ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
АУЫЛ ШАРУАШЫЛЫҒЫ
МИНИСТРЛІГІ

МИНИСТЕРСТВО
СЕЛЬСКОГО ХОЗЯЙСТВА
РЕСПУБЛИКИ КАЗАХСТАН

БҰЙРЫҚ

«___» _____ 20____

Нұр-Сұлтан қаласы

ПРИКАЗ

№ _____

город Нур-Султан

About the Strategic Plan of the Ministry of rural Economy of the Republic of Kazakhstan for 2020-2024

I ORDER:

1. Approve the attached Strategic Plan of the Ministry of Agriculture economy of the Republic of Kazakhstan for 2020-2024.

2. The Department of Strategic Planning and Analysis, within ten calendar days after the adoption of this order, ensure its placement on the Internet resource of the Ministry of Agriculture of the Republic of Kazakhstan.

3. This order comes into force from the date of its signing.

Acting Minister

A. Saparov

"AGREED"
Minister of National Economy
Republic of Kazakhstan

_____R. Dalenov

« » _____ of the year

"AGREED"
First Vice Minister of Finance of
the Republic of Kazakhstan

_____B. Sholpankulov

« » _____ of the year

002439

Appendix to the order
Minister of Agriculture
from " " _____20___
ÿ _____

Strategic plan
Ministry of Agriculture of the Republic of Kazakhstan
for 2020-2024

Section 1. Mission and Vision

Mission:

creating conditions for increasing the competitiveness of the agro-industrial complex, managing land resources through the effective formation, coordination and implementation of state

politicians.

Vision:

competitive agro-industrial complex and sustainable land resources.

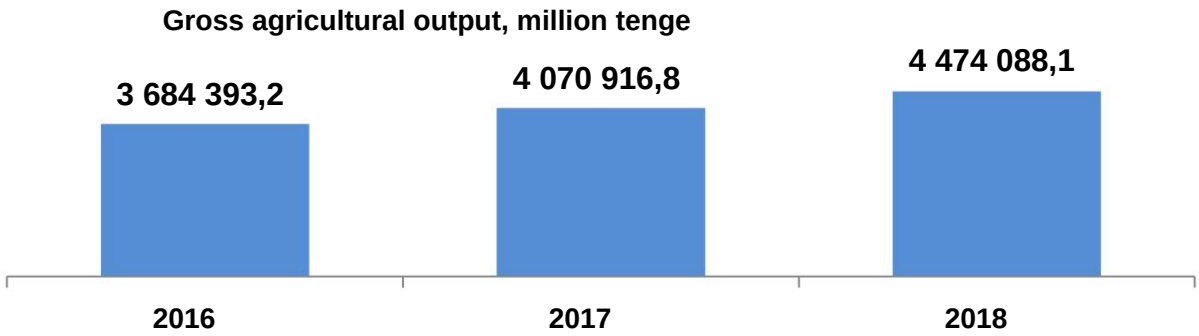
Section 2. Analysis of the current situation and risk management

Strategic direction 1. Increasing the efficiency of production of agricultural products

1.1. Main parameters for the development of a regulated industry or sphere activities

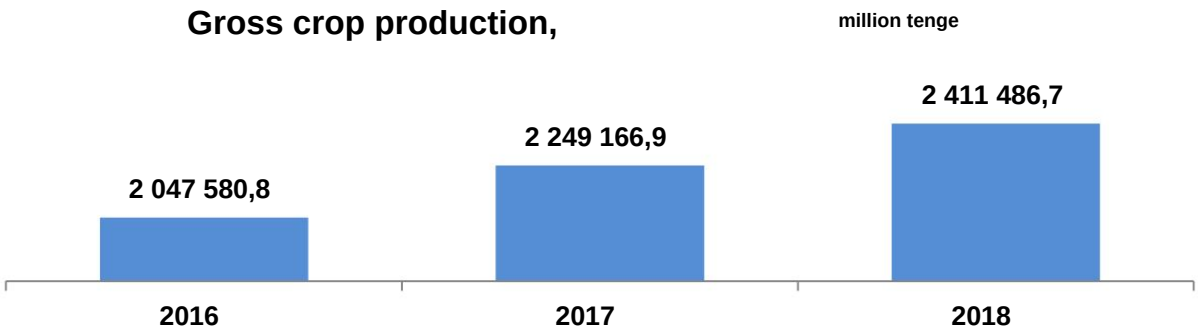
According to the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, the volume of gross agricultural output (services) in 2018 amounted to 4,474.1 billion tenge, which is 6.6% more than in 2016 (Figure 1).

Picture 1.



Gross output of crop production at the end of 2018 amounted to 2,411.5 billion tenge, which is 5.5% higher than in 2016 (Figure 2).

Figure 2.



The gross grain harvest in 2018 amounted to 20.3 million tons, which is 0.3 million. tons or 1.5% less compared to 2017 (20.6 million tons).

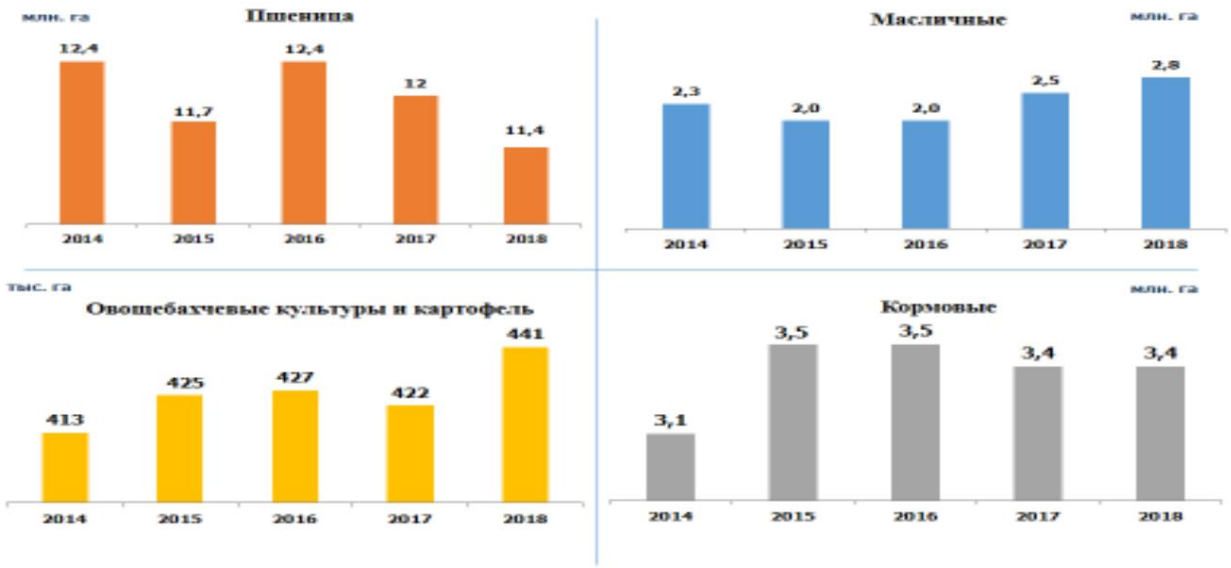
In 2018, the sown area of agricultural crops amounted to 22.0 million hectares, which is 351.1 thousand hectares more than in 2016. Grains

and legumes are located on an area of 15.1 million hectares (less than in 2016 by 265.4 thousand hectares), including wheat - 11.4 million hectares (less than in 2016 by 1022.5 thousand hectares) , while the area of oilseeds increased by 800.7 thousand hectares and amounted to 2.8 million hectares, sugar beets - by 6.7 thousand hectares and

amounted to 19.6 thousand hectares. In crop production, it is necessary to note the results of structural and technological diversification, if in 2013 the area under wheat was almost 60.8% (13.1 million hectares), then in 2018 these areas decreased to 51.8% (11.4 million . ha) (Figure 3).

Figure 3.

Diversification of the structure of sown areas of main agricultural crops for 2014-2018



The average grain yield in 2018 was 13.5 c/ha, which remains at the level of 2016 (13.5 c/ha).

In order to ensure a favorable phytosanitary situation in the republic, in total in 2018, at the expense of the republican budget, 2.7 million hectares were treated against especially dangerous pests.

In addition, treatments against diseases of grain crops were carried out on an area of 2.8 million hectares. At the same time,

at the expense of agricultural producers (hereinafter referred to as Agricultural Producers) there was 2.28 million hectares were processed, at the expense of the republican budget 543.9 thousand hectares.

Treatments against locust pests were carried out on an area of 1.7

million hectares

Chemical treatments at the expense of the republican budget against quarantine objects were carried out on an area of 5.8 thousand hectares, including: American white butterfly - 0.2 thousand hectares, oriental codling moth - 0.4 thousand hectares, Californian scale insect - 0, 09 thousand hectares, melon fly - 0.08 thousand hectares, gypsy moth - 1.4 thousand hectares, creeping bitterweed - 3.6 thousand hectares, Comstock's mealybug - 0.008

thousand ha.

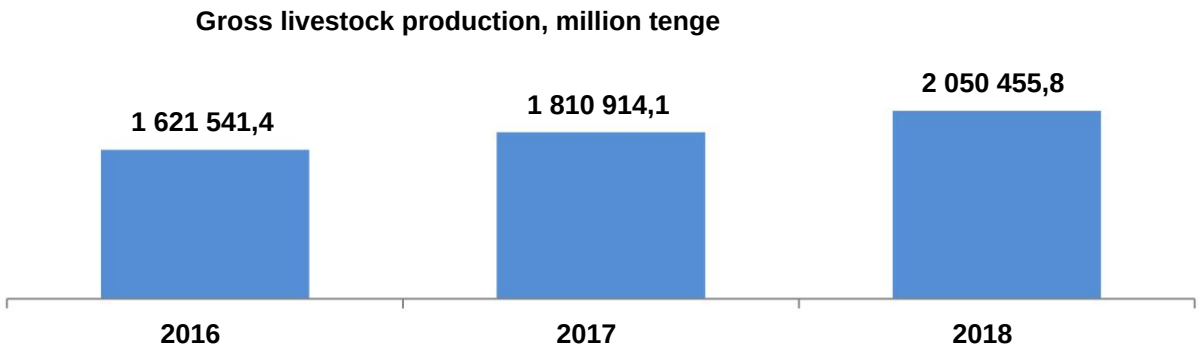
At the same time, according to the instructions of state inspectors, at the expense of the agricultural enterprise, measures were taken against outbreaks of quarantine objects on an area of 69.8 thousand hectares.

In general, the above measures ensure a favorable phytosanitary situation in the republic, as evidenced by the absence of domestic agricultural bans on the supply of crop products from third countries. Gross output of livestock products in 2018 amounted to 2,050.9

on

billion tenge, which is 8.0% more than in 2016 (Figure 5).

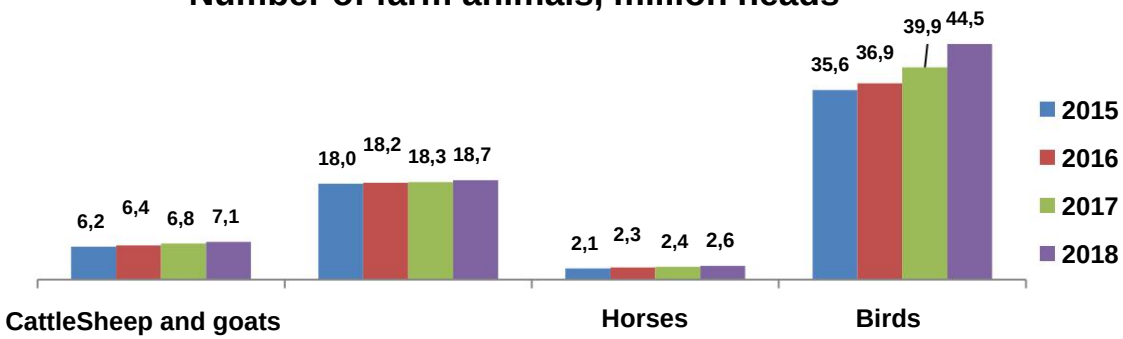
Figure 5.



The number of cattle increased by 15.4% compared to 2015 and in 2018 amounted to 7.1 million heads. The number of sheep and goats increased by 3.7% compared to 2015 and amounted to 18.7 million heads. The number of horses increased by 26.7% compared to 2015 and amounted to 2.6 million heads. The number of birds of all species increased by 25% compared to 2015 and amounted to 44.5 million heads (Figure 6).

Figure 6.

Number of farm animals, million heads



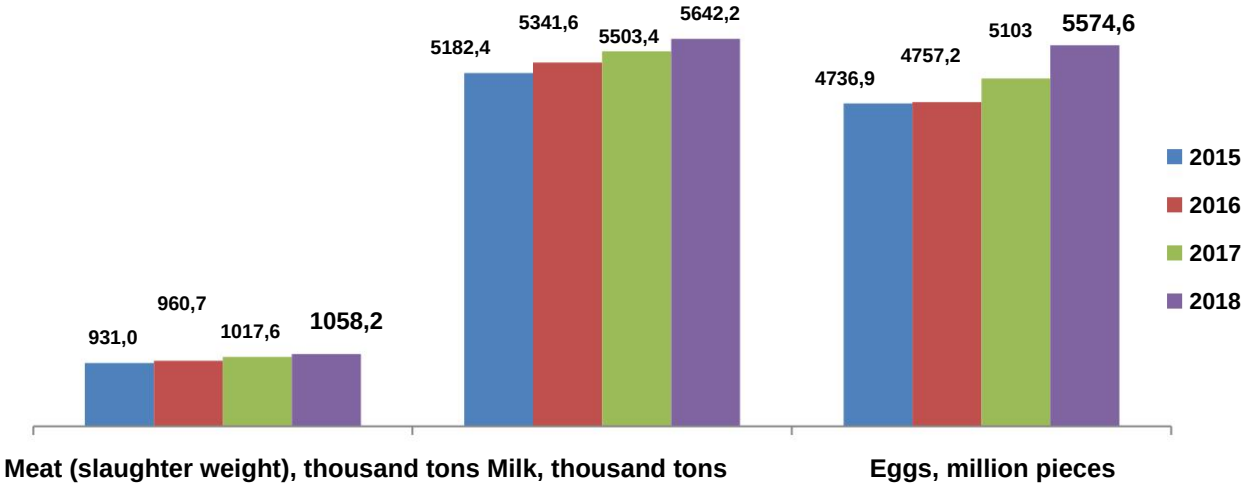
At the end of 2018, meat production in slaughter weight amounted to 1058.2 thousand tons, which is 13.7% more than in 2015.

Milk production in 2018 amounted to 5,642.2 thousand tons and increased by 8.9% compared to 2015.

Egg production in 2018 compared to 2015 increased by 17.7% and amounted to 5.6 billion pieces (Figure 7).

Figure 7.

Volume of livestock products produced



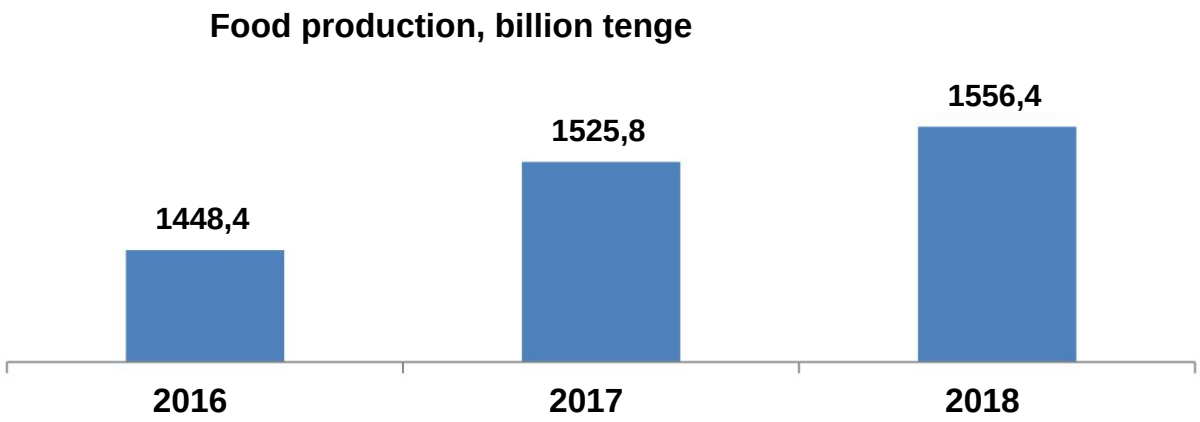
In 2018, the epizootic situation regarding especially dangerous animal diseases in the republic remains stable, with the exception of isolated outbreaks of acute and chronic infections.

Since the beginning of 2018, 167 foci of especially dangerous animal diseases have been registered, including: 2 foci of epizootic lymphangitis, 94 foci of rabies, 40 foci of emkar, 13 foci of pasteurellosis, 2 foci of infectious enterotoxemia, 1 foci of listeriosis, 3 foci of tuberculosis, 2 foci of anthrax , 3 foci of rhinopneumonia, 1 foci of Newcastle disease, 5 foci of epididymitis, 1 foci of bradzitis.

Of the 167 outbreaks registered above, 160 were eliminated and closed by decision of local executive bodies. In the remaining 7 outbreaks, veterinary quarantine measures are being carried out according to the instructions.

The volume of food production in 2018 amounted to 1556.4 billion tenge and increased in nominal terms by 5.8% compared to 2016 (Figure 8).

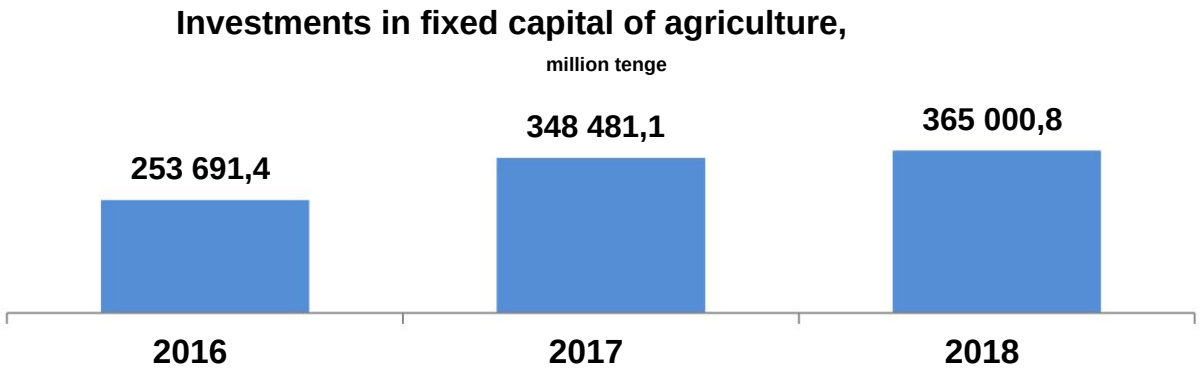
Figure 8.



Labor productivity in agriculture in 2018 compared to 2016 increased by 674.7 thousand tenge/person and amounted to 2076.6 thousand tenge/person.

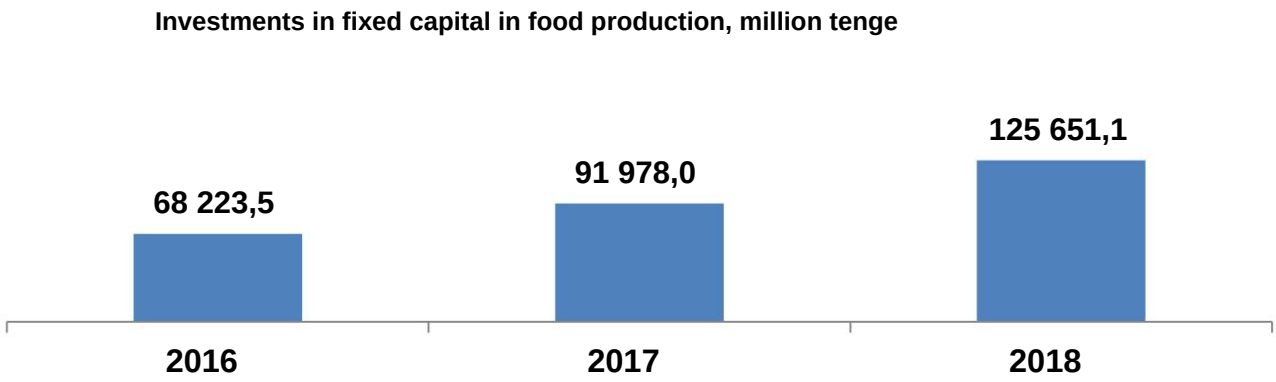
The influx of investment in fixed capital in agriculture in 2018 compared to 2016 increased by 35% and amounted to 365.0 billion tenge (Figure 9).

Figure 9.



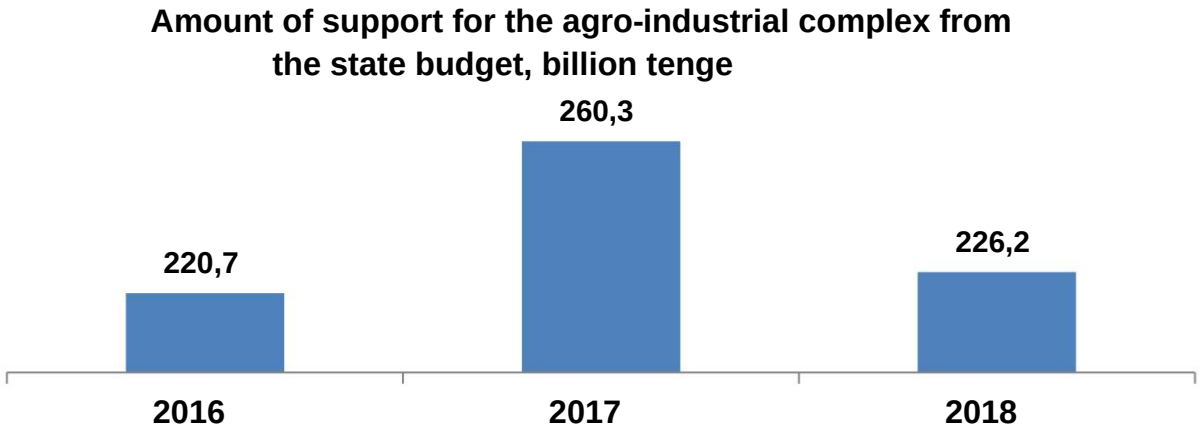
The volume of investments in fixed capital for food production in 2018 compared to 2016 increased by 66.8% and amounted to 125.7 billion tenge (Figure 10).

Figure 10.



In 2018, 226.2 billion tenge were allocated from the state budget to support the agro-industrial complex, 2.5% (5.6 billion tenge) more than in 2016 (Figure 11).

Figure 11.



At the same time, state support for the main consumers (beneficiaries), agricultural producers and the population, was carried out through subsidies, preferential lending, preferential taxation, provision of free services, and others. which are

In order to introduce new technologies and knowledge into the agro-industrial complex (hereinafter referred to as the agro-industrial complex), as well as to train personnel of a new formation, the National Agrarian Scientific and Educational Center NJSC (hereinafter referred to as the NJSC NANOC) was created in 2015, which manages 3 higher educational institutions (hereinafter - HEI) of an agricultural profile, 24 research institutes (hereinafter - SRI), 13 experimental production farms (hereinafter - EPH) and 5 service organizations.

The total number of scientific workers in the system of NAO NAOTS at the end of 2018 was 2,490 people, of which 1,377 people were in research institutes, experimental production farms, agricultural experimental stations (hereinafter referred to as Agricultural Experimental Stations) and agricultural cooperatives, and 1,113 people were in universities.

Young scientists - 831 people (33.4%). The average age of young scientists is 28 years. In order to increase the market orientation of

agricultural research in 2018, the Ministry of Agriculture of the Republic of Kazakhstan (hereinafter referred to as

The Ministry) for the first time formed a state order for program-targeted funding of science with the participation of industry associations with support only for popular topics. This significantly adjusted the direction of activities of scientific organizations towards business needs. To involve entrepreneurs in the implementation of innovations, a mechanism is being introduced to subsidize part of the business costs of financing scientific research. This will launch a mechanism for interaction between business and science and will significantly accelerate the scale of innovation in the agro-industrial complex. In order to ensure direct access of agricultural subjects to advanced scientific achievements and knowledge, as well as accelerated implementation of scientific developments in agricultural production, the Ministry, since 2009, has been

implementing a project to create a knowledge dissemination system. The system being created is based on the best world practice - the Extension system, which exists in many foreign countries with developed agriculture.

At the same time, the concentration of resources of NJSC "NANOTS" on solving practical problems of the agricultural industry and the dissemination of advanced knowledge among farmers requires an increase in the structure of assets of the share of agricultural enterprises, agricultural enterprises, in the form of knowledge dissemination centers (hereinafter referred to as CRZ).

CRHs should become a link between institutions that create new knowledge, adapt and transfer it to farmers. In addition, through these organizations, feedback should be received from farmers, providing guidelines for research institutes in terms of practical scientific tasks. In agricultural universities, as a result of the integration of education, science and production, the use of effective teaching technologies and scientific research, specialists at various

levels are trained.

Education at universities is conducted according to a three-stage model: bachelor's degree - master's - PhD doctoral studies, corresponding to the development trends of the global educational space in credit technology.

Universities are actively involved in the implementation of the principle of student mobility, and relationships with foreign partners have been established. Work is being done to introduce students to science and scientific projects.

All three universities (Kazakh National Agrarian University, Kazakh Agrotechnical University named after Saken Seifullin, West Kazakhstan Agricultural Technical University named after Zhangir Khan)

passed domestic and international institutional and specialized accreditation.

Work is underway to create research universities on the basis of the Kazakh National Agrarian University (hereinafter - KazNAU) and the Kazakh Agricultural-Technical University (hereinafter - KazATU). The main goal of a research university is the integration of science and production, the training of highly qualified personnel through participation in fundamental and applied scientific research and scientific and technical projects.

1.2. Analysis of the main problems

Problems in saturating the domestic market and developing the export potential of domestic agricultural products:

problems of livestock development:

1) low productivity of farm animals and poultry;

2) insufficient food supply;

3) low proportion of breeding stock of animals and poultry;

4) insufficient acreage for fodder and fodder crops
cultures;

5) irrational use of pasture lands;

6) lack of working capital among feed mills;

7) incomplete veterinary coverage of farm animals
preventive measures;

8) imperfection of veterinary legislation in terms of harmonization with international requirements;

9) lack of subordination in the implementation of functions in the field of veterinary medicine between local executive bodies of regions and cities of regional significance, districts;

10) untimely provision of regions with funds (products) and
attributes for identifying animals.

problems of crop production development:

1) insufficient rates of diversification of agricultural crop areas;

2) irrational use of agricultural land;

3) non-compliance with recommended scientifically based crop rotations;

4) insufficient use by agricultural producers (hereinafter referred to as
agricultural products) chemical agents (fertilizers, pesticides, etc.);

5) low level of technical and technological equipment of agricultural production facilities;

6) low productivity of main agricultural crops;

7) non-compliance with the requirements of applied technologies, standards, certification systems and quality management; 8) lack of work to

determine areas suitable for gardening, with reference to regions;

9) the absence in phytosanitary legislation of mechanisms for introducing prohibitions and restrictions, norms for conducting phytosanitary risk analysis;

10) low level of phytosanitary literacy of agricultural enterprises in carrying out phytosanitary measures to combat harmful, especially dangerous organisms and measures for localization and elimination of quarantine objects.

In the area of financial measures of state support, there are the following problems:

1) low availability of loans and subsidies for most agricultural enterprises;

2) lack of linking subsidies to the final result and
regional specializations;

3) the focus of investment subsidies on large-scale production, with the inaccessibility of small agricultural enterprises and weak control over the implementation of target indicators;

4) subsidizing interest rates for lending to agricultural entities, leasing agricultural machinery and animals, and technological equipment does not encourage second-tier banks and leasing companies to reduce interest rates on loans and leasing;

5) risks of re-emergence of problems of non-fulfillment of obligations under
loans and the threat of bankruptcy, despite financial recovery;

6) lack of due interest of insurance companies and guarantors in the mechanism of subsidizing insurance and guaranteeing loans of agricultural entities due to the high credit risks of the industry;

7) lack of liquid collateral in rural areas;

8) dependence of agricultural production on the sufficiency of financial resources in lending organizations of the joint-stock company “National Manager of the KazAgro Holding”;

9) low level of competition in the financial services market due to the weak representation of private financial organizations in rural areas with weak institutional development of credit partnerships;

10) lack of targeted long-term loans to finance the agro-industrial complex within the framework of cooperation programs of the Government of the Republic of Kazakhstan and international financial organizations.

problems in scientific and staffing of the agro-industrial complex:

1) weak interaction of agricultural science and education with business, low attractiveness, insufficient confidence in domestic agricultural science and education on the part of business;

2) high wear and tear of agricultural machinery, buildings and structures, outdated laboratory equipment;

3) poor implementation of advanced technologies, low level
automation;

4) low attractiveness of the system of agricultural science and education among talented youth, low motivation and wages;

5) aging of scientific personnel and teaching staff composition, lack of continuity;

6) low publication activity in ranking scientific journals;

7) poor integration into the international system of science and education, poor foreign language proficiency among employees of the NJSC NAOTS group;

8) low implementation into production and commercialization results of scientific activities;

9) discrepancy between educational programs of agribusiness specialties and graduates' competencies to the needs of employers.

1.3. Management of risks

Name of the risks that may affect the achievement of the goal	Management activities risks
	2
1 Spread of especially dangerous animal diseases, including due to the worsening epizootic situation in neighboring countries	Timely veterinary carrying out and sanitary preventive, diagnostic and liquidation events
Spread of quarantine and especially dangerous pests	Timely monitoring of the development and spread of quarantine and especially dangerous pests, forecasting the spread using equipment, modern determination of distribution coordinates for compilation carrying out a lot localization and a lot liquidation outbreaks spread of quarantine pests and combating harmful and especially dangerous organisms
Natural risks: drought, frost, freezing, lack of heat, excessive moisture, hail, rain, storm, hurricane, flood, mudflow, global warming	1. State support for compulsory insurance of adverse events in crop production. from natural

	2. Ensuring that 50% of insurance payments are guaranteed to insurance companies that have fulfilled their obligations for insured events to agricultural producers. Use of fertilizers and phosphorus 3. biostimulants to accelerate ripening crops. 4. Subsidizing the purchase of herbicides by agricultural producers by reducing their cost in order to prevent the growth of weeds due to the rainfall in May and June heavy rainfall. 5. Cultivation of at least 2-3 varieties on the farm with different ripening periods in order to reduce the likelihood of the risk of adverse effects of weather and climatic conditions during the growing season on the productivity and quality of grown products, taking into account different timing of development phases, different resistance to diseases and reactions to agricultural technologies, and more Also V purposes productive use of agricultural machinery for agricultural work. seasonal
Height competition in on international markets for certain types of by products in connection with accession to the World Trade Organization (hereinafter referred to as the WTO)	Optimization of domestic foreign trade policy and regarding agricultural products
Decrease in the level of implementation of research and development work	1. integration of education, science and production. Security 2. Transfer of effective foreign technologies

Land resources

The territory of the Republic of Kazakhstan is 272.5 million hectares and is divided into categories: agricultural land -
105.3 million hectares; settlements – 24.1 million hectares; industry, transport, communications, for the needs of space activities, defense, national security and other non-agricultural purposes - 12.2 million hectares, including 10 million hectares of land at test sites and the Baikonur Cosmodrome, used by the Russian Federation on the territory of Kazakhstan on a lease basis); specially protected natural areas, lands for health, recreational and historical and cultural purposes - 7.3 million hectares; forest fund - 22.7 million hectares; water fund - 4.1 million hectares and reserves -

96.7 million hectares.

Rational use of land resources is of great importance in the economics of agriculture and the country as a whole. In agriculture, the production of products is related to the quality of the land, the nature and conditions of its use. As of November 1, 2018, the area of agricultural land reached 215.58 million hectares, including arable land - 25.81 million hectares, of which irrigated 1.63 million hectares, perennial plantings - 147.5 thousand hectares, fallow land - 4 .07 million hectares, hayfields - 4.91 million hectares, pastures - 180.57 million hectares, service plots and vegetable gardens - 68.9 thousand hectares.

In order to automate the processes of maintaining the state land cadastre, a unified automated information system of the state land cadastre (hereinafter referred to as AIS GZK) was created in the republic.

As of December 1, 2018 in the republican database
AIS GZK has about 4.9 million information on existing land plots in the attribute database and 4.8 million information on existing land plots in the graphic database, 708.7 thousand requests were completed and processed online through the “Information Certificate” of the website aisgzk.kz.

The created AIS GZK is a system-forming database of the “electronic government” portal, within which a mechanism for centralized provision of information from the republican AIS GZK database to information systems and state databases of the “electronic government” portal is implemented: Information system “Register of Taxpayers and Taxable Objects” (IS RNION)", "Integrated Information System of the Public Service Center (IIS PSC)", "electronic government" portal, IS "Register of State Property", information exchange system for law enforcement and special bodies of the General Prosecutor's Office

Republic of Kazakhstan. AIS data

from the State Land Loan Commission are a national information resource, and they are in demand as an integral part of the “electronic government” portal in the provision of public services, optimization and automation of business processes.

One of the main components of ensuring the country's food security is the preservation and improvement of soil fertility and the rational use of agricultural land as the main means of agricultural production. According to Articles 12 and 152 of the Land Code of the Republic of Kazakhstan dated June 20, 2003, the state land cadastre is a system of information about land

resources, namely the natural and economic status of the lands of the Republic of Kazakhstan, location, intended use, size and boundaries of land plots, their qualitative characteristics , on accounting for land use and cadastral value of land plots, and other necessary information.

2.2. Analysis of the main problems

Land management problems:

1) deterioration in the quality of lands and their productivity;

2) a small volume of good-quality materials on soil and geobotanical survey of agricultural land, soil assessment;

3) lack of up-to-date data to determine the cadastral value of agricultural land;

4) low level of development of distant pastures due to their insufficient water supply;

5) carbon dioxide emissions from agriculture.

2.3. Management of risks

Name of risks that may influence the achievement of the goal	Risk management activities
Hardware and software problems, information failures systems	Support of developed AIS GZK subsystems, communication services and maintenance of server technical equipment
Force majeure circumstances (cloudy, flood, epidemic, quarantine, etc.) in the areas of aerial photography and field work	1. Assessing situations and the possibilities of execution field work. 2. Taking measures to make changes or adjust work plans.

Section 3. Priority areas of the sphere/industry

Strategic direction 1. Increasing the efficiency of agricultural production

Priority 1. Increasing the availability of financing for agricultural entities

The priority was determined in accordance with the Message of the Head of State to the people of Kazakhstan dated January 10, 2018 “New development opportunities in the conditions of the fourth industrial revolution”: “Ineffective subsidies need to be reoriented to reduce the cost of bank loans for agricultural entities.”

Increasing the availability of financing for agricultural entities will be ensured by increasing the volume of financing, as well as redistributing subsidies from less to more effective subsidies in order to attract investment. In addition, the credit policy of NMH KazAgro JSC will be revised.

The volume of subsidies in the agricultural sector will be brought to an acceptable level within the WTO. The stability of government support measures in agriculture will also be ensured.

In order to ensure the stability of subsidies, a Target subsidy structure will be developed in the context of regions (districts), indicating relative limits for types of subsidies, which will be secured by memorandums between the Ministry of Agriculture, the business community and the akimats of the regions, the cities of Nur-Sultan, Almaty and Shymkent. In order to ensure transparency of subsidies, the principle of publicity of applications for subsidies has
been introduced.

To ensure the effectiveness of government support measures, a register of counter-obligations of agricultural entities will be introduced to receive government support measures, including subsidies and lending by subsidiaries of NMH KazAgro JSC.

Establishing facts of non-fulfillment of counter-obligations will entail
restriction on receiving government support measures for 1 year.

In order to increase the efficiency of state regulation and support of the agro-industrial complex and ensure uniform approaches to assessing state support measures, a methodology for assessing the effectiveness of state support measures will be developed. This methodology will allow us to determine the main directions for the development and improvement of existing mechanisms of state support in agriculture.

Measures of state support for the agro-industrial complex will be available on equal terms to all subjects of the agro-industrial complex, regardless of gender.

The property owned by potential and existing entrepreneurs has low value for financial institutions. That is why, one of the measures to increase the availability of financing for agricultural entities is loan guarantee, the main objectives of which are:

increasing access to credit resources for agricultural entities that do not have an adequate collateral base;

involvement of aspiring entrepreneurs in the agro-industrial complex;

increasing the share of lending by private financial institutions in the total volume of lending in the agro-industrial complex.

The guarantee institute will improve the creditworthiness of agricultural enterprises by reducing its dependence on the availability of a collateral base.

Due to the low interest of private financial organizations in guaranteeing loans from agricultural producers, JSC “Fund for Financial Support of Agriculture” (hereinafter referred to as FFPSH) will be involved in the system. The functioning of a company with state participation in the market will demonstrate the relevance and potential of this instrument.

On the basis of the FFPSH, at the expense of the state budget, a compensation system for guaranteeing loans.

To increase the availability of the guarantee instrument for agricultural producers, the measure of state support within the framework of loan guarantees will be improved. In particular, the scheme for receiving subsidies will be simplified and optimized and changes will be made to the regulatory legal acts.

Priority 2. Ensuring accessibility of sales markets and development of exports.

The priority was determined in accordance with the Message of the Head of State to the people of Kazakhstan dated January 10, 2018 “New development opportunities in the conditions of the fourth industrial revolution”: “Agricultural policy should be aimed at a dramatic increase in labor productivity and growth in the export of processed agricultural products. The state, together with business, must find strategic niches in international markets and promote domestic products.”

To create a unified export support system and favorable conditions for domestic producers, as well as the reorientation of Kazakh agricultural enterprises to new markets for their products, there will be:

1) a register of export markets, products and requirements of importing countries when exporting agricultural products was created on the basis of a digital portal;

2) work continued to remove barriers and open foreign markets, including the countries of the Eurasian Economic Union (hereinafter referred to as the EAEU), the European Union, China, Iran, countries of Central, Middle and Southeast Asia, and the Persian Gulf;

3) work continued to attract transnational companies and anchor investors to promote Kazakh agricultural products and their processed products under well-known brands, attracting modern technologies into production, management and marketing processes. This work is carried out jointly with akimats

regions, specialized organizations in the field of attracting investments and developing exports (KazakhInvest, KazakhExport);

4) an attractive investment environment has been developed and implemented in terms of state support, provision of raw materials, qualified personnel, infrastructure and others;

5) terminals and hubs operating and necessary for construction in the main export-oriented directions have been identified to resolve transport and logistics issues; 6) measures have been taken to stimulate the production and promotion of organic products,

including holding exhibitions and presentations, developing a brand of organic products;

7) work is being carried out to create an institute of representatives on agricultural issues in the diplomatic institutions of Kazakhstan in priority countries (China, European countries, Australia, South and North America and the Gulf countries);

8) amendments have been made to the legislation of the Republic of Kazakhstan in the field of competition protection.

Priority 3. Ensuring the development of agricultural science and education, transfer of technologies and level of competencies of agribusiness subjects

The priority was determined in accordance with the Message of the Head of State to the people of Kazakhstan dated October 5, 2018, "Growing the welfare of Kazakhstanis: increasing incomes and quality of life": "All measures of state support must be directed towards the large-scale attraction of modern agricultural technologies to the country. We must use the best experience in managing the industry by introducing flexible and convenient standards and attracting "gray heads" - authoritative foreign experts in the field of agriculture. It is necessary to build a system of mass training of rural entrepreneurs in new farming skills. It is important to develop partnerships with leading universities in the world, recruiting, based on the experience of Nazarbayev University, the best foreign top managers.

To increase the competitiveness of the agro-industrial complex of Kazakhstan, reduce production costs, increase crop yields and animal productivity of processing agricultural raw materials, and modernize means of production, it is necessary to ensure accelerated innovative development of the agro-industrial complex based on the close integration of production, education and science, the development and implementation of domestic scientific research, and the transfer of foreign effective technologies , training and retraining of personnel, attraction of leading domestic, foreign specialists and scientists in demand in the country's agricultural market. Integration of scientific and personnel support for the agro-industrial complex will allow:

1) make the most effective use of the personnel, property, financial, intellectual potential of all universities, research institutes, agricultural educational institutions and educational enterprises for the implementation of scientific, scientific, technical and educational scientific and educational activities and the provision of consulting services;

2) create a coherent and unified system of personnel training at universities and colleges, retraining and advanced training in knowledge dissemination centers;

3) reduce the time it takes to implement scientific research results into production;

4) ensure the training of scientific personnel for industry research institutes;

5) solve the problem of organizing and financing scientific work; 6) increase the efficiency of using tangible and intangible infrastructure assets of research institutes, universities, agricultural educational institutions and industrial enterprises in the form of buildings, structures, land, livestock, intellectual property, etc.; 7) rationally use the capabilities

of research institutes, universities, agricultural schools and industrial enterprises as bases for the implementation of scientific developments, testing and adaptation of domestic and foreign technologies, practical training for students, and the functioning of the central distribution center.

To qualitatively improve the level of competence of management personnel, the number of scientific organizations will be optimized through consolidation through the merger of some specialized organizations. The optimization project provides for a reduction in the number of subsidiaries of NAO NAOTS. It is also planned to transform some research institutes in the research and production center and agricultural experimental

stations.

Optimization will allow:

1) provide a clear vertical management and methodological guidance;

2) increase scientific and human resources potential;

3) ensure interaction between education, science and production;

4) commercialize the results of scientific and technical activities;

5) ensure technology transfer and adaptation;

6) ensure orientation towards orders from business structures;

7) improve the efficiency of use of assets and laboratory equipment;

8) increase labor productivity and efficiency of agricultural entities.

To ensure the integration of science, education and production, the issue of assigning research status to two agricultural universities will be worked out, providing for expanded autonomy following the example of Nazarbayev University JSC and functionality in the direction of scientific research, transfer and adaptation of foreign technologies and knowledge dissemination. The reform of universities will be carried out in partnership with the world's leading agricultural research universities (University of California at Davis (UC Davis, USA),

Wagenningen University (Holland), AgroParisTech Graduate School (France) with representatives of the Agreenium Consortium for scientific and academic

issues, Northwestern University of Agriculture and Forestry (PRC) and others) with the invitation of foreign professors to modernize educational programs and teaching.

Financing of agricultural science in 2030 will be increased to 1% of gross agricultural output, including up to 0.5% in 2021.

This will allow: 1)

to update the fleet of agricultural machinery and equipment of the subsidiary organization NJSC "NANOTS";

2) create and develop technological sites for demonstration and broadcasts of successful experience;

3) increase the prestige of the agricultural science system and attract young personnel;

4) prepare high-quality specialists for the development of domestic agricultural science and agro-industrial complex of the Republic of Kazakhstan; 5) reach

a new level of interaction with recognized foreign scientific organizations;

6) increase the level of transfer of effective foreign technologies.

Priority 4. Increasing the efficiency of government control and supervision

The priority is determined in accordance with the Work Plan of the Government of the Republic of Kazakhstan for 2018, approved by Order of the Prime Minister of the Republic of Kazakhstan dated January 19, 2018 No. 6-r.

In order to ensure veterinary safety, measures will be taken to strengthen and improve the efficiency of the veterinary system, taking into account the main provisions of the recommendations and standards of the World Organization for Animal Health (hereinafter referred to as the OIE), sanitary and phytosanitary measures of the World Trade Organization, the EAEU and other international organizations dealing with veterinary issues , including international experts.

Veterinary safety will be ensured through the implementation of systemic diagnostic, preventive and liquidation measures on the principles of analysis, assessment and risk management, taking into account the zoning of the country's territory, increasing the use of veterinary diagnostic and immunoprophylactic drugs that meet international standards.

To prevent the occurrence and spread of particularly dangerous diseases, immunoprophylactic measures will be provided for farm animals at risk of disease. At the same time, the share of veterinary drugs certified according to international standards against especially dangerous diseases used in immunoprophylactic measures will be no less than 70%; those used for diagnostic studies will be no less than 80%. In addition, the procedure for depositing strains of microorganisms will be regulated,

used in veterinary medicine, the procedure for conducting registration tests and approbation of veterinary drugs and feed additives has been adjusted.

To ensure veterinary safety, changes and additions will be made to the legislation in terms of establishing planned values of target indicators to improve the efficiency of the activities of local executive bodies on issues in the field of veterinary medicine and determining the methodology for their calculation.

In addition, veterinary requirements for state veterinary organizations created by local executive bodies will be determined, veterinary legislation will be harmonized taking into account recommendations, OIE standards and EAEU documents, scientific recommendations and analysis of practical problems, monitoring of food products subject to state veterinary and sanitary control will be strengthened and supervision, control over the movement (transportation) of animals, products and raw materials of animal origin. Carrying out veterinary and sanitary control taking into account the identification of risks at production facilities of products and raw materials of animal origin, livestock breeding facilities.

It is planned to take measures to delineate the functions and powers in the field of veterinary medicine between the department of the authorized body and local executive bodies, by concentrating control and supervisory functions over the department and implementation functions over local executive bodies, to build a vertical veterinary service of local executive bodies, to conduct state veterinary and sanitary control and supervision of the movement (transportation) of goods between established zones of prosperity, in the border area with neighboring states, in free economic

zones

With the introduction of information systems, it will become possible to effectively manage processes in veterinary medicine, control and track products according to the “farm to table” principle.

The coordination of interested government bodies, international organizations and public associations will also be strengthened, including timely information about the movements of objects under the control of state veterinary and sanitary control and supervision, the emergence of zoonotic diseases and the deterioration of the epizootic situation in neighboring states.

In addition, control over foot-and-mouth disease and nodular dermatitis will be strengthened, the development of a unified approach and strategy to combat foot-and-mouth disease at the regional level, and the unification of the efforts of the veterinary services of the Central Asian region to combat foot-and-mouth disease together with regional and special commissions of the OIE.

Priority 5. Improving the quality of public services and ensuring the introduction of digital technologies in the agricultural sector

The priority was determined in accordance with the Address of the President of the Republic of Kazakhstan N. Nazarbayev to the people of Kazakhstan dated January 10, 2018 "New development opportunities in the conditions of the fourth industrial revolution": "...Smart technologies" are a chance for a breakthrough in the development of the agro-industrial complex."

To increase the efficiency of high-quality provision of public services in the field of agriculture and land resources, the following measures will be taken:

1) improvement of public regulatory regulation providing services;

2) optimization of the register of public services in the field of agriculture; 3) optimization of public services in the areas of agriculture and land resources and converting them into electronic format;

4) wide involvement of IT companies in the process of automation of public services through public procurement mechanisms, public-private partnerships, service model of informatization, and so on.

Thanks to these measures, the following will be ensured:

1) simplification of obtaining public services;

2) increasing transparency and efficiency in the provision of government services;

3) reduction of administrative barriers when exporting products.

Digitization APK

Work will continue to introduce information technology and digitalization in the agricultural sector.

Process automation

The following processes will be covered by automation:

1) subsidies and other government support measures;

2) traceability of livestock and crop production products;

3) trade in the agro-industrial complex;

4) accounting of agricultural machinery;

5) monitoring and accounting of land resources;

6) accounting of grain receipts;

7) lending to agricultural producers;

8) agricultural insurance.

Directions "traceability of crop livestock and products" and "trade in the agro-industrial complex" are provided for in the State Program "Digital Kazakhstan", approved by Decree of the Government of the Republic of Kazakhstan dated December 12, 2017 No. 827 (hereinafter referred to as the Central Committee).

Work will continue within the framework of the EAEU digital agenda and integration with the systems of the EAEU member countries through the national
gateway.

Financing of process automation will be carried out within the framework of public-private partnership mechanisms, the service model of informatization, public procurement and others. Thanks to these measures, the following will be ensured:

1) transparency of processes in the agricultural sector;
2) creating prerequisites for the export of processed agricultural products.

Introduction of elements of precision farming and SMART farms (smart farms)

Work will continue to introduce elements of precision farming and SMART farms in all regions of the republic, some elements of which are already being implemented on the basis of some farms.

Agricultural producers will have the opportunity to make decisions based on an array of data received in real time about the state of crops, moisture, nutrients, nitrogen, potassium, phosphorus, pests, and the likelihood of precipitation. At the same time, the introduction of elements of precision farming will be carried out in conjunction with the acquisition of new agricultural equipment, the implementation of agricultural technologies and as farmers are ready. Such elements include: electronic field maps, accurate weather data, sensors and transmitters, space monitoring and others.

The implementation of SMART farms will allow for livestock monitoring and herd management, provision of autonomous greenhouse management, online accounting and analysis of expenses, to increase yields and labor productivity in the sector.

Financing of the above projects will be carried out by subjects of the agro-industrial complex, the investor, and, if necessary, the state within the framework of the public-private partnership mechanism, the service model of informatization, public procurement and others. Measures to introduce elements of “precision farming” in a number of farms, including the use of
meteorological stations, are provided for in the Central Committee.

Within the framework of these tasks, the authorized body in the field of information and communications will carry out work to provide communications and broadband access to the Internet to agricultural producers in accordance with the measures provided by the Central Committee.

Thanks to these measures, the following will be ensured:
1) increasing labor productivity, productivity and reducing production costs;

2) creating prerequisites for the export of agricultural products.
Organization of project implementation

To organize the automation of public services, processes and the introduction of elements of precision farming and SMART farms, a project approach will be applied with the formation of the E-APK project infrastructure, consisting of a council, an expert council, a digitalization office and a situation center.

The results will be considered at the meeting of the Governing Council
analysis and submitted to protect projects on digitalization of the agro-industrial complex.

An expert council consisting of representatives and technical specialists of IT organizations (JSC National Infocommunication Holding Zerde, JSC National Information Technologies, IT business and others) will carry out an expert and technical assessment of the feasibility of projects.

Project management in the field of digitalization will be carried out
through the digitalization office.

IT business will be involved in this office to implement tasks for automating processes and government services, as well as digitalization of the agro-industrial complex.

In order to ensure high-level competence, consultants and experts will be attracted to the project office through the procurement of consulting and advisory services.

At the same time, IT analysts, experts and developers of IT solutions will also be involved to implement digital solutions.

For these purposes, information technology departments will be opened in each subordinate institution and enterprise of the authorized body in the agro-industrial complex, where IT analysts and developers will be hired to analyze and automate internal processes on an ongoing basis whenever processes change. In this case, market wages will be provided.

To organize monitoring and project management, outsourced project management software will be used by purchasing services for access to the relevant system.

To make management decisions, information on all ongoing and implemented projects in the field of digitalization of the agro-industrial complex, as well as information from information systems of the state and IT business involved in the digitalization of the agro-industrial complex, will be transferred to the situation center being created.

Priority direction 6 in the field of land management is: *providing information on the qualitative condition of land to improve soil fertility, calculation of taxes, rent, sale of lease rights and cadastral value of land.*

These priorities are determined by the requirements of the norms of the Land Code of the Republic of Kazakhstan dated June 20, 2003 No. 442, “On taxes and other mandatory

payments to the budget" (Tax Code) of the Code of the Republic of Kazakhstan dated December 25, 2017, Decree of the Government of the Republic of Kazakhstan dated September 2, 2003 No. 890 "On establishing basic payment rates for land plots." Achievement of this priority will be ensured by:

development of the AIS GZK, aimed at creating an information infrastructure that provides the interests of the state, economic sectors and the population of the country with information about land (real estate), protecting the rights of land owners and land users, as well as supporting the functioning of the land and real estate market;

At the same time, measures will be taken to include previously undeveloped lands in arid and semi-desert regions into agricultural circulation.

Section 4. Architecture and relationships of strategic and budget planning National indicators of the country

Development Strategy of Kazakhstan until

2050, Concept of becoming one of the 30 most developed countries in the world

1. Development Strategy of Kazakhstan until 2050

Goals:

1) large-scale modernization of agriculture: increasing sown areas and ensuring a significant increase in yields, primarily through the introduction of new technologies; creation of national competitive brands with an emphasis on environmental friendliness; development and implementation of a country feed balance, increasing the area of forage crops. **2) creation of conditions for increasing the competitiveness of subjects of the agro-industrial complex 3) development of farming and small and medium-sized businesses in agricultural processing and trade** identification of priority product groups, the production of which is necessary to meet the needs of the domestic market and the implementation of export potential of the agro-industrial complex. **Target indicators:** increasing the volume of state support for agriculture by 4.5 times by 2020; increasing the share of non-resource exports in total exports by two times by 2025 and three times by 2040; increasing the share of agricultural products in the country's GDP by 5 times by 2050. ***2. Concept for becoming one of the 30 most developed countries in the world*** **Target indicators:** the share of non-oil exports will increase from 32% to 70%. **Goal: creation of a high-tech agro-industrial complex.**

...The task of developing the agro-industrial complex involves taking measures aimed at: 1) increasing the investment attractiveness of the industry; 2) expanding access to finance; 3) intensification of scientific research, modernization of used and development of new technologies...

Strategic development plan of the Republic of Kazakhstan until 2025

Goal: accelerating economic diversification.

Indicators:

GDP per capita;

increase in labor productivity; volume of non-resource exports of goods and services; investments in fixed capital; share of the non-observable (shadow) economy.

Strategic directions of the government body Strategic direction

1 Increasing the efficiency of agricultural production

1			
Goal 1. Saturation of the domestic market and development of the export potential of domestic agricultural products	Goal 2. Increasing the efficiency of using financial measures of state support	Goal 3. Scientific, technological, personnel and technical support for the agro-industrial complex	Goal 4. Increasing the availability of information on land resources

Budget programs			
1			
249 “Creating conditions for development 250 “Increasing accessibility livestock production, and sales of livestock products"	267 “Increasing accessibility of knowledge and	259 “Increasing financial services” scientific research"	accessibility information on land resources"
“Creating conditions for development 258 “Increasing the authorized capital 131 JSC “National manager of (or) scientific and technical activities" financing subjects of scientific and production, sales crop production" state policy to stimulate the development of the agro-industrial complex.”		"Security basic 255 of products holding “KazAgro” for the implementation	
	264 “Lending to regional budgets for the development of productive employment and mass entrepreneurship"		
	262 “Lending to JSC Agrarian Credit Corporation” for providing events of the by support to the subjects agro-industrial complex"		
001 “Services for planning, regulation, management in the field of agriculture and land use”			
101 “Carrying out events using funds for entertainment expenses”			
138 “Providing advanced training for civil servants”			
109 “Carrying out current activities at the expense of the reserve of the Government of the Republic of Kazakhstan for urgent expenses.”			

Section 5. Strategic directions, goals and target indicators

ÿ n/p	Target indicator	Responsible	Source information	Ed. change	Reporting year	Plan fact) current year	Planning period			
					2018 2019 2020 2021 2022 2023 2024					
1	2	3	4	5	6	7	8	9	10	11	12
Strategic direction 1. Increasing the efficiency of agricultural production											
Goal 1. Saturation of the domestic market and development of the export potential of domestic agricultural products											
1	Height labor productivity in agriculture to the level of 2016	First Vice Minister	statistical data	%	126,9	129,4	144,8	162,4	182,0	203,9	228,3
2	IFI of gross output (services) of agriculture, in % of the previous year	First Vice Minister	statistical data	%	103,5	100,9	103,2	105,3	106,2	106,3	106,5
3	Volume of exports of agricultural products	Vice-Minister for International Cooperation, Investment policy, agri-food markets, technical regulation and digitalization of the agro-industrial complex	statistical data	million US dollars	2 450,1	2 650,1	3 135,3	3 900	4 290	4 720	5 192
4	Volume import of food products	Vice-Minister for International Cooperation, Investment policy, agri-food markets, technical regulation and digitalization of the agro-industrial complex	statistical data	million dollars in USA	2131	2 288	2 196	2 105	2015	1930	1850
5	Proportion of special dangerous diseases animals covered	Vice Minister for Veterinary Affairs,	reporting Ministry of Agriculture data	%	40,5	40,5	40,5	40,5	40,5	40,5	40,5

ÿ n/p	Target indicator	Responsible	Source information	Ed. change	Reporting year	Plan fact) current year	Planning period				
					2018 2019 2020 2021 2022 2023 2024						
	diagnostic research	phytosanitary, and food safety Vice-Minister for Veterinary,									
6	Area coverage of chemical treatments compared to identified areas by quarantine facilities and especially dangerous harmful organisms	Phytosanitary, and Food Safety	reporting Ministry of Agriculture data	%	100	100	100	100	100	100	100
7	Promotion grain yield	First Vice Minister	statistical data	%	.	.	10	2	3	2	3
8	Share of breeding livestock in the total volume livestock	First Vice-Minister	statistical data	%	11,5	.	12,5	13,0	13,5	14,0	14,5
Goal 2. Increasing the efficiency of using financial measures of state support											
1	Volume attracted investments in fixed capital of agriculture	Vice-Minister for International Cooperation, Investment policy, agri-food markets, technical regulation and digitalization of the agro-industrial complex	statistical data	billion tenge	.	.	523	693	857	1061	1314
2	Share of financed start-up businesses in rural settlements and small towns, single-industry towns, no less and	Vice Minister for Financial Instruments, Microcredit, Land Resources and Project Management	reporting Ministry of Agriculture data	%	20	40	40	40	.	.	.
3	Satisfying the need for credit resources in crop production, from all	Vice Minister for Financial Instruments, Microcredit,	reporting Ministry of Agriculture data	%	7,4	7,4	5	5	5	5	5

ÿ n/p	Target indicator	Responsible	Source information	Ed. change	Reporting year	Plan fact) current year	Planning period				
					2018	2019 2020	2021	2022	2023	2024	
	needs for financial resources in crop production	land resources and project management									
	Goal 3. Scientific, technological, personnel and technical support for the agro-industrial complex										
1	Coverage of agribusiness subjects extension systems services	First Vice Minister	reporting Ministry of Agriculture data	%	2,7	10,0	0,8	2	2	5	5
2	Share of income from scientific subjects the agro-industrial supporting complex from the total amount of budget funding for agricultural science within the framework of the PCF	First Vice Minister	reporting Ministry of Agriculture data	%	18	15	16	17	18	19	20
3	Share of women V the Ministry of rural Economy of the Republic of Kazakhstan at the decision-making level	Executive Secretary	reporting Ministry of Agriculture data	%	.	35	35	35	35	35	35
	Goal 4. Increasing the availability of information on land resources										
Level 1	provision data from the state land cadastre for the rational use of land resources (% of the area subject to survey with increasing)	Vice Minister for Financial Instruments, Microcredit, Land Resources and Project Management	reporting Ministry of Agriculture data	%	19,7	22,1	24,7	27,5	27,7	28	28,3

Section 6. Resources

Resources	Ed. change	Reporting period	Plan current period	Planning period		
		2018 is 258	2019 year	2020 year	2021 year	2022 year
Financial, total:	**million tenge**	**583,4**	**353 687,0**	**408 570,8**	**364 531,6**	**282 397,3**
Strategic direction 1.Increasing the efficiency of agricultural production						
Goal 1. Saturation of the domestic market and development of the export potential of domestic agricultural products						
Budget program 249 “Creating conditions for the development of livestock farming and production, sales of products livestock"	million tenge	21 977,9	21 401,4	33 842,3	24 677,5	24 679,9
Budget program 255 “Creating conditions for the development of production and sales of crop products”	million tenge	6 513,7	9 287,3	18 966,3	7 544,9	7 838,9
Total for goal 1.	**million tenge**	**28 491,6**	**30,688.7**	**32,222.4**	**Goal 2. Increasing the**	**32 518,8**
efficiency of using financial measures of state support						
Budget program 250 “Increasing accessibility of financial services”	million tenge	76 198,1	132 427,0	178 882,9	158 117,7	149 715,7
Budget program 258 “Increasing the authorized capital of JSC National Management Holding KazAgro to implement state policy to stimulate the development of the agro-industrial complex.”	million tenge	17 880	30 000,0	34 550	30 000,0	
Budget program 262 “Lending to JSC Agrarian Credit Corporation for carrying out activities to support subjects of the agro-industrial complex”	million tenge	60 000	60 000,0	70 000	70 000,0	70 000,0
Budget program 264 “Lending to regional budgets for the development of productive employment and mass entrepreneurship”	million tenge	44 759,0	71 959,0	43 259	43 259,0	
Total for goal 2.	**million tenge**	**198 837,1**	**294 386**	**326,691.9**	**301 376,7**	**219 715,7**
Goal 3. Scientific, technological, personnel and technical support for the agro-industrial complex						
Budget program 267 “Increasing accessibility of knowledge and scientific research” **Total for goal 3.**	million tenge	8 263,6	8 386,1	7248,8	8 914,5	8 914,5
	million tenge	**8 263,6**	**8 386,1**	**7248,8**	**8 914,5**	**8 914,5**

Goal 4. Increasing the availability of information on land resources						
Budget program 259 “Increasing the availability of information on land resources” **Total for goal 4.**	million tenge	9 295,2	7 430,7	8524,4	8 351,4	7 671,4
	million tenge	**9,295.2**	**7 430,7**	**8524,4**	**8 351,4**	**7 671,4**
Financial resources aimed at achieving several goals						
Including: Budget program 001 “Services for planning, regulation, management in the field of agriculture and land use”	million tenge	13 695,9	12 795,5	13 297,1	13 666,6	13 576,9
Human	people	3 891	2 982	3310	3310	3310