capacity building.

Conclusions and suggestions. Agricultural products and incomes from tomorka farm farms play an important role in meeting the demand for food, developing rural areas, providing employment and improving the welfare of the population, as well as reducing poverty.

In the analysis of income from the activities of dehkan and tomorka farms activities, anonymous surveys were conducted in 170 tomorka farms in 4 districts of Samarkand region, where agriculture is relatively developed. It is important to increase the volume of agricultural production and income from tomorka farm farms through the efficient use of resources. Based on this, the tobit model was used in the economic assessment of the factors influencing the income from agricultural products obtained by tomorka farm landowners.

In rural areas, an increase in the volume of arable lands of tomorka farm (p <.01) by 1 unit increases the income from it by 35.2%. In addition, an increase in the consumption of organic and mineral fertilizers by 1 unit in tomorka farm will have a positive impact on the increase in income from tomorka farms by 0.8:1.7 percent, respectively. Expenditure on seeds and seedlings is statistically significant (p <.01) in obtaining high quality crops in tomorka farms, and a 1 unit increase in expenditure has a positive effect on a 0.4 percent increase in income from it. The cost of preparing the tomorka farms crop area for planting is also statistically significant (p <.01), with a 1 unit in expenditure increases revenue by 0.6 percent. It was found that the service sector has a statistical role in increasing the income from tomorka farms activities. For instance, the reduction of the distance (p <.01) to the 'Tomorqa Xizmati' LLC and the mineral fertilizer service by an average of 1 unit to the increase in income from tomorka farms is 44.0:47 percent, respectively. Household landowners' satisfaction with water supply in irrigating their farmland was statistically significant (p <.05) and was found to have a positive impact on a 67.1% increase in income from tomorka farm activities.

An average 1-year increase in the age of tomorka farm landowners (p <.01) increases income from tomorka farms activities by 6.3 percent, and (p <.05) by 45.2 percent. However, the gender and number of family members of household landowners found that they were not statistically significant in increasing income from tomorka farms activities. The presence of family members aged 0–3 years (p <.05) reduces income from tomorka farms by 59.7%.

According to the analysis, in 4 districts of Samarkand region there is an opportunity to increase income of tomorka farms. In the future, the focus of tomorka farms landowners on improving their skills, literacy, increasing soil fertility, use of high-yielding varieties, use of mineral and organic fertilizers will have a positive impact on increasing incomes from tomorka farms. It also requires the government to expand the activities of 'Tomorqa Xizmati' LLC and mineral fertilizer sales outlets in rural areas, to develop effective measures for the use of water resources.

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МЕВА-САБЗАВОТЧИЛИК МАҲСУЛОТЛАРИ ИШЛАБ ЧИҚАРИШ ФАОЛИЯТИНИ ИҚТИСОДИЙ - СТАТИСТИК ТАҲЛИЛИ

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Аннотация: *ушбу мақолада республикамиз ва унинг ҳудудларида мева –сабзавотчилик ва узум маҳсулотларини етиштириш, уларнинг иқтисодий-статистик таҳлили, Тошкент вилояти фермер хўжаликларида мева-сабзавотчилик соҳасидаги муаммолар ва уларни бартараф этиш йўллари баён этилган.*

Таянч иборалар: *қишлоқ хўжалиги, қишлоқ хўжалиги маҳсулоти, ялпи ички маҳсулот, ялпи ҳудудий маҳсулот, деҳқон хўжалиги, чорвачилик, таркибий ўзгаришлар, инвестиция, ҳудуд иқтисодиёти, иқтисодий-статистик таҳлил, аграр ислоҳотлар, ижтимоий-иқтисодий жараёнлар.*

ЭКОНОМИКО-СТАТИСТИЧЕСКИЙ АНАЛИЗ ПРОИЗВОДСТВА ФРУКТОВ И ОВОЩЕЙ

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Аннотация: *в данной статье описывается выращивание плодоовощной продукции и винограда в республике и ее регионах, их экономико-статистический анализ, проблемы в области плодоовощной продукции в хозяйствах Ташкентской области и пути их преодоления.*

Ключевые слова: *сельское хозяйство, сельскохозяйственное производство, валовой внутренний продукт, валовой региональный продукт, сельское хозяйство, животноводство, структурные изменения, инвестиции, региональная экономика, экономико-статистический анализ, аграрная реформа, социально-экономические процессы.*

ECONOMIC AND STATISTICAL ANALYSIS OF FRUIT AND VEGETABLE PRODUCTION

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Annotation: *This article describes the cultivation of fruits and vegetables and grapes in the country and its regions, their economic and statistical analysis, the problems in the field of fruit and vegetables in farms of Tashkent region and ways to overcome them.*

Keywords: *agriculture, agricultural production, gross domestic product, gross regional product, agriculture, animal husbandry, structural changes, investments, regional economy, economic and statistical analysis, agrarian reform, socio-economic processes.*