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PROBLEMS AND PERSPECTIVES OF FINANCING INNOVATIONAL PROJECTS OF AGRO-INDUSTRIAL COMPLEX IN KAZAKHSTAN

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Annotation. The article presents anoverview of the Kazakhstan's agro-industrial complex situation and practical issues of financial support ofinnovative development of agriculture in Kazakhstan. The transition to sustainable economic growth in the agricultural sector of the country is impossible without promoting the use of science and technology, the introduction of high technology, activation of all economic entities of scientific and technical sphere of agriculture. The main priority of science, technology and innovation policy in the agricultural sector should be state support for basic and applied science with a focus on the implementation of scientific development in agriculture.

Key words: innovation, innovational projects, agro-industrial complex,financing of innovative projects.

President of the Republic of Kazakhstan N.Nazarbayev in his address to the nation (January 17, 2014), said that "we need to ensure that our agriculture takes the path of innovations. This is our traditional industry. The global demand for food will increase. This sector will attract more investment. This will enable farmers to look beyond short-term weather-related achievements to the long-term growth of production. Competition in the global agro-production will intensify. Agricultural lands should be used by those who introduce new technologies, continuously improve productivity, and perform on the basis of the best international standards"[1]. This is possible only on condition that innovation and technological development ofagro-industrial complex(AIC).

More recently, attention has focused on the demand for research and technology and on the development of innovation systems. An "innovation system" is a network of organizations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organization into economic use, together with the institutions and policies that affect the system's behavior and performance [2]. AIS thus represents a network of organizations, enterprises and individuals that focused on "bringing new products, new processes and new forms of organization into economic use, together with the institutions and policies that affect their behavior and performance". Ultimately, it is the policy environment and active government strategies to foster and award innovation in agriculture that

stimulates or hinders CD for agricultural innovation within the AIS. In short, agricultural innovation, which includes the successful development of new or traditional practices, their tailoring to the local needs of farmers, farm cooperatives and agri-business, and their adoption and up-scaling, requires adequate capacities on all levels of decision making. However, low-income countries often lack the resources and capacities to fully develop their innovation systems [3, 4, 5]. Since the performance of an agricultural innovation system influences the overall performance of the agricultural sector, measuring sectoral performance is vital to assessing an innovation system. Classical indicators of agricultural sector performance include measures such as agricultural sector growth rates and total factor productivity. The growth rate of the agricultural sector is an important indicator of the sector's potential to contribute to poverty reduction if distributional aspects are taken into account. Increases in agricultural productivity are a major driver of agricultural growth and are an important measure of the sector's competitiveness [6].

Theoretical and practical issues of innovative development of agriculture as a whole, and in particular the agricultural sector, as well as the problems of the financial and investment support were the subject of separate publication of L.Abalkin [7], E. Yasin [8], B. Bautin [9], M. Konkova [10], M. Bunin [11], A. Taubayev[12]. But despite the presence of a significant amount of research and publications in the given direction, some issues of the development of financial and investment maintenance of the national system of agriculture through the use of a specially created state development institutions not adequately addressed in the modern economic science. Especially the unique experience of Kazakhstan in the establishment and operation of similar organizations are just beginning to yield its first results.

The purpose of the study of the system of financing of innovative projects in the agro-industrial complex of Kazakhstan is to identify the existing problems in the financial and investment support for promising innovative projects in the field of agriculture and to offer recommendations for improving the of an existing financial mechanism for the implementation of innovation projects through the development of specialized of state development institutions.

There are problems in the agro-industrial complex of the Republic of Kazakhstan. These are:

- the backwardness of agricultural technologies, physical and moral depreciation of the means of production;
- excessive loss of irrigation water, undeveloped commercial fish farming, as well as inefficient use of other natural resources;
- small commercial farming;
- low levels of genetic potential of the seed used, and cattle;
- lack of quality raw materials for industrial processing and the

low share of domestic value-added products in the domestic food market;
- the availability of essential food products, which have not met the domestic needs;
- low level of attracting investments in the agricultural sector;
- insufficient development of rural cooperation.

In addition, financial, and then the food crisis revealed additional problems that affected the investment activities of the industry, and now, when the financial sector problems are at the stage of remission, agriculture in Kazakhstan is one of the most promising sectors of the economy.

Agriculture is one of the key sectors of the Kazakh economy. Kazakhstan is the 9th largest country by land mass. More than 74 % of the country's territory is suitable for agricultural production, representing 5.5 % of GDP and employing over 20% of the labor force, with 43% of the population living in rural areas.

The rich soil and climate provide ideal conditions for growing wheat, barley, rice, corn, millet and buckwheat. In 2015, the total crop area reached 21.2 million ha. Corn and beans will be sown on 16.5 million ha while oilseed will occupy 1.7 million ha. Food production increased by 2.9% at the end of 2015 and for the first time was more than 1 trillion tenge. Imports amounted to 2.9 billion US dollars, export were 1.1 billion US Dollars [13].

Despite the optimistic forecast, there is a need to move agricultural production harmonious combination of development, both crop and livestock production, which will in any economic environment cost-effectively develop agribusiness.

The main reasons for the low labor productivity in agriculture are:

- insecurity of modern scientific research organizations material and technical infrastructure. For today most of the buildings and facilities (71.1%) has been in operation for over 30 years and 22.1% - more than 20 years, to be written off 71.4% of all available agricultural machinery [14, 15];
- limited financial resources to carry out research and development work (grant size does not exceed 0.2% of the gross output of agriculture (2009), while in countries with developed agriculture, the figure is between 1% and 4%);
- low level of entrepreneurial culture based on the use of new technology and innovation, low innovation activity of subjects of agriculture;
- low competitiveness of scientific products and technologies on the international scientific market. Due to the lack of financial resources been poorly implemented training of young professionals in leading international research centers are not held a joint international research, are not implemented measures to attract leading foreign scientists;

- lack of an effective mechanism for securing, motivation, and social support for young scientists in national agricultural science has led to a deterioration of the social status (decrease credibility of scientists in society) scientist and break the continuity of generations of scientists;
- low level of wages in agriculture;
- skills shortages due to lack of effective tools for forecasting staffing, inadequate allocation of government contracts to train agricultural training and employment of low-level agricultural and veterinary professions (16-30% of the number of the graduates of higher education). There is also a shortage of personnel in areas where there are no schools for technical and vocational education;
- lack of social support for young professionals to promote their consolidation in rural areas;
- lack of development of social and physical infrastructure of the village as a whole, including the organization of cultural activities;
- weak interaction of agricultural enterprises and universities and colleges, as well as lack of projects.

awareness of the graduates of universities and colleges on the availability of vacancies in the enterprises.

In this situation, the Government carries out a number of measures. For example, "National Holding" KazAgro" was created in order to implement the state policy to stimulate development of agribusiness complex of the Republic of Kazakhstan through ensuring effective management of investment assets and development of corporate culture of joint stock companies implementing their activities in agribusiness complex, which shares are given to it for payment of placed shares [16,17].

Before liquidation the Holding was an operator of the most important strategic projects of agriculture development, will provide available, targeted and effective use of the state and attracted resources, implementing further development of productive, information and service infrastructure of agribusiness complex.

In 2015, it was funded 251,9 billion. tenge in the agricultural sector and employed 35,8 thousand persons (Figure 1). Current the investment portfolio of "KazAgro" contains 477 projects to the amount of 309 billion tenge. 365 of these projects have been put into operation. Capacity utilization was 70% or 236

Figure1 – Dynamics of agribusiness complex financing (billion tenge)

Selection of projects for funding include the following conditions:

- projects should include modern technology
- investment projects to be implemented within the framework of the Holding structure and meet its goals and objectives
- creation of new jobs, economic recovery and the economic life in rural areas.

Effective development of small and medium enterprises in the agro-industrial complex is an essential resource for economic modernization of Kazakhstan. Especially small and medium businesses that require no upfront investment volume, are the guarantors of social stability and irreversibility of modernization processes by involving the wider rural population in the industrially-innovative sector.

In 2014, the Holding achieved an increase of nearly 5.3% in lending to small and medium-sized businesses, 158.5 billion tenge against 156.2 billion tenge in 2013, by increasing the number of loans granted to small and medium-sized businesses. In 2015, a sharp increase in lending volume by 12%, or 177.7 billion tenge.

The Government of Kazakhstan approved a new sectoral program of agroindustrial complex development for 2013-2020 “Agribusiness – 2020” in February 2013. The Agribusiness-2020 Program aims at developing four dimensions: financial recovery, increase of affordability of products, works and services for the agro-industrial sector entities, development of the state system of agricultural producers support, improvement of efficiency of the state management system of the agro-industrial complex [17]. The gross expenditures proposed in the republican and local budgets for the Program implementation in 2013-2020 will amount to 3,122.2 blntenge, including: 2013 – 339.7 blntenge; 2014 – 466.0 blntenge; 2015 – 322.7 blntenge;2016 –340.7 blntenge;2017– 383.5 blntenge;2018 – 406.9 blntenge;2019– 414.3 blntenge;2020 – 448.4 blntenge.

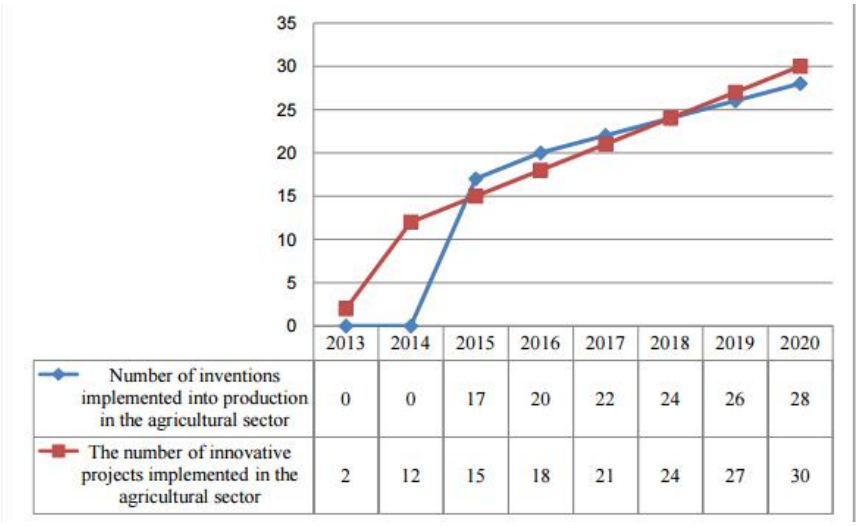
The Program on agribusiness development for 2013 – 2020 will be implemented in two stages:

- During the first stage in 2013 – 2015, it was necessary to build a strong foundation for the agribusiness development.
- The accomplishments planned for the second stage in 2016 – 2020 are: to increase considerably the output of agricultural products, reduce dependence of the RK on imports of all the key food products, exploit the export potential and to achieve the goals highlighted in the Program. The results of solving the tasks assigned to the second stage are outlined below:

  1) increase in labor efficiency in the agriculture through the use of up-to-date agricultural technologies facilitating achievement of the target indicators for the yeild capacity of crops and livestock productivity;

  2) exploitation of the potential of manufacturing and processing sectors in the RK agribusiness.

Measures have been taken by the government for the development of innovation in the production system. The Center of the transfer and commercialization of agricultural technologies (CTCAT), which aims to support and development of new agricultural technologies, including through the creation of new companies based on high technologies with the participation of public resources. Also, in order to provide highly information-analytical and advisory services in agriculture in 2009 Analytical Centre for Economic Policy in the agricultural sectorwas established. CTCAT Activities aimed at supporting and developing new agricultural technologies, including through the creation of new companies based on high technologies with the participation of public resources (start-up and spin-offs). The key indicators for the development of innovations in agriculture [17, 18] are shown in Figure2.



	2013	2014	2015	2016	2017	2018	2019	2020
Number of inventions implemented into production in the agricultural sector	0	0	17	20	22	24	26	28
The number of innovative projects implemented in the agricultural sector	2	12	15	18	21	24	27	30

Figure 2 - Indicators for the implementation of the results of agricultural science in Kazakhstan

Based on the analysis of the current state of the industry of agriculturalscience in Kazakhstan the following issues has identified that hinder thedevelopment of innovations in agriculture:insufficient funding; lack of motivation to improve the performance of scientists;difficulties in implementing scientific research;the lack of development of the dissemination of knowledge;outdated scientific and technical infrastructure;the aging of the scientific staff; undeveloped level of transfer of advanced foreign technologies;lack of available financing in the early stages of innovation;undeveloped demand for innovation, etc.

To solve the problems mentioned above, and for adequate provision ofinnovative and technological development of the agro-industrial sphere of Kazakhstan, we propose the following steps and measures:

- improvement of the state of science policy;
- development trends of innovation in agribusiness and agricultural science;
- the introduction of market mechanisms to activate innovation in theagricultural sector;
- development of innovative infrastructure of AIC;
- development of cluster initiatives in the innovation system of agribusiness.
- introduction of modern methods and acceleration of research by updatingthe infrastructure of agricultural science;
- creation of a system implementation in production of scientific research;integration into the international scientific environment by conducting jointresearch and development, the establishment of joint funds, membership ininternational scientific organizations;
- implementation of measures to attract top foreign scientists in agriculturalresearch;
- establishment of a system of labor remuneration of researchers and attractyoung professionals in agricultural sciences;
- the development of public-private partnership through the implementationof innovative projects;
- to ensure the transfer of foreign technologies;
- the development of institutions to support innovation in agriculture.

From the state side in order to improve the efficiency, effectiveness and competitiveness of scientific research results necessary modernization and development of scientific research infrastructure, as well as the current provision of scientific infrastructure and property, remuneration of labor of the administrative and support staff, as well as information support of scientific and technical activity of research organizations under the Ministry of Agriculture.

Along with this, it is necessary to improve the transfer and commercialization system of agricultural technologies for activation of innovation activity in agro-industrial complex through by increasing investment opportunities of agro-industrial complex subjects of agriculture, expand the coverage of agro-industrial complex subjects by system of knowledge transfer.

In order to develop public-private partnerships should be increased share of private investment in scientific research through contract research realization.
For the formation of a new research and innovation system on the generation and transfer implementation of knowledge in the field of agro-industrial complex with the results, corresponding with the best world standards, should be continued work for creation inter-disciplinary research and education complexes of international level.

In order to maintain an effective feedback between the subjects of agro-industrial complex and state agencies, agricultural science and vocational education system will continue providing free advice to farmers.

Immediate task of improving the innovation system of agriculture is to increase agricultural innovation capacity. It is based on research and development for the agricultural industry as a constantly replenished and renewable source of continuously increasing capabilities of innovative renewal of agriculture. Scientific and technological advances often determine the possibility of transition to sustainable agriculture development, while ensuring the implementation of the measures of the innovation system depends on how fast this transition happens.

Thus, problems and perspectives of financing innovational projects of agro-industrial complex in Kazakhstan were studied and major conclusions are as follows:

- the feature of modern agro-industrial complex is the presence of a large number of scattered small farms, which are not able to perceive innovations;
- a necessary condition for the formation of an innovative system of agro-industrial complex is the creation of innovation-active economic structures, i.e., real subjects that can implement innovations in the agricultural sector;
- implement policies aimed at improving the financing of innovative projects in the field of agriculture should be continued, becauseagrarian sector can be a strategic vector of the national economic system development.

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Резюме

Чтобы инновационное развитие АПК отвечало своему предназначению и оправдало в обозримом будущем возлагаемые на него надежды, требуется полноценное и всестороннее обеспечение этого процесса, позволяющее преодолеть черты его инерционного, и нередко застойного и даже регрессирующего характера. Это относится ко всем направлениям обеспечения инновационного развития АПК. Непосредственной задачей совершенствования инновационной системы АПК является увеличение аграрного инновационного потенциала. Основу его составляют научно-технические разработки для агропромышленного производства как постоянно пополняемый и возобновляемый источник непрерывно возрастающих возможностей инновационного обновления АПК.

Түйін

АӨК-нің инновациялық дамуының өзінің тағайындалған сипатына сай болуы үшін және жарқын болашақта оған қойылған талаптарды ақтау мақсатында осы процессті толық және жан-жақты қолдау қажет етеді. Бұл АӨК инновациялық дамуын қамтамасыз етудің барлық бағыттарына қатысты. АӨК инновациялық жүйесін жетілдірудің басты міндеті аграрлық инновациялық потенциалды арттыру болып табылады. Ал осы міндеттің негізгі бағатына АӨК инновациялық жаңартудың үнемі толықтырылып және жаңартылатын мүмкіндіктердің көзі ретінде агроөнеркәсіптік өндірісіне бағытталған ғылыми-техникалық әзірлемелер жатады.