



UDC: 311.213

## STATISTICAL ANALYSIS OF THE DEVELOPMENT OF AGRICULTURE IN THE NATIONAL ECONOMY

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DOI No: 10.36713/epra14560

Article DOI: <https://doi.org/10.36713/epra14560>

*This article explains in detail the theoretical and technical aspects and practical results of the level of development of the industry in the regions and its impact on all macroeconomic indicators as a result of reforms carried out in the agricultural sector of country. Also considered are ways to use innovative factors in solving the problem of increasing competitiveness of the national economy in the context of structural changes taking place agriculture and trends in the development of statistical indicators of the industry, accelerating globalization processes, scientifically substantiated. At the same time the article presents scientific proposals for state support of enterprises and organizations working in the field of agriculture and diversified farms, its sustainable development and increasing the level of competitiveness at the global level. To apply the experience of the developed countries of the world and the peculiarities of our country to the national economy, various statistical methods were used.*

**KEY WORDS:** *macroeconomics, world economic development, gross domestic product, gross regional product, agriculture, agricultural products, innovations, digital economy, digital technologies, agriculture, animal husbandry, diversified farms, individual entrepreneur agrarian reforms, statistical methods, econometric models, medium-term forecasting methods.*

**INTRODUCTION**

New product, service and knowledge based on world experience creation, implementation and wide distribution of technological processes, production, has become an important factor in the volume of employment and investments, and the product improving quality, saving labor and material costs, labor productivity increase, form an intensive model of production organization and efficiency increase requirement is enough. Country competitiveness grow up of going important factor his step by step stage innovative development to the way pass with is based on Scientists to his opinion according to XXI century different of countries strategic in terms of important was problems solution in doing important role – to knowledge based on economy or innovative economy.

Over the past 15 years, the United States and Western in Europe innovations in the field those who work the number two times South-East in Asia while 4 to the bar increased. Europe in the Union innovative active industry of enterprises share 56 from percent more organize is doing. of the world developed in countries of gross domestic product 75 percentage exactly innovations at the expense of right is coming [16].

Global climate change conditions in perspective food products for the sharp increase in world demand and limited natural resources competition of struggle aggravation with bump into this to changes adaptation Demand is enough. Innovations, grow up going demand satisfy and food products stable work release, processing to give

distribution and consumption to do waste to lose unifying and food system, that name received network set to expand who help important tools as manifestation will be. Scientists according to estimates, by 2050, the population of the planet Earth will reach 9.6 billion, produce products compared to today to provide them with food it will be necessary to increase the output by 60 percent. If you pay attention to foreign trends 1 million annually. number of innovations created per population (recognized in foreign patent offices): in the USA - 261.7; in Japan - 213.0; in Germany - 206.3; in France - 171.9; In Russia, it is 1.3 [16].

Today's in the day Uzbekistan in the republic science, education and work to ensure wider integration of output, to create new knowledge and to apply innovative technologies, advanced experiences current reach according to consistent measures are being implemented. But innovative technologies current reach and agrarian the field development on the way take going years before research results reach the lowest levels of the field problems that cannot be solved during the agricultural sector prevents further rapid development. Therefore, in the future in the agricultural sector "...scientific research, education and advice of services work release with integrated knowledge of distribution efficient mechanisms Create, development of the system of science, education, information and consulting services" is a priority task by doing defined. This is it condition village in the farm innovative of processes scientific and theoretical and methodological aspects improvement according to systematic studies take to go requirement does.

In this respect, agriculture is being further improved today reducing labor and energy consumption, saving resources are the main requirements one to be is coming village household crops advanced technologies based on cultivation and development of high-performance agricultural machinery and special attention is paid to application. Seeds of agricultural crops resource-saving technologies of soil preparation for planting and them creation of new examples of technical means, available cars the work in the process resource economy of provision scientific technical the basics work to exit directed purposeful scientific research works take is going Including this in the direction less energy spent without the soil to plant who prepares the work quality and product high was combined cars work exit and they are the work bodies soil with mutually in its influence resource thrift provides parameters to justify circle scientific research their work take to go Demand is being done.

PD-5853 of the President of the Republic of Uzbekistan dated October 23, 2019 No. "Development of agriculture of the Republic of Uzbekistan 2020-2030 Decree on approving the strategy for 2019 and 2019 PD-4410 dated July 31 "Rapid development of agricultural machinery, the provision of agricultural

machinery to the agricultural sector by the state "On support measures" and this decision to the activity belongs to another regulatory and legal in the documents series tasks defined. Including Uzbekistan Republic village farm development 2020-2030 for years intended in strategy, including "...modernization and diversification of agriculture and food chain private investment capital to support sustainable growth reducing state participation in the field of increasing the flow and investment attractiveness increase mechanisms current to do land and water rational use of resources, labor productivity in farms increase, product improve quality" [1] duties set given

The implementation of these tasks includes preparing the soil for planting according to all technological processes (soil soften, of the field surface part leveling, densification and the field on the surface soft soil layer harvest to do). adding which performs combined car work exit and worker parts requirements level the work quality less energy spent without provides parameters justification important from tasks is considered.

## LITERATURE ANALYSIS

The economy village farm in the field innovative processes efficiency increase scientific and methodical the basics improvement reference to the review of the literature conducted within the scope of the problems we will Microfinancing of agricultural producers as a system foreign and from Uzbekistan economist scientists by scientific in terms of research done and relevant scientific and theoretical and practical conclusions formed.

In particular, O. Yastrebova and A. Subbotin's [1] to research according to village farm of enterprises financial of the situation stable that it is not and to payment ability level low the fact that their credit institutions financial services, that's it including microfinance services use level to increase obstacle does. In our opinion, above conclusion Uzbekistan practice for important practical importance occupation is enough. In our republic village farm enterprises and farmer farms financial of the situation stable that it is not and to payment ability level low the fact that them of banks financial services and microfinance services use to increase the level obstacle is doing

Professor of N. Figurovskaya to research according to village farm work the process of microfinancing of producers is supported by the state should be powered. The main focus is on allocating resources from the state budget and to bonus focus need [2]. of N. Figurovskaya according to village farm work manufacturers microfinance from services use of possibilities limited of the state this to the process intervention makes it necessary. Agricultural products and delivery to the network provided material and technical resources and prices of provided services the growing disparity between the growth of public procurement prices due to the low profitability of

production in the agricultural sector and production of goods producers' incomes compared to other sectors of the economy significantly is lagging behind [3].

According to D. McNaughton, the right of rent and mortgage of future crops providing loans to farms, including microloans they are activities in development important place holds [4]. But rent the right bail get based on credit to give mechanism our republic in practice not available. Because the farmer who could not repay the loan is deprived of the land procedure has not found its legal solution. I. Petrenko and P. Chuzhinov [5] researches, a number of specific characteristics of agriculture (natural climate conditions, work release of the cycle term) because of village farm credit market continuous activity take give can't.

This while owns in turn, state in front this the field control by doing stand-up causes a problem. But that's it too attention get ok village farm state by credit most of the time expected the results without giving standing this such as of loans return level while as low as remains, and financial institutions in these processes finance observer as are staying it is known that village to the farm separable limited state funds Agrarian of the sector credit funds was needs satisfy can't.

The process of granting loans, their interest rates are regulated by the state should be installed [6]. State agriculture of I. Petrenko and P. Chuzhinov financial support through subsidies, preferential loans We agree with his opinion. Also, agriculture by the state low repayment rate of loans given to producers private thought too appropriate.

Uzbek economist scientist A. Boymuratov [7] according to village the possibility of using loans from commercial banks for economic enterprises There are three approaches to augmentation, and the third approach is that is, loans given by banks to agricultural enterprises the difference between the preferential interest rate and the market rate of bank loans payment by the state to commercial banks is a relatively effective approach is considered Here, A.Boymurotov to agriculture by the state given bank loans offer to subsidize does.

In our opinion, this proposal is very reasonable, but we would like to emphasize one thing We would like to subsidize loan interest rates under certain conditions done increase must for example, state the order did it farmer interest rates of loans given to farms should be subsidized. Macro and the statistical analysis of agricultural production at the mesa level is separate countries and region (area)s according to many scientists and researchers studied by

Including Yo. Abdullayev and N. Soatov [3] economic-statistical of analysis theoretical aspects, T. Shodiyev [4] of the development of the agricultural network econometric models theoretical and practical in terms of D. Parmakli [5] village from a theoretical point of view, specific aspects and laws of the

economy of the farm learned if V. Somov [6] separately territorial unity village farm development economic-statistical in terms of analysis did From this except B. Salimov, the role of small business and private entrepreneurship in agriculture expand issues separately attention directed U. Gofurov His scientific work on the development of family entrepreneurship in rural areas in their work separately attention directed.

## RESEARCH METHODOLOGY

In this article, the country's and foreign economists are rural statistical analysis of the economy and statistical data to international standards to adapt dedicated scientific works comparative studied. Uzbekistan based on the data of the statistical Agency under the President of the Republic statistics information grouping, comparison analysis, selection observation methods were used. Comparative literature as a research methodology analysis, logical and structural analysis, grouping and comparative comparison methods was used.

## ANALYSIS AND RESULTS

It should be noted that the first steps in this regard were taken today. Of these one Andijan in the technopark "Monterra" artificial intellect platform using an innovative pilot project on agricultural land management has been implemented is increasing. Within the framework of the project, six directions were selected, they are in vector format digitized and uploaded to the online platform. The platform was captured by satellite pictures analysis does. This software tool Andijan in the region clusters works in the example. Agricultural land owners with the help of the platform using satellite technologies according to research results necessary recommendations to get possible will be. Electronic of the system convenience is that she is the harvest collect received after too the product again work, packaging, cleaning, sorting and delivered to give in the process is used. Smart agricultural technologies to achieve high productivity and quality, water consumption and work release expenses reduce, crops planning and forecast in doing even important plays a role.

First of all, there is in the field of introduction of innovations in agriculture earth, water and another natural of resources reasonable use enable give "Smart village farm" concept based on Village farm work introduction of modern tested forms of production, rural in the agrarian sector maximum automation of farm production, productivity increase and improve financial indicators, as well as the country's food food safety provide enable give innovative ideas, developments and technologies to facilitate implementation such as from tasks consists of

According to the decrees and decisions of the President, starting from 2020, the village expansion of

market mechanisms in the field of economy, interest of farmers in order to increase, the state cancels the market order for cotton and grain. That's its relationship with our country leader 2020 year of January 28 "In 2020 Uzbekistan Republic of village farm development 2020-2030 for years intended in the strategy defined tasks done increase signed the decree "On measures for the main concept purpose village farm crops productivity increase, of animal husbandry productivity increase, village farm fields from diseases, from pests, that's it including from insects, a stranger from herbs protection to do also modern farming methods current reach and work output volume is to raise.

Due to the introduction of the concept, labor productivity in the field is 30 percent increases and cotton dial complete technique with done is increased. Biological active to substances rich village farm crops to stress resistant, fruitful, movable varieties Create 100 percentage guaranteed. Artificial companion information and from a distance standing up probing from technologies use village farm lands and them cultivated crops situation fast and sure to evaluate possibility will give. Again one important direction - "smart greenhouse" the number of objects designed using technology is 500 deliver In animal husbandry automated work release system current will be of this as a result product cost 15 percent decreases. Village farm digitization in the matter of of course developed countries to the experience relied on done without to increase is appropriate.

The world's transition to "smart" agriculture is slow but sure is being implemented. Most of the market (53 percent) is in North America is located. I technologies land in the fields basically grain crops is actively used in cultivation and this is called "precision farming". In general, many countries are moving from "analog" to "smart". village farm active by developing that he is going confirming. Of course, to work on these, completely different machines and aggregates are required. It should be noted that the manufacturer of agricultural machinery The world's leading companies are farming their development strategies arising from the needs of digitalization and automation of processes have already started to determine the case. For example, John of the United States Dir company village farm techniques work one of the leaders in the world in terms of production. The company its tractors sensors and web interfaces withsupported complexes current to do entered. Agrarian techniques in the field "smart" devices apply level according to Europe for now lags behind the USA. Unmanned vehicles. Tactical Consulting company information according to by 2024 go and village farm robots delivered give 32 to a thousand increase 594 thousand units constitutes.

Analysts Agrarian work release complex in robots of application the following important to the fields attention focus on:

- without a driver tractors and to fly devices;
- material resources management;
- village farm vegetation automated systems;
- the forest and land under management;
- cattle farms of management automated systems.

Self-propelled systems installed on tractors and trucks in addition to reducing the impact of the human factor, it has another important advantage: they are grain and fuel theft to reduce possibility will give. Intellectual not only driverless vehicles on farms, but cameras and higher from unmanned aerial vehicles equipped with sensing sensors use possible They are one how many hour during village farm in the plots research take to go camera and sensors using fell delivery of information to the farmer, electronic map of fields in 3D format normalized vegetation in order to create, effectively fertilize crops index count, take going things letter, the earth to protect and another has opportunities.

Currently, the US, China, Japan, Brazil and the EU are among the drones countries village in farms wide is being used. In farming the use of sensors and sensors is important in the establishment of an intelligent farm is a step. From tens of square kilometers, they are through radio channels in control objects status - mainly of soil humidity degree, temperature, health level of the plant, fuel reserve and other important parameters about continuously information delivered get up takes for example, control to the points installed sensors to determine the main systems of soil properties customized. And the sensors are natural diversity (relief, soil type, light, the weather, a stranger herbs and pests amount), to the disease played plant, productivity about in advance information will give. Sensor and sensors not only plant to grow perhaps the harvest to full storage too help will give.

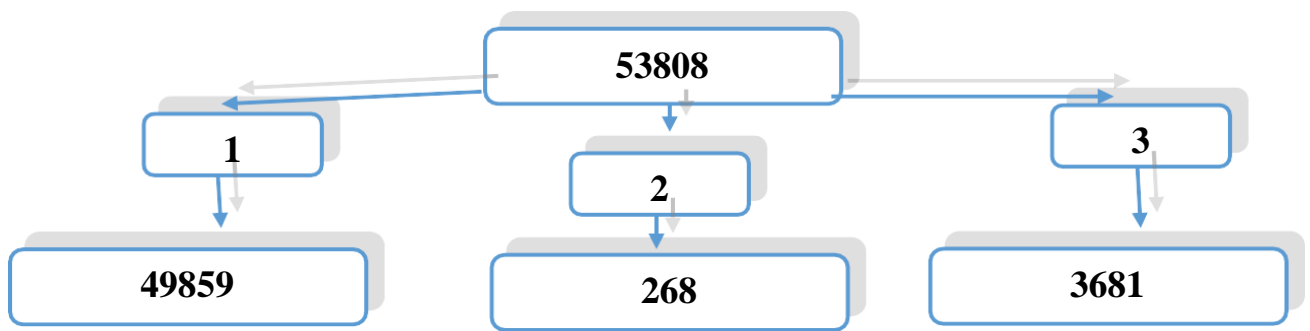
Electronic devices make animal husbandry and fisheries more efficient to manage too help will give - cattle is located place and the weather changes control does. Such devices through farmers already by studying animal pregnancy, milking time and identifying signs of disease received Find My Sheep Satellite Cattle Tracker between machines the solution to this great example be takes This system sensor on the map each how movement of the animal showing them attached stands "General Alert another one system while on farms animal's observation with together, their health also checks.

Consumers of introduction of intelligent technologies to agriculture, of course, they are farmers and farm managers. Technology providers while delivered givers is considered They are consumers for innovative software or mobile applications, M2M equipment, sensors and tracking devices, communication channels, data analysis tools and other intelligent solutions work exit for is responsible. But,

each one farm (each one farmer) too not connected to the internet. It's not even big enough for networking to the farm enough investment is necessary.

The Japanese media corporation "Soft Bank" is in Colombia in July smart sensors flight the test finished. Rice fields for This device is designed for soil and water nutrient content, humidity and temperature measures the level and collects data through smartphones to each to the farmer individual

sends. His own all advantages despite smart village farm yet of development initial stage. of the United States According to the Trimble report, only one in four farms in the world one data collect from the base uses to this financial factors (such infrastructure organize reach farmers by weighty initial requires investment) is a reasonable obstacle. Also, data security, in farming to himself special politics and the weather too mostlyconfuses farmers.



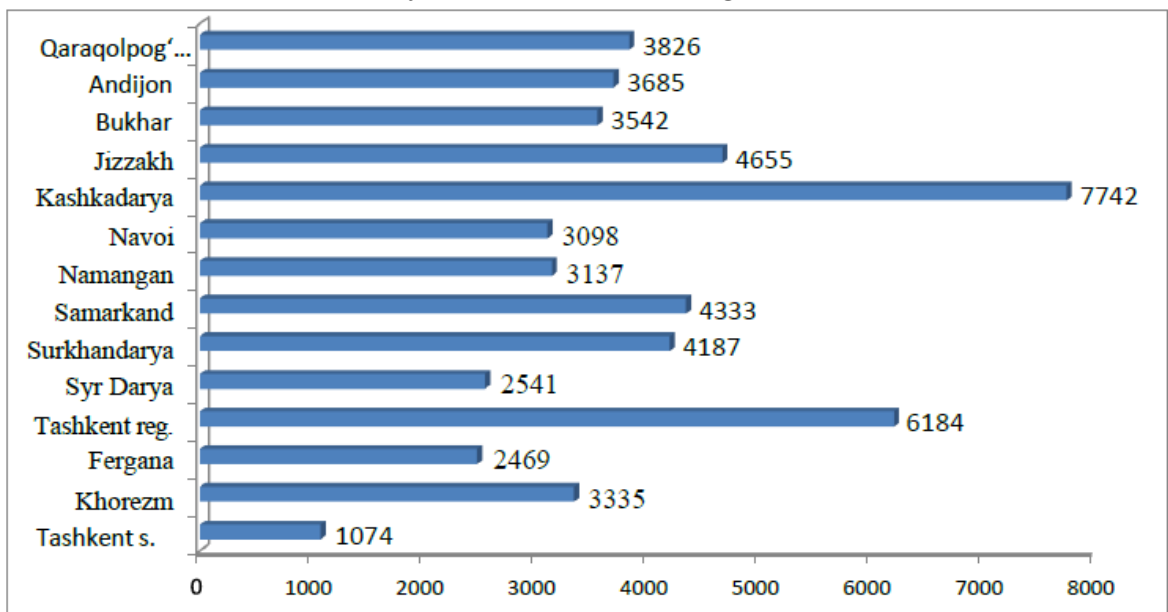
**1-Picture the Number Enterprise of operating in agriculture, forestry and fisheries and organizations (except farmer and farmer farms)**

Analyzes as a result according to of the economy Agrarian in the sector structural changes and village farm work release reform to do diversification, land reclamation improvement, modern high efficient technologies current reach and of farms material and technology as a result of measures taken to strengthen the base 2023 year January 1 to the situation village, the forest and fishing in the farm activity showing enterprise and organizations (farmer and farmer from farms except) number - 53,808, of which agriculture and animal husbandry, hunting and this in the services provided in the fields – 49 859 in forestry - 268

agriculture and fisheries in the farm – 3 681 know organize did (Figure 1).

1. Farming and animal husbandry, hunting and this in the fields shownservices. 2. Forestry. 3. Fishing farm.

When this indicator is analyzed by regions, the largest number of enterprises and organizations Kashkadarya in the region – 7 742 know or republic according to 14.4% of the total enterprises and organizations operating in this field this organize reached if vice versa the most less enterprise and organizations Tashkent in the city – 1 074 ta (2.0 %) was recorded (Figure 2).



**2-Picture. the number of areas in the section village, forestry and activity in the fishery showing company and organization**

Past of the year suitable period with compared to village, the forest and fishing in the farm activity showing enterprise and organizations the number – 7,307 people, including farming and animal husbandry, hunting and in these areas shown in services – 6 931 to the forest in the farm – 46 to and fishing in the farm – 330 to increased.

Gross production of products (services) of agriculture, forestry and fisheries release – in the field own consumption and sell for created product and total cost of services. Agriculture, forestry and fisheries products (services). gross work release farming and animal husbandry product gross production of (services), hunting, forestry and timber preparation, fish hunting and aquaculture in the field cultivated product (service)s value is formed based on

Agriculture, forestry and fisheries in January-December 2022 product of (services). common volume 364.5 trillion sum, that's it including farming and animal husbandry, hunting and this in the fields shown services

- 352.1 trillion. soums, forestry - 9.2 trillion. soum, fishery - 3.2 trillion soum organize that he did let's see possible (Table 1).

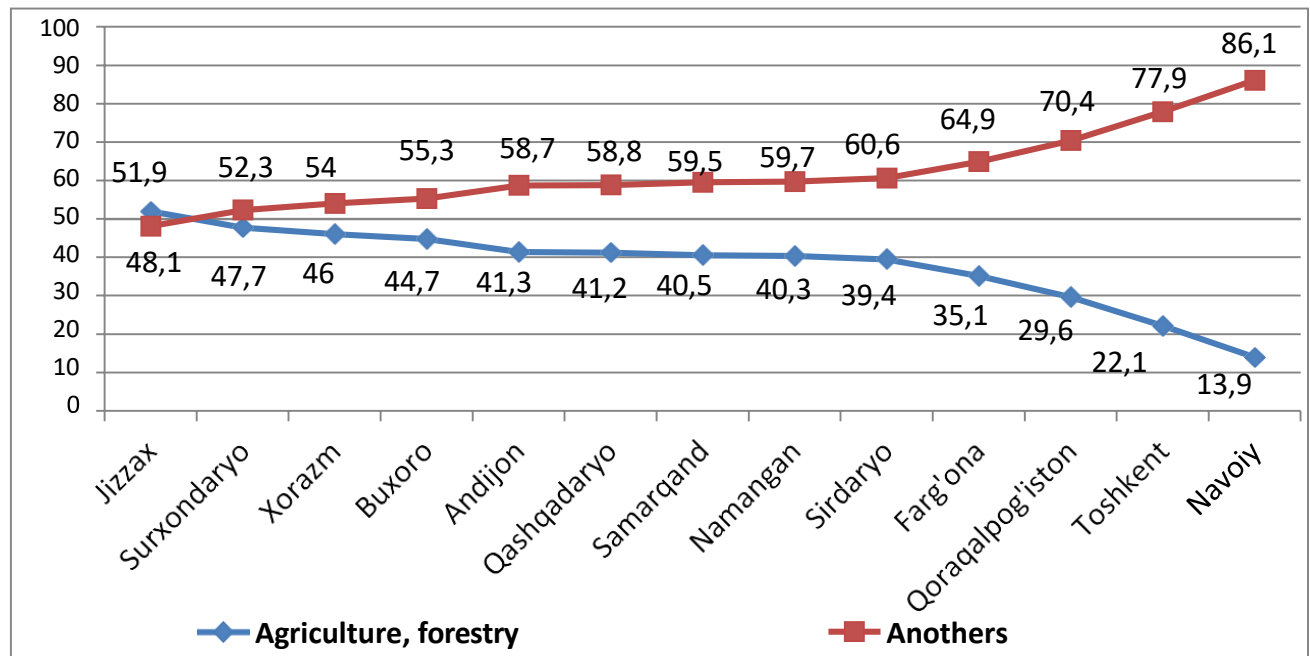
Agriculture, forestry and fisheries in January-December 2022 product (services). volume passed of the year suitable to the period compared to 103.6 % (January-December 2021 respectively January-December 2020 per month relatively – 104.0 %), that's it including farming and animal husbandry, hunting and this in the fields shown services – 103.6% (103.9 %) the forest farm – 102.3 % (103.0 %) fishing

farm – 101.9 % (118.0 %).

Gross internal product (GDP)-economic resident units work release representing the final result of the activity and final by these units use for work issued goods and services value through is one of the main indicators of measurable MHT. January 2022-according to the results of December, gross domestic product (GDP) (gross added value (YQQ)) in the composition village, the forest and fishing of the farm share 25.1 % organize did

Gross territorial product (GNI) – of the area development generalizing indicator. GNP economic to the point according to GDP equal to is an indicator, that is, it is the economics of the residents of this area goods produced for final use by units and services value represents Gross territorial product in the composition village, the forest and fishing of the farm share regions in the section analysis does the highest share corresponds to Jizzakh region (51.9%), on the contrary, it is less to share have to the area Navoi province (13.9 %) cause can pass. village in the farm continue doing structural changes in the process, the main forms of agricultural production organization reach farmer and farmer farms choose received.

Depending on the type of economy and level of development of countries, mainly raw materials work to issue specialized economy, industrial economy, post-industrial economy, mixed economy and innovative economy or knowledge economy based on to countries is divided. Innovative economy is the most developed type of economy and for that knowledgeable society is typical.



3-Picture Gross territorial product contains a village, the forest and fishing farm and another of networks (%)

To deepen innovation processes in Uzbekistan today and all necessary socio-economic to strengthen the innovation base there are grounds. However, the transfer of the agrarian sector to the path of innovative development, or different so to speak innovative projects one, even one how many farmer farms scale too done in raising problems there is, because: First, farms and processors of agricultural products subjects present at the time scientific research to work order to give and studies in financing participation sluggishness; secondly, advanced innovative technologies work on the way out research take to go and scientific studies financing too household subject himself done increase can't; thirdly, new technology, new of varieties use for sufficient number of producers and processors of agricultural products level to knowledge have not they are scientists and specialists from the service their uses necessary also the product again work and in selling too farmers face certain difficulties; fourthly, higher education and scientific research institutions scientists by prepared innovative to developments work of producers demand enough level they are in the middle organic dependence there is it's not; fifthly, some irresponsibility of agricultural producers in the world happened giving socio-economic changes and international integration conditions in the republic short time inside village farm network and the village that's it with together village infrastructure, new innovative development to the way pass necessary.

This optimization household duties solution to do for there is opportunities account received without very many different from options the most effective ones choose get enable will give. Village in the farm structural consistent development of production by deepening changes, population with food products, the processing industry is continuous with raw materials to further strengthen the food security of our country by providing, ecological clean products work release expand, Agrarian of the sector export potential significant level increase in perspective done increase in the eye caught the most important tasks is counted.

In this regard: - in exchange for reducing the cultivated areas of cotton and sorghum potatoes, vegetables, policy, food and oily crops, new intensive gardens and vineyards area expand and optimization; - irrigated land reclamation improvement, reclamation and irrigation facilities develop, to the network intense, water and resources thrifty modern introduction of agro-technologies, use of high-productivity techniques; - resistant to diseases and pests of agricultural crops, local land-climate and ecological to the circumstances suitable new selection varieties and high scientific research on the creation and introduction of productive animal breeds expansion of research work; — deep processing of agricultural products work based on food and packaging products work emits construction of modern processing enterprises, reconstruction of existing ones and modernization; — production of

agricultural products, re work, preparation, sell, construction works and services display with engaged a lot network farmer farms development; - village storage, transportation, sale of agricultural products, agrochemical, financial and others development of modern market service infrastructures; — global climate changes and Island the sea of construction village farm development and the life of the population to the activity negative effect softening according to systematic measures to see

Fulfillment of the above-mentioned tasks in agriculture and its market economy laws requirements level from development behind had the opportunity to operate freely in the network different kind of property and ownership forms, to them based on entrepreneurship types and they are between free market of relations theoretical, methodical the basics improvement, investments more attraction reach science and technology introduced to the production of achievements, new techniques, advanced technologies achieve limited land and water resources, constant and variable from capital and work resources short and long in deadlines complete and efficient use ways sure set, all expenses save, work productivity upgrade, farmer and workers encourage system improvement basically benefit amount increase ways based on without set get to the goal is appropriate.

## CONCLUSION AND SUGGESTIONS

The problems of innovative development are of special relevance for Uzbekistan earns, because only new resource-efficient, advanced technologies are available and efficient used without innovative development environment save to stay account take economy stability fast in paces growth provides.

The above taking into account the following Suggestions work issued:

- Increasing productivity, introducing innovations, production diversification to do in order to village farm and food, education, advanced to combine the results of research in the field of training and counseling creating a modern, integrated and flexible system aimed at further development;
- Local food of the network competitiveness increases strategic priority direction task from being come came out without an approach system that takes into account the natural and climatic features of the regions Create necessary;
- The system development knowledge and skills later on regularly distribution, training, agricultural producers and to provide relevant information and advice to processing plants collected knowledge and expand experience and to fill need;
- State budget and private sector funds knowledge of distribution financing sources to be service does. That's it because of system state and private sector financial resources financing more improvement is necessary;
- Agro Industry set and agribusiness in the field

consulting and knowledge distribution goals public-private partnership potential increase and of the country all in the regions is located small business and big of enterprises wide extensive needs to satisfy focused services present reach system development through knowledge distribution territorial for information and advice network is to create;

Summary by doing so to speak our country the ground fruitful, in the spring stick if we suck bears fruit in autumn. However, the fact that our population is increasing year by year, water, electricity energy and another natural of our reserves limited in consideration if we get it, we will understand the importance of "smart" agriculture. Therefore, implementation of a modern system in the agricultural sector is one of the important tasks is one.

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