

DEVELOPMENT OF THE ECONOMY AND INDUSTRY IN THE CONTEXT OF DIGITALIZATION

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Abstract

The research paper describes In the conditions of the new economy, the concept of economic growth has been replaced by the concept of economic development associated with the process of introducing innovations. In turn, the form of economic development based on innovative processes is constantly undergoing changes due to the introduction of advanced infocommunication technologies and the digital economy, which determines the relevance of the research topic. The purpose of the study is to identify the specific features of the transforming Russian economy, as well as the development of the principles of the digital economy in general and the identification of additional sources of business systems efficiency, taking into account the development of infocommunication technologies in the direction of digitalization.

Keywords: digitalization, factors, enterprise economics, investment, industrial policy, industry, production.

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1. Introduction

Under the conditions of the new economy, the concept of economic growth (as an increase in the time of production and consumption of goods) was replaced by the concept of economic development associated with the process of introducing innovations. The nomination of the innovation sector as a key driver for the development of the manufacturing industry (which is the foundation of the economy) has become a global trend. This form of economic development is the basis of national security and technological independence of the state: in the context of globalization, countries that have not solved the problem of ensuring progressive industrial development will not be able to become an integral part of the core of the world economic system and will be forced to be content with playing on the periphery, as, for example, a raw materials appendage, a source of cheap labor, etc. When implementing agricultural policy, it is necessary to pay great attention to achieving higher end results of production activities, both in agriculture and in the entire agribusiness, ensuring stable rates of production growth, increasing its efficiency and social development of the protecting population, the economic representatives interests of of the sector. agricultural An effective mechanism for introducing scientific developments into the real sector of the economy is developing in Uzbekistan. The sustainable development of a modern state is based on innovation.

The innovative development of agricultural production involves the use of highly productive varieties of plants and animal breeds resistant to adverse environmental factors, the implementation of comprehensive mechanization and automation in it, advanced training, working conditions and living conditions of workers, the transition to intensive environmentally friendly and resourcesaving technologies for the production of agricultural products, ensuring integration of science with production. Integration of science and industry, government partnership and support for international contacts of innovative business are important conditions for the development of innovative activities. An innovation process means the innovative activity of an enterprise. It is aimed at the development and implementation of the results of scientific and technical research in the form of a new product or a new technological process. We can say that the innovation process is a sequential chain of events, during which the innovation "matures" from an idea to a specific product, technology or service and then spreads in economic practice.

In accordance with the Decree of President of the Republic of the Uzbekistan "On Education of the Ministry Innovative Development of the of Republic of Uzbekistan" dated November 2, 2017, as well as in accordance with the tasks set by the Action Strategy for five priority areas of development of the Republic of Uzbekistan, the promotion of innovative ideas and technologies in agricultural sector contributing to increased production efficiency and food security of the country. Tasks included in the field of innovations in agriculture: making proposals for the introduction of modern forms of agricultural production on the concept of based "Smart Agriculture", allowing the rational use of available land, water and other natural resources; - assistance in the introduction of innovative ideas and technologies in the agricultural sector, allowing the maximum automation of agricultural production; assistance in expanding sales markets and direct supplies of agricultural products by ensuring their competitiveness in the world market. To achieve good results in agriculture, first of all, it is necessary to be able to work competently with the land, to carry out agrotechnical measures in a

Section A-Research paper

timely manner. Nowadays, the farmers are entrusted with the tasks of putting the industry into operation in the villages, providing employment for the inhabitants of the territory, especially rural youth, and establishing the sphere of services and services. In the production of agricultural products, resources occupy a central place; the growth rates of agricultural production depend on the availability of these resources. The scarcity of resources (land, labor, material, financial) forces farms to look for reserves in rational use, which is why at present the issue of resource conservation and determining the optimal ratio of resources in the economy is very important. Farms are characterized by intensive development of production. production Intensification of is а restructuring of the entire economic mechanism, taking into account the resource-saving factor. Intensification is a progressive process, constantly growing, covering all areas of agricultural production. The current stage of intensification provides for a transition to an innovative path of development, which is characterized by a systematic approach to the problem. Effective use of resources can be achieved if the entire technological chain of production, processing and use of raw materials is assessed from the standpoint of resource conservation. At the same time, one should not engage in resource conservation for the sake of economy. Identifying and eliminating limiting factors allows them to be replenished in time, as a result, other resources work more efficiently, and they are saved. Simultaneously with solving the problems of resource conservation, it is necessary to move to innovative methods of development. At the same time. saving resource itself should be modernized taking into account an innovative approach.

digitalization

Highly intellectual potential and high-tech developments in the field of agriculture are the basis for the

development of innovative activities in farms. Despite the positive results in the implementation of innovative developments in agriculture, it is necessary to continue to consistently develop a continuous system that unites all stages of the innovation process - from the creation and development of an invention to its commercialization and production of the final product. The innovative approach of farming in its activities solves a number of agro-technological problems and has certain achievements in irrigation, drip irrigation, seed production, construction of greenhouses, production of fertilizers, plant protection products and much more. The innovative development of agricultural production primarily affects the growth of export potential. Expansion of exports of fruits, vegetables and other food products has a positive effect on the country's foreign trade balance. Currently, these products account for 6.2% of Uzbekistan's exports by value, which makes them 1.5 times more valuable than the export of cotton, a traditional Uzbek export product. The net profit of some agro-industrial organizations due to the export of agricultural products has increased several times in recent years. As the ongoing reforms show, the government aims to make Uzbekistan one of the world's largest exporters of fresh and processed fruit and vegetable products. Within the framework of the Action Strategy for the five priority areas of development of Uzbekistan in 2017-2021, approved by the President of the Republic of Uzbekistan, 434 projects are envisaged to modernize and intensively develop agriculture. By 2021, it is planned to create in the regions 14 trade and logistics centers for processing, storage, packaging and export of fruit and vegetable products with a capacity of over 310 thousand tons. When organizing them, attention is paid to availability of an appropriate the infrastructure that ensures high-quality

transportation, storage, sorting, calibration, packaging, certification, as well as export.

By 2017–2021 food production is expected to increase by 1.4 times, processed fruit and vegetable products - by 2 times, and the export of fruit and vegetable products by 2.3 times.

In the Republic of Uzbekistan in recent years, large-scale work has been carried out to implement an innovative model of agriculture. The ongoing work on the diversification of agriculture, the efficient use of land and water resources, the use of modern and intensive technologies are giving good results. and innovative technologies in the agroindustrial complex allow the agricultural producers of the republic to provide their products not only to the domestic market, but also to sell part of the resulting products for export, mostly to the Russian Federation. By reducing low-yielding lands previously used for growing cotton and wheat, the area of fruit and vegetable crops is expanding, including potatoes, fodder vegetables. crops, oilseeds. intensive orchards and vineyards, which are in high demand in the domestic and world markets. In the republic, the cultivation of such non-traditional crops as saffron and soybeans has begun. In 2017, the growth in the volume of agricultural production compared to 2016 amounted to 103.5%, the cost of products amounted to 49 trillion soums (1.6 trillion soums more). Traditionally, the cotton industry is of great importance in the agro-industrial complex. The republic annually produces about 3.0 million tons of raw cotton, from which about 1 million tons of cotton fiber is produced. In view of the further optimization of the cultivated area, aimed at reducing the area under cotton, it is very important to maintain the existing volumes of cotton fiber production, which is so necessary to provide the textile industry with raw materials. One of the components of maintaining the production of cotton fiber in the previous volumes is to support research on the creation of new competitive varieties of cotton, including genetic using the achievements of engineering. New breeding varieties should not only be high-yielding, but also have high quality indicators and fiber yield. The country's leadership provides all-round support for the research of originating institutes that are engaged in breeding work to develop domestic varieties of cotton with a given yield, the quality and spinning best fiber characteristics, increased fiber yield and seed oil content.

2. Methods of research

Surveys of Uzbek fiber consumers allow us to improve the system of placing the most demanded selection varieties of cotton. Measures to improve breeding work, zoning of cotton varieties that are exclusively in demand on the world market, together with the improvement of the technology for the preparation of sowing seeds and primary processing of cotton, contributed to the improvement of quality indicators and the range of cotton fiber. Most of the selected varieties of cotton are in steady demand in the world market, they are distinguished by long fiber, optimal micronair and strength. It should be especially noted that such varieties of cotton as Porlock, Bukhara 6, Bukhara 8, Bukhara 102, Omad, which are the standards of Uzbek cotton, have high parameters of the upper average length, specific breaking load and whiteness. In Uzbekistan, for many years, research work has been carried out to create new varieties agricultural crops using genetic of engineering methods. For example. scientists of the Center for Genomics and Bioinformatics were the first in the world to develop an innovative technology for gene knockout ("turning off genes") of cotton. This technology does not use the transfer of genes from other organisms, which makes the product environmentally friendly and safe. Our scientists, using this technology, were able to turn off the functions of a number of genes responsible for regulating fiber length, as well as genes that prevent cotton flowering. As a result, on the basis of a number of domestic varieties, the first generation of new geneknockout cotton varieties Porlok-1 (AN-Bayaut-2), Porlok-2 (S-6424), Porlok-3 (Toshkent-6) and Porlok-4 (Namangan-77) with high agronomic performance.

These varieties have successfully passed large-scale tests in 13 different soil and climatic conditions of Uzbekistan. Field trials have shown the superiority of these varieties over any traditional varieties both in fiber quality, adaptation to the harsh environmental conditions of Uzbekistan, and in early maturity and yield. The new Porlock cotton varieties are the world's first biotech cotton varieties that have improved fiber quality and other agronomically important traits. It is also the world's first successful field trial of gene knockout cotton varieties. Modern cotton varieties of the Porlock series have demonstrated a huge advantage of genetically engineered varieties over any traditional varieties in terms of fiber quality (codes 38-41 versus codes 35-36 for conventional varieties). In addition, the superiority is evidenced by adaptation to the harsh environmental conditions of Uzbekistan (drought, salinity and heat stress), early maturity (5-10 days earlier) and an increase in the yield of raw cotton (at least 10-18%) or cotton fiber. (more than 1000 kg per hectare versus 800 kg / ha for common varieties of Uzbekistan). The new varieties produce more seeds with a 25-30% increase in 1000 seed mass, which provides an opportunity for increased food and feed. In addition, the scientists of the Center for Genomics and Bioinformatics introduced the technology of marker-associated breeding (MAC) into cotton, with the help of which new highquality varieties of cotton Ravnak-1, Ravnak-2 and Baraka were developed in a short time. These are the first cotton varieties in the world developed using MAC technology. In our region, where water resources are limited, it is very difficult to engage in agriculture and get a high-quality bountiful harvest. For this, farms in Uzbekistan are actively working on the widespread introduction of watersaving technologies. These technologies include: drip irrigation, sprinkler irrigation, mobile irrigation trays, pipelines, etc. Despite the fact that water-saving technologies require additional and sometimes large investments, the analysis of the effectiveness of their application showed that these innovations are selfsustaining and cost-effective. The advantages of water-saving technologies are not only that they can reduce the consumption of irrigation water by up to 65 percent, but also lead to an increase in vields and labor productivity, crop significantly reduce the cost of fuels and lubricants. mineral fertilizers and ultimately increase the income of farmers. At present, water-saving technologies have been introduced on an area of about 240 including thousand hectares. the technology of drip irrigation on 28 thousand hectares of land. In order to stimulate the introduction of drip irrigation systems and other water-saving technologies, tax incentives are provided to farms by the state. In particular, they are exempt from paying land and other taxes for a period of five years. Precision planters are increasingly used when sowing cotton seeds. As you know, when sowing seeds with precision seeders, even cotton shoots will be ensured, as a result, there will be no need to thin out the cotton sprouts, as a result of this, manual work and the cost of fuel and lubricants are reduced sharply and the working productivity of the equipment increases. In 2017, in a number of regions of the Republic, when sowing cotton with modern precision seeders, the consumption of seeds was 25-30 kg, which is 30-35 kg less compared to sowing with conventional seeders. In 2018, 372 thousand hectares, or 35% of the area for cotton, were sown by two-line method. 484 thousand the hectares were sown according to the 60 cm row spacing scheme, or 45% of the area, the new method with 76 cm row spacing was sown on an area of 21 thousand hectares. In the Republic of Uzbekistan, pilot projects have begun to automate the processes of growing agricultural crops. Sensors are being tested to control soil moisture, the content of elements in the soil.

The data from the soil condition sensors are used to determine the seeding depth of seeds, the amount of fertilizers applied, and irrigation water. On the basis of the Russian universal hardware and software complex "UniScan-24", work is being carried out on remote sensing of the Earth and modern technologies for their processing. The information obtained allows organizing monitoring of the state of agricultural land both from the point of view of compliance with the rules of crop rotation and from the point of view of targeted use of land, to conduct an operational assessment of the state and degree of degradation of agricultural and pasture lands. Typical tasks in this area inventory of agricultural are: land. monitoring the state of crops, identifying erosion, salinity areas of and desertification, monitoring the quality and timeliness of various agricultural activities, monitoring dynamics the of the development of agricultural crops and assessing the yield of agricultural crops. Use GPS is used and land maps are compiled by soil characteristics. Smart cameras installed on nadron are used to control the growth and development of crops, predict the volume and quality of the crop. In 2017, on an area of about 786 thousand hectares of cotton, or 63% of the the drug "Mepiquat chloride" area. (entojean, sojean) was widely used, which has the ability to improve the quality of

cotton fiber and accumulate the yield. As a result of the use of this drug on abnormal hot days of summer, the loss of cotton fruit elements is prevented. In the Republic of Uzbekistan, biological methods of pest control of agricultural crops are widely used. To combat insect pests, predatory and parasitic insects are grown in special biological laboratories. They reduce the use of chemicals by up to ³/₄ of the total crop protection need. A few words about the transition to machine cotton picking. The mechanization of the harvesting of raw cotton is a priority task for the republic, therefore, the volumes of cotton harvested by machines are rapidly increasing. In the very near future, Uzbekistan plans to significantly increase the volume of machine cotton picking. Since the 2018 harvest, the process of accepting raw cotton from farmers at procurement points has been automated. The main goal of the innovations is to achieve independence, reliability and maximum transparency of the cotton harvesting process with the strictest control of its quality and quantity. The use of digital information technologies makes it possible to record the weight of each delivered batch on electronic truck scales. then instrumentally in the "on-line" mode determine the initial cotton indicators and reflect their values in databases. The system of accounting for the preparation, sowing of cotton seeds, their variety distribution and ongoing agrooperations technological has been automated. Accounting is carried out in the context of more than 50 thousand cottongrowing farms. In addition, programs for monitoring financial accounting and reporting, personnel management. operational control over production activities in the processing of raw cotton, preparation of sowing cotton seeds and their sale have been introduced. As a new approach to the modernization of the cotton complex, one should cite the example of the creation in all regions of more than 60 agribusiness models of cotton and textile clusters with a full cycle of advanced processing of cotton fiber, including the cultivation of raw cotton and other crops, their processing and the production of competitive finished products with high added value. The creation of new organizational principles of production by the type of clusters for deeper processing of cotton products contributes to the implementation of the processes of localization and import substitution of products, intensive development of agriculture. Currently, work is underway to create a modern and effective system for the preparation of sowing seeds of cotton, grain and other crops that meet international quality standards. In 7 regions of the republic, work has begun on the creation of seed clusters on the basis of public-private partnership. A project is being developed to use blockchain technology to track seed material all the way from breeders and suppliers to agricultural producers.

Table 1. Production of agricultural products in farms of all forms of ownership in the country (thousand tons)

(the usual verils)										
Product	1001	1005	2000	2005	2010	2015	2017	2020	In 2020	
types	1991y	1995 y	2000 y	2005 y	2010 y	2015 y	2017 y	2020 y	1991%.	
Cotton	4646	3934,3	3002,4	3728,4	3404	3361,3	2900,0	2300,0	49,5	
Wheat	1908,2	3215,3	3929,4	6401,8	7404,1	6964,7	8100,0	6375.4	334,1	
Vegetables	3348	2724,7	2644,7	3517,5	6346,5	10129,3	11433,6	9635,1	287,8	
Potatoes	351,2	439,9	731,1	924,2	1694,8	2696,9	3014,6	2750,1	783,1	
Poliz	925,8	472	451,4	615,3	1182,4	1853,6	2094,8	1904,9	205,8	
Fruits and	516,6	602,3	790,9	949,3	1710,3	2746,2	3076,3	2589,7	501,3	
Berries	480,4	621	624,2	641,6	987,3	1579	1748,9	1564,5	325,7	

Source: Materials of the Statistics Committee of the Republic of Uzbekistan

Together with a number of foreign companies (FiberMarkSolutions, ETHZurich), it is planned to add special nano markers (0.1% concentration) or additives in the form of DNA tags to seed cotton, which will make it possible to identify and track the movement of seed products along the entire chain. The implementation of these projects will contribute to the timely provision of farms and other agricultural producers with highquality sowing seeds of cotton and grain, increasing the yield of agricultural crops, increasing export potential by increasing the supply of branded sowing seeds of cotton, grain and other agricultural crops for export. We also invite Russian partners to take part in the implementation of these investment projects. Taking into account the existence of plans for the renovation of cotton production in the Russian

Federation, such cluster agribusiness models can be implemented with the participation of our scientists and technologists not only in the Republic, but also in the Russian Federation. Much work is being done to provide domestic producers with sowing seeds and seedlings of horticultural crops. So, in the laboratory of biotechnology of the Research Institute Vegetable Growing, Melons of and Potatoes, an insulating greenhouse has been created, in which primary potato seeds are multiplied by the "Meristem" method. In 2017, the experimental stations of the Institute of Bioorganic Chemistry have grown 800 tons of virus-free potatoes of new varieties "super-super elite" and "super elite". At the same time, they used the experience of the Russian Federation. well as such countries as the as Netherlands. Spain, Poland. Greece.

China, Turkey. It is no secret for our and farmers Russian that at present biodiversity of agriculture is decreasing, the most valuable, rare varieties of fruits and vegetables domestic are forgotten. In order to preserve the biodiversity of agriculture in the republic, new advanced technologies are being introduced, in particular, the micropropagation of plants by the "invitro" method has been established at the of Research Institute Horticulture. Viticulture and Winemaking named after Academician M. Mirzaev. When using this technology, it becomes possible to obtain a healthy maternal specimen that does not succumb to viruses and plant diseases, obtain from one sprout to 10 seedlings, reduce the fruiting period by 2-3 years, and most importantly, these plants are valuable varieties. the ability to reproduce plants and restore endangered their population. In order to ensure uninterrupted supply of vegetables to the population of the republic in the winter and early spring period, in August 2017, a special resolution of the President of the Republic of Uzbekistan was adopted on the organization of sowing vegetable crops using the tuksonbosti method (ninety days). 218 thousand hectares of vegetable crops. In addition, a total of 1 million 300 thousand lemon seedlings, 558 thousand unabi seedlings, 610 thousand walnut seedlings have been planted in 92 thousand private subsidiary plots in the republic. Last 2017, along with uninterrupted provision of the domestic market, 902,800 tons of vegetables and fruits were exported in the amount of 653.8 million US dollars. Of course, great merit belongs to the greenhouse and greenhouse farms, which provide our dastarkhan all year round and bring great profits to farmers. In accordance with the decree of the President of the Republic of Uzbekistan "On the creation of greenhouses in Uzbekistan with the involvement of a grant from the Government of the Republic of Korea" dated November 24, 2011, the Korean Center for International Cooperation (KOIKA) allocated grants in the amount of US \$ 4 million to create standard greenhouses. According to this project, in two greenhouses, each with an area of 5000 cubic meters, located in the Kibray region on the territory of the Tashkent State Agrarian University and in the Yukorichirchik Association of Water Consumers named after Akhmad Yassaviy, tomatoes were grown using the "Hydroponics" method. Growing "Hydroponics" vegetables using the method is considered promising all over the world. In such greenhouses, soil and manure are not used at all, the efficiency of the use of mineral fertilizers increases, water saving is 60-70%, heat savings in relation to conventional greenhouses is 25-30%, the ripening period of vegetables is reduced to 20-30 days, and the period of harvest lasts up to 50-60 days, from one bush of a tomato plant you can get 10-15 kg of harvest (2-2.5 times more). In the Chust district of Namangan region, the technology of growing potatoes without soil in the open air by the "Aeroponics" method has been introduced. Based on the experience gained, the technology for multiplying high-yielding potato seeds is throughout multiplied the republic. According to scientists and experts, using this method, you can get a potato crop 6 times more than the traditional method. Today, the area of gardens in all categories of farms in the Republic of Uzbekistan exceeds 244 thousand hectares.

3. Results

Moreover, the main part of the plantations was created 40-50 years ago, and is based on outdated cultivation technologies. The yield of such gardens does not exceed 100 kg / ha. In this regard, the Government of the Republic is taking comprehensive measures to gradually replace existing and create new intensive

orchards and vineyards using dwarf and semi-dwarf seedlings. The effect of using such seedlings is achieved by increasing the density of tree planting by 3-5 times and, accordingly, increasing the yield by at least 3-4 times. In addition, intensive gardens begin to bear fruit in the first year (while tall ones only after eight years), yield a harvest every season, and with dwarf trees it is much easier and more economical to carry out processing, pruning and harvesting. Intensive gardens are created in foothill and mountainous areas and are entirely based on drip irrigation. Currently, in the republic, intensive gardens are laid out on an area of more than 43 thousand hectares, of which about 20 thousand hectares were laid out in 2016-2017. By the end of 2018, intensive gardens will be created on an area of 13 thousand hectares. Also, more than 148 thousand hectares of vineyards function in the republic, in 2018 another 9 thousand hectares of vineyards will be created. To ensure the storage of produced vegetables, refrigeration fruits and complexes are being created in all regions of the republic. The provision of agricultural machinery per 100 hectares of crops in the Republic of Uzbekistan is significantly lower than in farms of Western European states, which is a significant brake on the use of innovative technologies in crop production. In this regard, a lot of work is being done in the republic to strengthen the material and technical base of farms. Only for the period 2016-2017 in agricultural sector received 597 units of new highperformance arable machinery, 309 units. plows, 600 units. tractors for processing row spacings. 490 units. combine harvesters. 989 units cultivators. 1 thousand 179 units. two-row seeders, 2 thousand 117 units. sprayers, 3 796 units. other agricultural machinery and equipment. We invite our Russian partners, and in particular agricultural engineering enterprises, to organize the production agricultural of modern machinery at the enterprises of the Republic, science-intensive using resource-saving technologies, with low consumption of fuel and lubricants. In recent years, as a result of the implementation of measures to organize a network of services and stimulate the production of livestock products, a number of positive results have been achieved in farms and dekhkan farms, as well as in individual subsidiary plots. sown area of fodder crops up to 326,700 hectares due to the reduction of 17,700 hectares of cotton and grain crops. During 2016-2017, 3,800 new projects in the field of livestock development were implemented, due to which more than 121,054 cattle were raised. In 2017, 217 livestock farms were transferred to the category of breeding farms, due to which the number of this category of farms reached 827 units. These farms produced and delivered to farms 9563 heads of pedigree cattle through auctions. To improve the quality of breeds and increase fertility, 8,200 units of pedigree livestock, 2 million 480 thousand cows and females were imported from foreign countries, which were artificially fertilized. To deepen reforms in the field of livestock, poultry, rabbit, beekeeping, fish farming and increase the production of livestock products, as well as increase the export potential in the industry, a number of measures have been taken. In the field of fish farming, in 2017, 677 projects were implemented on an area of 3,011 hectares and 2,000 new jobs were created. Based on the advanced technologies of Vietnam and China, cooperation in fish farming has been established to introduce methods of intensive reproduction and production of fish feed. In the field of horse breeding, in order to breed thoroughbred Korabayir horses and develop equestrian sports, a new horse breeding complex has been organized in the Yakkabag district of the Kashkadarya region. Such complexes are being created in the Tashkent region and in other regions of our republic. Also, to strengthen the material technical base of specialized livestock farms, 47 units were purchased. mowers, 23 pcs. forage harvesters, 73 units press pickers and 90 units. milk-milking equipment. To study progressive experiments and establish mutual cooperation, a number of visits were organized to the regions of the Russian Federation, as well as countries such as Germany, the Netherlands, Belarus, India, Vietnam, China, Indonesia. As a result of these visits, agreements were reached on the development of the agricultural sector in various areas.

4. Conclusion

The selection of these blocks, the specification of the goal and expected results, due to their general nature, can be specified in relation to the object and / or subject of research, which confirms the universality of the proposed algorithm, as well as its theoretical, methodological and practical significance.

Thus, the information cycle can be considered as an independent cycle within the framework of the modern transitional period in social and economic development: from industrial to postindustrial economy. As has been proven, it is he who determines the general vector of innovation, technological and industrial accumulating improvement, the subsequent accumulation of economic potential. Its quantitative analysis can be carried out in two directions: the first is the characteristics cumulative of the development information of the environment, where scientific research acquires priority, the second is economic, within which the economic costs of them the economic and effects of their implementation come to the fore. Identification of the features of duration, parameters characterizing the modern information cycle, as well as basic contradictions and patterns of its flow can

become the basis for the development of adequate directions and methods for managing interphase and inter-stage transitions within the framework of the modern transition period in the economic and social development

5. References

- Branca, T. A., Fornai, B., Colla, V., Murri, M. M., Streppa, E., & Schröder, A. J. (2020). The challenge of digitalization in the steel sector. Metals, 10(2), 288.
- Schallmo, D. R., & Tidd, J. (2021). Digitalization. Springer International Publishing.
- Shinkevich, A. I., Baygildin, D. R., & Vodolazhskaya, E. L. (2020). Management of a sustainable development of the oil and gas sector in the context of digitalization. Journal of Environmental Treatment Techniques, 8(2), 639-645.
- 4. Yuldashev, Nuritdin, et al. "Innovative development of Uzbekistan agroindustrial complex." International Scientific and Practical Conference "Digital agriculturedevelopment strategy"(ISPC 2019). Atlantis Press, 2019.
- 5. Diuraevna, Rustamova Dilsahon. Makhmudov Odil Xalmirzaevich, Yuldashev and Akmaljon "Innovative Mexmonovich. Activities Agriculture In Of Uzbekistan." World Science 3.11 (51) (2019): 13-16.
- Akhmadovich, Khakimov Ziyodulla. "Synergy Effect Textile Clusters of Uzbekistan." Asian Journal of Technology & Management Research [ISSN: 2249–0892] 9.1 (2019).
- 7. The speech of the President of Uzbekistan Sh.Mirziyoyev at the expanded meeting of the Cabinet of Ministers on January 14, 2017, devoted to a comprehensive analysis

of the results of the country's social and economic development in 2016 and the identification of the most important priorities of the economic program for 2017. The popular word, vol. 3, 2017.

- Decree of the President of the 8. Republic of Uzbekistan on January 23, 2017 "On the Strategy of Actions for the Further Development of the Republic of Uzbekistan." [4] http://www.lex.uz N. Κ. Yuldashev, V. I. Nabokov, and K. V. Nekrasov, "Agriculture innovative development prospects of The Uzbekistan Republic," Moscow economic journal, №.4. pp. 31, 2018
- Djumaboev, Kakhramon, Hamidov, Ahmad, and Anarbekov, Oyture, "Impact of Institutional Change on Irrigation Management," Water vol, 9. issue 6, Article Number 419, Published: JUN 2017.
- Agricultural risks and farm land consolidation process in transition countries: The case of cotton production in Uzbekistan. By: Djanibekov, Utkur; Finger, Robert AGRICULTURAL SYSTEMS vol. 164, pp. 223-235, Published: JUL 2018
- 11. The strategy of actions in five priority directions of development of the Republic of Uzbekistan in 2017-2021. http://strategy.regulation.gov.uz/uz/d

http://strategy.regulation.gov.uz/uz/d ocument/1.

- V. I. Nabokov, and K. V. Nekrasov, "Innovation activity management of AIC organizations under modern conditions," Agri-food policy of Russia, №1, pp. 30–32, 2017.
- Changes in the character and 13. competitiveness of Uzbekistan's agrarian foreign trade. By: Ortikov, Akhmadjon. Conference: 26th International Scientific Conference on Agrarian Perspectives Competitiveness of European

Agriculture and Food Sectors Location: Czech Univ Life Sci, Fac Econ & Management, Prague, Czech Republic Date: Sep 13-15, 2017. Agrarian Perspectives Xxvi: Competitiveness Of European Agriculture And Food SectorS Book Series: Agrarian Perspectives Series Pages: 264-271 Published: 2017

- Soldak, M. O. (2020). Industrial ecosystems and digitalization in the context of sustainable development. Economy of Industry, (4 (92)), 38-66.
- 15. S. F. Ryan, N. L. Adamson, and A. Aktipis, "The role of citizen science in addressing grand challenges in food and agriculture research," Proceedings of the royal society b-biological sciences vol. 285 issue 1891 Article Number 20181977 Published: NOV 21, 2018.