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## Investment Providing Innovative Projects in Agro-Industrial Complex of Kazakhstan

**Keywords:** *innovation project in agriculture, investment in agricultural science in Kazakhstan, investing innovation in agriculture.*

**Annotation:** *This paper discusses theoretical and practical issues of investment support of innovative development of agro - industrial complex of Kazakhstan. Defined system-wide problems that impede the full development of innovative agro-industrial complex of Kazakhstan. Found that the beginning of a promising innovative development of agriculture in the Republic of Kazakhstan are reproduction of agricultural innovation and development in the mass practice of improved methods of agricultural production.*

Problem statement. At the present stage, in agro-industrial complex (agrarian and industrial complex) of the Republic of Kazakhstan there are all-system problems among which it is possible to note:

- backwardness of agro-technologies, physical and moral wear of fixed assets of production;
- excess losses of irrigation water, backwardness of commodity fish breeding, and also inefficient use of other types of natural resources;
- small marketability of agricultural production;
- low level of genetic potential of used seeds and cattle;
- shortage of qualitative raw materials for industrial processing and a low share of a domestic production of deep processing in domestic market of foodstuff;
- existence of the major food on which internal needs of the country aren't satisfied;
- low level of attraction of investments into agrarian sector of economy;
- insufficient development of rural cooperation (1, 2).

In addition, financial, and then and food crisis was revealed by additional problems which influenced investment activity of branch, and now when problems of financial sector are at a remission stage, the agriculture in Kazakhstan is considered one of the most perspective sectors of economy.

Analysis of the last researches and publications. Theoretical and practical questions of innovative development as a whole agriculture, and in particular agro-industrial complex, and also problems of financial and investment providing devoted L.Abalkin (3), E. Yasin (4), V. Bautin (5), M. Konkovoy (6), M. Bunin's separate publications (7), O. Sabdena (1), A. Taubayeva (8). But despite existence of a significant amount of researches and publications in given the directions, single questions of development of system of financial and investment providing national system of agrarian and industrial complex through use of specially created state institutes of development are insufficiently considered in modern economic science.

Especially unique experience of Kazakhstan in creation and functioning similar to the organization only starts bringing the first results.

The research objective of system of financing of innovative projects in agro-industrial complex of Kazakhstan consists in identification of existing problems in financial and investment providing perspective innovative projects in the sphere of agriculture and to offer recommendations about improvement of the existing financial mechanism of implementation of innovative projects through development of specialized state institutes of development.

Allocation unresolved earlier parts of a common problem. Besides all-system problems, existence of the problems constraining rates of innovative development of agrarian and industrial complex is noted:

- neediness of the scientific organizations of modern scientific and material infrastructure. Today the main part of buildings and constructions (71,1%) is in operation over 30 years and 22,1% - over 20 years, is subject to write-off of 71,4% of all available agricultural machinery [9, 10];

- limitation of financial resources on carrying out research and developmental works (the size of allocated funds doesn't exceed 0,2% of gross output of agriculture (2009) whereas in the countries with the developed agriculture this indicator makes from 1% to 4%);

- low level of the enterprise culture based on use of new technological decisions and innovations, low innovative activity of subjects of agrarian and industrial complex;

- low level of competitiveness of scientific products and technologies in the international scientific market. Due to the lack of financial resources training of young specialists in leading foreign scientific centers is poorly carried out, joint international scientific researches aren't conducted, measures for involvement of leading foreign scientists aren't realized;

- lack of the effective mechanism of fixing, motivation and social support of young scientific shots in domestic agrarian science I led to deterioration of the social status (to decrease in authority of scientists in society) the scientist and to a rupture of continuity of generations of scientists;

- low level of compensation in agriculture;

- shortage of qualified personnel due to the lack of effective techniques of forecasting of requirement for the shots, insufficient allocation of the state orders for preparation of agrarian shots and low level of employment of graduates of agricultural and veterinary specialties (16-30% of number of let-out experts of the higher education). Also shortage of shots is noted in those areas where there are no educational institutions of technical and professional education;

- lack of measures of social support of the young specialists stimulating their fixing in the village;

- backwardness of social and engineering infrastructure sat down as a whole, including the organization of cultural leisure;

- weak interaction of the agrarian and industrial complexes enterprises and universities and colleges, and also absence of awareness of university graduates and colleges about existence of vacant places in the enterprises.

Main results of research. Innovative development of agrarian and industrial complex means its high-quality transformation reached at the expense of growth of productive forces at simultaneous improvement of the organizational and economic mechanism of agriculture,

branches interacting with it and agrarian and industrial complex as a whole. It is provided with constantly extending use of more perfect production technologies and processings of the agricultural production, the improved grades of crops and breeds of animal, new cars, progressive organizational and economic models, modern information technologies and other innovations.

The agro-industrial complex of Kazakhstan includes about 65 sectors and splits, for a specification of measures for the most perspective directions and strengthening of specialization of regions on the basis of the detailed analysis of these sectors and splits of agro-industrial complex was selected 15 perspective, competitive sectors (production, export of grain and products of its deep processing, production and export of meat and meat products, poultry farming, production and processing of oil-bearing crops, production and processing of fruit and vegetable production, production of milk and dairy products, production of white sugar from sugar beet, production and export of wool and products of its deep processing, development of an aquaculture and processing of fish production, production and pork processing, development of horse breeding of the meat and dairy directions with further production of finished goods, development of camel husbandry and production of its processing, maralovodstvo development for satisfaction of requirements of pharmacy, beekeeping development for satisfaction of internal requirements of the population and pharmacy, production and cotton processing).

Key elements of implementation of drafts of the Map of industrialization, and also development of agro-industrial complex the Joint-stock company "National holding "Kazagro" was defined further created with 100 percent participation of the state which includes a number of subsidiaries - "The Food Contract Corporation national company; "Agrarian credit corporation"; "Kazagrofinance"; "Fund of financial support of agriculture"; "It is small өнімдері корпорациясы"; "Kazagrogarant"; "Kazagromarketing"; "Kazagroinnovation", for each of which defined own functions and development priorities.

We detail investment activity of Kazagro holding. At implementation of investment activity the Holding is guided by the following conditions:

- in the sphere of investment intentions of Holding the competitive environment has to be absent or be poorly presented;
- as a result of implementation of investment projects the modern technologies rendering considerable multiplicative effect on economy of Kazakhstan have to be introduced;
- investment projects have to be implemented within put before subsidiaries of Kazagro Holding of the authorized purposes and tasks on the principles of state-private partnership;
- the organization of new workplaces and revival of economic and economic life in rural areas.

Work of Holding is conducted in two large directions: the first is an ensuring import substitution by the separate types of the agricultural products which have been insufficiently presented in the food market of the country; the second is a development of an export potential of agrarian and industrial complex.

From the presented directions on 8 most priority sectors of agro-industrial complex of Kazakhstan detailed master plans in which accurate reference points and indicators for businessmen, financial institutions, government bodies and social and enterprise corporations are defined at implementation of investment projects are developed.

Annually volumes of the budgetary funds allocated for development of agro-industrial complex grow, only in 2009 from means of the republican budget production subsidizing (in 2008 of a subsidy made – 40,2 billion tenge, in 2007 – 21,5 billion tenge) is directed more than 96 billion tenge, including 41,3 billion. In 2010 for crediting of investment projects of JSC National Holding Kazagro from the RK National fund it is allocated with 120 billion tenge.

Thanks to investment policy of the state projects of food supply and building of an export potential, first of all, at the expense of means of institutes of JSC National Holding Kazagro are realized.

So following the results of 2008-2010 124 projects for the sum of 35,2 billion tenges, including in 2008 62 projects on 5,9 billion tenge and in 2009 on 29,3 billion tenge are put into operation.

Among them it is possible to note the following large projects having breakthrough innovative character.

Construction of tomatopererabatyvayushchy plant - 1 project worth 2,3 billion tenges on construction of tomatopererabatyvayushchy plant and development of production of fruit and vegetable cultures with application of technologies of a drop irrigation in YuKO, including at the first stage in 2008 on 141 hectares production of 8,4 thousand tons of fruit and vegetable production, at the 2nd stage in 2009 production of 32,5 thousand tons of fruit and vegetable production on 650ra. Release to 4,4 thousand tons of Cold Break tomato paste, and "Hot Break" with the content of solids of 28-30% and 36-38% respectively is expected.

Development of infrastructure of export of the Kazakhstan grain - the grain terminal in port Amirabad (Republic Iran) with transfer to 700 thousand tons of grain a year, single storage – 53 thousand tons of grain, stabilization of export of the Kazakhstan grain to Iran is put into operation.

Construction of plant on sunflower processing – plant on processing of the 7400 tons oil-bearing crops of oil in year, cost of the project is 2,4 billion tenge, 100% a covering of internal deficiency of the West Kazakhstan region. The supplier of the equipment - SINEKO International, a.s. (Brno, Czech Republic). During realization 148 constants of a workplace will be created. Production of sunflower oil will lower an importozavisimost of the Western region of the republic.

Construction of large and commodity dairy farms – are put into operation 7 MTF with use of advanced technologies of the loose housing contents and cultivation of highly productive breeds of KRS. The total cost of financing 7-MTF made 6,0 billion tenge. Within the majority of projects selection and purchase of breeding heifers of golshtino-frizsky breed with annual efficiency to 7,5 tons of milk was carried out. Implementation of projects is directed on saturation of domestic market by the food and stabilization of the prices of food, ensuring food security, development and increase of competitiveness of agricultural production of processing industry.

Construction and modernization of poultry farms of the egg direction – all is put into operation of 5 projects for total amount – 460,6 million tenges. Implementation of projects is aimed at creation of modern productions with use of the latest processing equipment. Within projects acquisition and delivery of the cellular equipment for young growth and laying hens, and also a livestock of the hens, different is carried out by good immunity and ability to give

vent stable eggs even in the conditions of periodic change of conditions of the contents and a food allowance.

On 01.09.10r. JSC National Holding Kazagro is financed implementation of 79 large projects for a total cost of 87,4 billion tenge, including the financing sum from Kazagro makes 70,0 billion tenge:

Creation of livestock feeding complexes – is realized 12 investment projects worth 24,5 billion tenges on construction of hi-tech feedlots on 42090 heads of cattle and 70 thousand heads of MRS. Production to 9 230 tons of KRS meat a year and 3 500 tons of meat of pork a year is expected. Creation of 933 constant workplaces.

Development of a network of dairy and commodity farms - 8 projects for the sum of 8,0 billion tenges. Large-scale dairy and commodity farms on 4660 heads of milch herd of mainly golshtino-frizsky breed, with use of advanced technologies of the maintenance of KRS will be modernized and constructed.

Construction of meat-processing plants – 3 projects worth 3,4 billion tenges on production of the meat products answering to the international standards, with the organization of 229 new workplaces. Capacities of data of the enterprises will make 10,7 thousand tons of meat and meat production in a year.

Development of a network of hothouse farms - 6 projects worth 8,8 billion tenges on the area of 21,66 hectares with capacity up to 11 500 tons of fruit and vegetable production a year that will allow to reduce need of the republic for the areas of the closed soil (202 hectares) by 10%.

Development of infrastructure of export of the Kazakhstan grain and its deep processing - in this direction is realized 17 projects for a total cost of 19,1 billion tenge, among them:

- elevator construction with a mill complex and a formula-feed plant in nrt. Beyneu (Mangistausky area). The planned power of single storage of grain of an elevator of 100 thousand tons which will provide transfer to 1,5 million tons of grain for export in the Caspian direction, the countries of Central Asia and the Middle East,

- the organization of production for deep processing of grain, in Karaganda. The planned power processing of 37500 tons of a flour a year, production of a gluten to 4400 tons, syrups – 23 800 tons, feed additives – 18 000 tons per year,

- expansion of macaroni factory, Kostanay. The increase in production to 36 600 tons of pasta a year (project power to 24 000 tons) is planned.

Creation of a network of poultry farms – 7 projects on production of eggs and fowl worth 14,2 billion tenges. Creation of 6 poultry farms of the meat direction will give the chance of production of fowl about 42 700 tons, the project of poultry farm of the egg direction will allow to make to 50 million eggs a year.

Development of a network of vegetable storehouses – 10 projects with the purpose of creation of a warehouse for storage of vegetables. fruit, meat and other foodstuff, worth 2,0 billion tenges. Capacity of storage is 32,9 thousand tons. Creation of 168 constant workplaces.

Production of bakery products - 1 project worth 1,1 billion tenges providing acquisition of a technological set the equipment - the line for baking of rolls and bread (the supplier the System Trade GmbH company, Salzburg, Austria). The line for baking of rolls and bread power 7884тыс. rolls in a year and 31,0 thousand loaves of bread a year. The organization of 160 workplaces during commissioning.

Implementation of the project will allow to provide the population Ekibastuz with bakery products of own production.

Creation of production on agricultural machinery assembly - 1 project in the total cost of 1,4 billion tenge, with creation of 52 new workplaces during operation. Release (1000 units of the Belarusian tractors a year) domestic assembly at the prices available to agricultural producers is expected. Now tractors of production of the Republic Belarus are the agrarian and industrial complexes most demanded at subjects (good qualitative characteristics at lower prices in comparison with other foreign producers) and make about 91% of all agricultural machinery.

Production of tractors directly in the territory of the Republic of Kazakhstan to 1000 units a year at an initial stage, with further increase to 3000 units, will lower an importozavisimost of the Kazakhstan market of agricultural machinery.

Production of a high-quality seed material of a cotton – construction of plant on production of a seed material of a cotton with a side job to 5000 tons of seeds a year, worth 1,7 billion tenges. Products - elite seeds of a cotton, seeds of the 1st and 2nd reproduction.

Implementation of these projects will allow to create 5 103 constants and 3 503 temporary workplaces for construction.

Along with it, the group of subsidiaries of Kazagro National holding realizes 67 investment projects for total amount of 35,9 billion tenge.

Since 2009 of JSC Kazagroinnovation as the main coordinator of innovative activity in the sphere of agrarian and industrial complex of Kazakhstan started implementation of the budgetary program "Applied Scientific Researches in the field of Agrarian and Industrial Complex" for 2009-2011.

In 2009 the following results were reached: in the field of a gene pool of crops inventarizovano 7029 samples, are studied 71166 samples, 10326 samples are documented; 35 new grades are transferred to the state sortoispytaniye, being characterized by the increased productivity, quality and resistance to external factors of the environment; in agriculture 12 recommendations about resource-saving technologies and cultivation of main types of the crops adapted for various climatic conditions of the republic are developed.

In branches of animal husbandry, fishery scientific works on creation of new highly productive lines (types), breeds of agricultural animals, fishes, etc. are continued. Implementation of the project of large-scale selection in cattle breeding branch (the meat and dairy directions), directed on increase in a breeding number of cattle in livestock farms of the republic is begun.

Scientific researches captured the priority directions of development of branches food and processing industry, mechanization of agriculture, economy of agrarian and industrial complex and development of rural territories.

Works on introduction of scientific development in agricultural production are sped up. In Akmolinsky area the share of grades of wheat of the Kazakhstan selection for the last 4 years increased to 70%. So, grades Akmola-2 and Astana - achievements of selectors of the Research and production center of a grain farm of Barayev were cultivated in 2009 on the area about 3 million hectares. Grades of a cotton of selection of the Kazakh scientific research institute of a hlopkovodstvo occupied 75% of cultivated areas.

New grades and hybrids are especially demanded in production: on winter wheat and barley - to 90% of grades and soy - 100% (selection achievements of scientists of the Kazakh

scientific research institute of agriculture and plant growing); to spring-sown field - 40% (The Karaganda scientific research institute of plant growing and selection); to carthamus - 100% (Krasnovodopadsky agricultural experimental station), to a cotton – 75% (The Kazakh scientific research institute of a hlopkovodstvo); to rice - more than 50% (The Kazakh scientific research institute of rice growing); to potatoes - to 40% (The Kazakh scientific research institute of potato growing and vegetable growing), etc.

Grades of a spring-sown field and barley of Karabalyksky SHOS are cultivated on the area up to 1,5 million hectares in Kostanaysky, North Kazakhstan, Akmolinsky areas.

As a whole the areas under domestic grades of crops made about 7,1 million hectares in 2009, and application of the minimum and zero resource-saving technologies of cultivation of grain crops increased to 10,3 million hectares. These results became possible thanks to system state support of agricultural researches and their introduction in production.

Now are created and transferred to the state sortoispytaniye of 16 new grades and hybrids of agricultural and other cultures, cultivated areas of cultures under grades of domestic selection are increased by 2%. 7 technologies in agriculture, fishery and animal husbandry are created. Developments of branches of the food industry, to system of measures of the state support, structure and a tendency of development of a manpower of agrarian and industrial complex in Kazakhstan and other countries are developed 6 recommendations and offers on the forecast of development of agrarian and industrial complex for 2010-2012. Also, 3 recommendations in fishery are developed. In 2009 of a grade of a cotton of domestic selection occupied 75% of cultivated areas. Similar results are available and by other types of crops.

As a whole, estimating positively state policy on innovative development of agrarian and industrial complex and agricultural products sales promotion, in branch there is a number of the problems which decision demands further efforts of JSC National Holding Kazagro and subjects of agriculture.

It should be noted, very small percent of introduction of innovations in mass process of production. For example, in the agrarian sphere only for 2006-2008 were created and passed gossortoispytaniye more than 200 new highly productive grades and hybrids of agricultural cultures, more than 70 vaccines, preparations and MH are developed. other. But many development still is presented only in scientific reports.

Besides, low level of solvent demand for scientific and technical products from agrarian sector is the main barrier on a way of innovations. Calculations show that annually remain unclaimed by agricultural production to 80% of the finished scientific development. Not less actual problem is backwardness of an innovative carrying-out network from science to production. Only about 40% of total of the enterprises and about 35% of country (farmer) farms of the republic payment - are solvent and represent financially steady formations, other agricultural formations conduct simple reproduction, and the majority of them bankrupts (26% of the agricultural enterprises and about 60% of country (farmer) farms).

In agro-industrial complex of the country still there is a number of shortcomings - low rates of structural and technological modernization of branch, an unsatisfactory level of development of market infrastructure, a melkotovarnost of agricultural production, financial instability of the branch, insufficient inflow of private investments on branch development, deficiency of qualified personnel, etc. (11)

The modern agrarian and industrial complex is in a difficult financial and economic state: in branch the unprofitable agro-industrial enterprises work, product cost still remains high, the accounts payable doesn't decrease. Besides, the fixed business assets are extremely worn-out, sharply there are no current assets, there are no necessary methods of technological updating of capacities, mechanisms of conducting economic activity of the agrarian and industrial complexes enterprises with application of modern production technologies, managements and the organizations are insufficiently effective.

The backbone beginning of innovative development of agrarian and industrial complex in the Republic of Kazakhstan are reproduction of agricultural innovations and development in mass practice of more perfect methods of maintaining the agricultural production, defining in the set innovative development of agriculture. Ensuring innovative development of agrarian and industrial complex consists of two blocks - resource and institutional. The resource block includes financial, personnel, material, information support. A part of the institutional block are organizational and economic, infrastructure, standard legal support; the same group is adjoined by development innovative the focused forms of managing.

o receive the increased value of innovative development and the expectations connected with it in acceptable time limits demanded results don't allow to count only on the developed innovative system of agrarian and industrial complex which a little capable in its modern look by expanded scales and sufficient rates is to apply innovations in mass practice of agricultural production. In the agrarian sphere of economy I made a basis of the mechanism of the crisis phenomena during reform and the destructive policy concerning providing measures of innovative development of agrarian and industrial complex defines now.

That innovative development of agrarian and industrial complex answered the mission and justified hopes in the near future rested upon it, full and comprehensive ensuring this process, allowing to overcome its lines inertial, and quite often stagnant and even regressing character is required. It belongs to all directions of ensuring innovative development of agrarian and industrial complex.

Direct problem of improvement of innovative system of agrarian and industrial complex is the increase in agrarian innovative potential. The basis it is made by scientific and technical development for agro-industrial production as constantly filled up and renewable source of continuously increasing opportunities of innovative updating of agrarian and industrial complex. Scientific and technical achievements define often possibility of transition to a sustainable development of agrarian and industrial complex whereas on implementation of providing measures of innovative system depends as quickly such transition will happen.

Actually always lag of the actual results of agricultural production from opportunities of their receiving takes place at full and correct use of scientific and technical achievements. It is fair and concerning the present. For example, the productive potential of plants and animals is realized at the level which isn't exceeding 35-40% of the genetically caused. At the same level possibilities of increase of soil fertility are used. It demands to increase along with development of scientific researches innovative potential in all other directions, to raise possibilities of wider and effective use of scientific and technical achievements available and expected in the future.

Conclusions from this research and prospect of the subsequent development in this direction. Therefore, one of the main objectives of providing blocks of innovative system of



agrarian and industrial complex is the creating favorable conditions for formation of fund of innovations and their development in production when smoothing existing distinctions between results received in production and potential of scientific and technical development, meaning as a quantitative set of innovations available and available to consumers, and opportunities to improve their operational, economic and other performance of agro-industrial activity.

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