Stimulation of investment process in the livestock production

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Abstract. One of the factors of innovational development is the use of biological features - breeding and genetic potential of animals. Currently the important argument in favor of the purchase of animal breeding stock is the effective implementation of national and regional programs on supporting dairy cattle production and livestock breeding. Expansion and strengthening of the existing dairy cattle breeding basis of the country requires scientific justification of the choice of breeding stock with high genetic productivity potential. For improving of the genetic potential of the herd in Kazakhstan there are great opportunities due to the use of domestic animal types and lines, i.e. along with imports of foreign cattle it is necessary to establish the mechanism of transfer (purchase) of domestic breed animals from breeding farms to trade farms.

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Introduction

Livestock in the AIC in industrialized countries takes the leading place. The level of development of this branch is essential in ensuring food self-sufficiency of the country. [1]

Production and consumption of meat products in the world is constantly increasing and developing in different countries under the influence of natural and national factors. Livestock production is the leading branch of agriculture in most developed countries of Europe, USA, Canada, Australia, New Zealand. Currently on the planet there are more than 500 cattle breeds [2].

Animal husbandry is the leading sector of livestock production in many countries of the world, in terms of productivity. Accelerated development of beef cattle has no alternative and should be considered as a matter of national importance and in perspective its solution will allow to meet sound demand for beef due to domestic production based on scientific justification and population interest. Livestock production is very promising branch and deserves attention and support from the government. Currently, meat livestock production requires new conditions for further development. The livestock industry of Kazakhstan needs modernization, because the existing forms of management are often based on outdated, high-cost methods, technologies and technical means. Full nutrition, professional care for farm animals - are the main criteria ensuring qualitative value of livestock products [3].

Methodology

Addressing the issues of restoration of disrupt reproductive processes in livestock production, catching up with industrialized countries is possible through

innovative development, which will facilitate the increase the efficiency of production, reduction of the country's dependence on food imports, ensuring of competitiveness and sustainability of domestic livestock production.

The main part

Livestock production development, effectiveness of innovation processes are directly dependent on fodder basis which is the key factor of high productivity of livestock and poultry and achieving of necessary volumes of livestock production.

According to the opinion of many researchers, growth of production volumes to 70 % should be done due to productivity (which growth depends on feeding level to 95 %) and only 30% due to the growth of livestock population.

Currently in the world for providing high-grade animal fodder in terms of nutrient feeds, different methods of harvesting have been developed, which largely reduce loss of nutrients and this is due to scientifically sound use of feed, which takes into account the biological characteristics of different types of farm animals: their age, physiological condition, productivity direction [4].

In the development of innovation process in livestock production, technical and technological innovations associated with industrialization, mechanization and automation of production processes, reconstruction and modernization of livestock farms and complexes, development of energy-saving technologies that determine the level and efficiency of production are very important.

The Program on development of agroindustrial complex in the Republic of Kazakhstan for 2013-2020 (Agribusiness 2020) plans to increase budget spending and a number of new mechanisms to support agribusiness. It has been planned to introduce six financial instruments to support agricultural producers: loan guarantees and insurance, investment subsidies, subsidized interest rates on loans and leasing, financial improvement, funding of second-level banks. [5]

In the livestock sector investment subsidies will be provided primarily for high-tech investment projects in priority areas of dairy and beef production, fodder production and infrastructure elements.

To organize milk production by 2020 it has been planned to build dairy farms, designed for 24, 50,100,200 cows with 500 objects in each direction and 25 large dairy farms (DF) with 1200 cows in each farm. For the construction of the DF for 1200 cows it is foreseen to allocate investment subsidies in the amount of 20 % of the value of the object, for other dairy farms objects - 20 % of investment subsidies.

In the direction of beef cattle production development it has been planned to build 35 facilities and upgrade feedlots for 3,000 heads of cattle, and allocation of 20% of investment subsidies, as well as 35 reproduction farms designed for 1,000 heads on each farm [6]

For the development of commercial cattle production it has been planned to upgrade 1400 farms with average 200 heads of livestock, and for this purpose 6.976 mln. tenge has been allocated, i.e. 50% of investment subsidies for each object.

In sheep production it has been planned to provide upgrading and equipment of 700 farms (with 600 ewes each) for growing commercial livestock, with up to 25 % of investment subsidies for each object. Also it is planned to develop infrastructure elements, in particular pasture irrigation, taking into account allocation of 80 % of investment subsidies for the construction of mine and tube wells.

To stimulate the development of livestock production till 2020 in agriculture, it has been planned to construct and upgrade 8270 livestock production facilities, 137 procurement centers for procurement and primary processing of milk, meat, wool and hides, as well as for the development of fodder production to purchase 25 irrigation units for feed and sprinkler equipment for growing forage crops.

As a result of government support measures it is planned by 2020 to increase the population of dairy cattle to 3156 thous. heads versus 2186 thous. heads in 2012. Milk production volume will increase 2 times compared to 2012 and reach the level of 10 614 thous. tons, that will be 127% of population's supply with dairy products. Cow productivity will increase 1.5 times, to the level of 3363 kg, in agri

businesses it will be 4415 kg, private farms - 3500 kg, households - 3000 kg [7

Production of all types of meat will increase twice and reach 191 thous. tons in slaughter weight, animal population will increase by 64%, including cattle -74, sheep - 59, pigs - 85, horses - 75, camel - 64 and poultry - by 63%, and simultaneous increasing of productivity of livestock. In general, population of cattle in all directions by 2020 will be more than 8 mln. heads, which is higher by 50% in comparison with 2012.

Along with the direct support, including allocation of budgetary and extra-budgetary resources, in accordance with the system of government priorities, indirect incentives are also of great importance and require significantly lower budget funding compared to the direct funding, and much larger range of innovative entities can be covered.

A new form of subsidizing being implemented in Kazakhstan is subsidizing of insurance and loan guarantees costs for AIC entities. In view of the experience of livestock insurance of foreign countries and countries of the Customs Union, the following proposals have been done. In Kazakhstan it is necessary to create conditions for enhancing the development of the Insurance Institute, in particular subsidizing of insurance risks in livestock production.

It is necessary to create associations of insurers acting as the guarantor of the solvency of the entire system in case of bankruptcy of one of them. For this purpose a compensation payment fund should be established which is filled due to accumulation of transfer of at least 5% of insurers insurance premiums. Insurance organization must send 80% of the premium received for the establishing of reserves for payment of insurance compensation to agricultural producers and only 20% can be spent on maintaining their business. Percentage of compensation of damage and costs caused by forced slaughter of livestock and poultry should be at the rate of 100%. Insurance compensation should be paid at the rate of remaining balance value in the amount specified in the contract, but not less than 50% of damage.

Insurance of the livestock will provide guarantees for financial support for farmers who are in a critical situation due to unfavorable conditions or natural disasters. [8]

Summarizing the estimation of the effectiveness of using various feeding and management technologies, it is recommended to provide support of stimulating innovative processes in the following areas:

- budget investment should be done directly through innovative programs through direct subsidies;

- reduction of interest rates to ensure availability of financial-loan tools for AIC entities (reduction of interest rates by 1% increases the profitability of production by 3%);
- development of leasing relations as a way of financing investment, based on long-term lease of fixed assets while retaining ownership right by the landlord (medium-and long-term leasing of machinery, equipment, transport and other means, as well as purchase of livestock);

*tax incentives:

- -«tax holiday" on profits obtained from the implementation of innovative projects, during project implementation;
- tax credit a reduction of calculated profit tax to the amount equal to a certain percentage of R & D expenditures;
- -exemption from land tax, property and machinery tax for the period of the innovation project
- * subsidies for increasing productivity and product quality should be done based on the cost rate per unit of sold product set in the regions, in case of economic accounting and reporting;
- * establishing of the Institute of livestock insurance for risk management in livestock production;
- *inclusion of hydroponic system of fodder production in risky climatic zones into the priority areas.

Proposed forms of stimulus will allow to implement in Kazakhstan new and innovative programs of agricultural development and related industries, which will reduce import dependence of the country on main agricultural products, improve the competitiveness of products produced by domestic farmers and with minimum loss enter the process of integration into the WTO [9].

Conclusion

Thus, in recent years, thanks to government programs and measures on the development of livestock production, innovation processes became much more active. Particularly this applies to the advanced agricultural enterprises, which have been intensively introducing innovations into production, and the vast majority of enterprises implementing scientific achievements in production, achieve a significant improvement of industrial, economic and social indicators.

Findings

-Research of methodological problems of innovative development of livestock showed that innovative processes in the industry are conducted in the following areas: biological, technical, technological, organizational and economic;

- In the world practice, stimulating of innovation processes are most spread in the following areas: joint stock investments; budget investment, carried out directly at the expense of investment programs through direct subsidies, leasing; lending through bank loans and debt obligations of legal entities and individuals; mortgage collateral of real estate with purpose of obtaining cash loans, etc.; venture funding funding of new businesses and activities that were traditionally considered as high risk [10];
- features of the present stage of development of agricultural sector and its major branch- the livestock production are small-scale production, unsatisfactory state of the level of material and technological basis, low investment potential, high production and financial risks;
- Today in Kazakhstan the level of innovative activity lags behind global trends. According to estimates of susceptibility of enterprises to innovative processes which is characterized by the share of active enterprises, innovative activity of enterprises of the republic in 2012 was 5.7 %, USA about 50, Turkey 33, Hungary 47, Estonia 36 and Russia 9.1%:
- Selection and breeding potential of farm animals in Kazakhstan is low. In animal husbandry the share of breeding livestock is 7 %, in sheep production- 11.1, pig production 12.9, camel production 10.1 and poultry production- 12.1%. In countries with developed livestock sector the share of breeding animals is in average 30-40%;
- public financial support for agriculture in 2006 to 2011 had tendency of growth. Starting from 2012 new types of subsidies for livestock breeding have been introduced 10.315 mln. tenege, for increase of productivity and quality of livestock production 21.139 mln. tenge;
- Through the provision of public financial support in 2012 the farms have purchased more than 59 thous. heads of cattle female stock and 3.3 thous. of breeding bulls. A network of feedlots for feeding 17500 heads of livestock has been established at own expense of the initiators (business entities). Reproduction of foreign highly productive cattle breeds have been established;
- As a result of support in the frame of development of breeding in Kazakhstan the number of breeding dairy cattle units reached 117 units . versus 110 units in 2010, of them16 breeding plants and 101 breeding farms. In breeding farms yield per cow was within 4.5 5.5 thousand kg of milk per year, compared with 2.0 2.5 thousand kg in the republic:
- An innovative form of public support of farmers are investment subsidies funds allocated for

partial compensation of costs by investments aimed at the creation of new or expansion of existing production capacities in the priority sectors of agriindustrial complex;

- A new form of subsidizing implemented in Kazakhstan, is subsidizing of insurance costs and loan guarantees for AIC entities for which national budget allocated 104.7 million tenge;
- In the course of implementation of the Program "Agribusiness 2020" population of dairy cows will reach the number of 3156 thous. heads i.e. increases by 144%. Milk production volume will increase twice compared to 2012 and reach the level of 10 614 thous. tons, which will be 127 % of the supply;
- The proportion of milk production farms will be 27% versus the actual figure for the period 4%, the share of private farms will be 14% versus 10% in 2012. Productivity of cows will increase 1.5 times and reach the level of 3363 kg, in agribusinesses 4415 kg, private farms 3500 kg, households 3000 kg.

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References

1. Isermeyer F., 2004. International Competitiveness of European agriculture, 39, pp: 37-50.

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- 2. McCullough E., P.Pingat and K.Stamoutis, 2008. The transformation of agro-food systems: globalization, supply chains and small-holder Farmers. Rome, FAO, pp: 381.
- 3. Handelman Y., 2011. The challenge of third world development. L., pp. 334.
- 4. Akhu-Lodhi A. and C. Ray, 2009. Peasants and globalization: political economy, rural transformation and the agrarian question. L., pp: 374.
- Program on development of agriculture in the Republic of Kazakhstan for 2013-2020 "Agribusiness in 2020."
- 6. Amanova R., 2011. AIC as a source of economic growth: development of village. Kazakhstan Pravda.
- 7. Rakhimzhanova A., 2011. Status and Problems of Development of Kazakhstan Agribusiness. Analitik. 2: 78-87.
- 8. Burbayeva B., 2011. Innovations in nation's health care service and development of economic potential of AIC. Agro ALem. Agricultural magazine. 3: 42-44.
- 9. Socio-economic modernization, the main vector of development of Kazakhstan: Address of the President of the Republic of Kazakhstan Nursultan Nazarbayev, Leader of the nation to the people of Kazakhstan, 2012. Kazakhstanskaya pravda.
- 10. Goldsmith Z., 2009. The Constant Economy: How to Create a Stable Society. N.Y., pp: 200.