PARTICULARITY OF PHYTOSANITARY SECURITY
LEGAL SUPPORT IN MODERN TIMES
OF AGRICULTURAL SYSTEM OF FARMING DEVELOPMENT
(analyses of agrarian, land and environmental legislation)

Within a market economy, the trends of agrarian, territorial and environmental legislation reforming are aimed at development of agricultural cooperation and ensuring phytosanitary security. For a long time eminent menaces from quarantine, extremely hazardous and undesirables directly affect the further development of agriculture, increasing biodiversity, as well as ensuring country’s food security. At the present moment, entitled issues are the premier sources that harm the economy of the State.

This article deals with the legal support of phytosanitary security in the modern development of agricultural system of farming.

In the time of active research writing, the author used methods of analysis and synthesis, generalization and classification.

The primary objectives requiring shift solution are the scientific substantiation and the need of evaluation and risk management system applying restrictive quarantine measures in the field of state phytosanitary control (supervision). In this regard, ensuring the sustainable development of agricultural production, including organically pure agricultural products, is of particular importance. The author analyzes the current agricultural, land and environmental legislation of the Republic of Kazakhstan in the field of phytosanitary safety. Conclusions and suggestions on improving the activities of phytosanitary inspections are given.

**Key words:** food security, phitosanitary security, phitosanitary control, protection and plant quarantine, agricultural industry, farming, agricultural cooperative society, rural sector, phitosanitary and quarantine demands.
Особенности правового обеспечения фитосанитарной безопасности на современном этапе развития сельскохозяйственной кооперации (анализ аграрного, земельного, экологического законодательства)

В условиях рыночной экономики тенденции реформирования аграрного, земельного и экологического законодательства направлены на развитие сельскохозяйственной кооперации и обеспечение фитосанитарной безопасности. Перманентно исходящие угрозы от карантинных, особо опасных и вредных организмов напрямую влияют на дальнейшее развитие сельского хозяйства, увеличение биоразнообразия, а также обеспечение продовольственной безопасности страны. В настоящее время названные проблемы являются главным источником, наносящим ущерб экономике государства.

В данной статье рассматриваются вопросы правового обеспечения фитосанитарной безопасности в условиях современного развития сельскохозяйственной кооперации.

При написании настоящего исследования автором были использованы методы анализа и синтеза, обобщения и классификации.

Основными задачами, требующими незамедлительного решения, являются научное обоснование и необходимость оценки и системы управления риском при применении ограничительных карантинных мер в сфере государственного фитосанитарного контроля (надзора). В связи с этим особое значение приобретает обеспечение устойчивости развития сельскохозяйственного производства, в том числе органических продуктов. Автором проведен анализ действующего аграрного, земельного и экологического законодательства Республики Казахстан в сфере фитосанитарной безопасности. Даны выводы и предложения по совершенствованию деятельности фитосанитарных инспекций.

Ключевые слова: продовольственная безопасность, фитосанитарная безопасность, фитосанитарный контроль (надзор), защита и карантин растений, сельскохозяйственное производство, сельское хозяйство, сельскохозяйственные кооперации, аграрный сектор, фитосанитарные и карантинные требования.

Introduction

At the present stage for sustainable development of the country a lot of attention paid to the development of agriculture, as the agricultural sector is a key sector of the economy and its development depends on the food security of the country. Legal support of food security is a major component of economic security of the Republic of Kazakhstan. To ensure food security of the country one of the most important components is the main line of phytosanitary security.

The Law of the Republic of Kazakhstan dated July 8, 2005 No. 66-III “On State Regulation of the Development of the Agroindustrial Complex and Rural Territories” defines the concept of phytosanitary security refers to the state of protection of agricultural objects and crop products from pests, plant diseases and weeds (www.online.zakon.kz).

Within a market economy, the trends of agrarian, territorial and environmental legislation reforming are aimed at development of agricultural cooperation. The importance of the functioning and development of agricultural cooperation was noted in the Message of the President of the Republic of Kazakhstan to the people of Kazakhstan “New Development Opportunities in the Conditions of the Fourth Industrial Revolution” dated January 10, 2018. Elbasy N. Nazarbayev pointed out that “the introduction of new technologies and business models, increasing the knowledge intensity of agricultural industrial complex reinforce the need for cooperative farms. Comprehensive support for agricultural cooperatives is needed. The state, together with business, must find strategic niches in international markets and promote domestic products. The intensification of agriculture should take place while maintaining the quality and environmental friendliness of the products” (Nazarbayev, 2018).
Main part

For the first time, after the independence of Kazakhstan, the most important legislative act establishing the legal status of agricultural cooperatives is the Law of the Republic of Kazakhstan “On Agricultural Cooperatives” dated October 29, 2015. This Law determines the legal status, rights and duties of the members of agricultural cooperatives, as well as the legal status, establishment, operation, reorganization and liquidation of agricultural cooperatives and their associations (unions) (www.adilet.zan.kz).

Primary intent of formation and activity of agricultural cooperative society are the following:
- Satisfy the socio-economic and other needs of members of a cooperative and protecting their interests;
- Increase the income of members of the cooperative;
- Creation of a competitive environment in the areas of production, processing, marketing, storage of agricultural products, aquaculture products (fish farming), supply of means of production and material and technical resources;
- Development of infrastructure and ensuring direct deliveries of agricultural products, aquaculture products (fish farming) from producer to consumer;
- Assistance in acquiring the necessary resources on favorable terms by the members of the cooperative and gaining access to finance their production and other economic activities (www.adilet.zan.kz).

The activities of cooperatives are directly related to environmental protection and the rational use of natural resources. This relationship can be viewed from two perspectives. First of all, it is the functioning of production, processing and other cooperatives that may have an impact on the environment. Two main interconnected factors are traditionally distinguished here: environmental pollution by harmful substances and exploitation of natural resources. Secondly, the environmental activities of cooperatives, aimed at protecting and restoring the environment – waste management, resource conservation, land reclamation (Khamzin: 2018).

As of November 1, 2018, the agricultural sector of the republic has 213.5 thousand farms and farms, which are assigned 62.6 million hectares (59.5%) of agricultural land, 1631 agricultural production cooperatives on an area of 2.7 million ha (2.5%), 7,708 business partnerships of all forms and joint-stock companies on an area of 37.5 million ha (35.6%). State agricultural enterprises occupy 1.5 million ha or 1.4% of agricultural land (www.mao.gov.kz).

The main purpose of agricultural cooperative societies is the production of clean, natural, safe food products. Not only obtaining fruitful crops, but also ensuring the country’s food security depends on the phytosanitary situation. A key factor in increasing crop yields is protecting plants from pests, plant diseases, and weeds. The timely detection and investigation of especially dangerous, harmful and quarantine organisms for agricultural land, finding ways to limit their impact on food security are especially important tasks for the state.

Agriculture and agri-food production over the past two decades have become increasingly industrialized and globalized (Humphrey: 2006). Large cooperatives pursue industrial production in order to achieve economies of scale with higher productivity and profit. Mass cultivation and processing of agricultural products currently characterize modern agri-food production, which includes technological and biological achievements obtained as a result of intensive Research and Advanced Development (R&D). In addition, the distribution of pre-packaged and finished products has contributed to the growth of food producers being leading firms in the agri-food chain through intensive technological and marketing research (Boyd and Watts, 1997). To obtain environmentally friendly products, new technologies must be used and scientifically based methods should be based. However, the receipt of agricultural products is associated with the chemicalization of production. Chemicalization in turn leads to the detection of pesticide residues not only in food consumed, but also in soil, atmospheric air and in groundwater.

According to I.M. Khamzin and S.P. Emelyanova, the role of agricultural cooperatives in solving such problems lies in the fact that they can organize meetings with their own shareholders on the environmentally safe use of chemistry and the introduction of new technologies in production, establish control over the correct application of fertilizers on the fields, their processing. They are obliged to take into account the environmental factor when selling finished products, in other words, food prices need to be differentiated depending on their production efficiency in environmentally accepted conditions and at elevated doses in the use of fertilizers and pesticides (Khamzin 2018).

Under standards of the environmental legislation land owners and landusers laid under obligations to hold following activities:
- Protection of lands from water and wind erosion, mudflows, waterlogging, waterlogging, secondary salinization, desiccation, compaction,
contamination with radioactive and chemical substances, littering with production and consumption waste, pollution, including biogenic, as well as other negative impacts;

2) Protection of agricultural land and other lands from infection with bacterial-parasitic and quarantine pests and plant diseases, overgrowing with weeds, shrubs and light forests and from other types of land degradation;

3) The elimination of the consequences of pollution, including nutrient, and land litter;

4) Maintaining the achieved level of land reclamation;

5) Reclamation of disturbed lands, restoration of soil fertility, timely land involvement in circulation;

6) Removal and preservation of the fertile soil layer for its subsequent use in reclamation. (Environmental Code of the Republic of Kazakhstan, Article 217) (www.adilet.zakon.kz).

In compliance with article 141 of the Land Code provides for the conservation of land:

- In order to prevent land degradation, restore soil fertility and contaminated territories, as well as in cases where it is impossible to restore soil fertility in degraded agricultural land,

- Lands contaminated with chemical, biological, radioactive and other harmful substances in excess of the established standards for their maximum permissible concentrations and maximum permissible levels of exposure, production and consumption waste, sewage,

- As well as lands infected with quarantine pests and plant diseases, in the manner established by the Government of the Republic of Kazakhstan (www.online.zakon.kz).

The Land Code of the Republic of Kazakhstan from 2003 focuses on the peculiarities of land owned by the state, for conducting a country or farm, farming. According to Article 43-1 of the Land Code of the Republic of Kazakhstan, the application for participation in the tender for granting the right of temporary paid land-use (lease) for conducting a country or farm, agricultural production should include:

1) For non-state characters of the Republic of Kazakhstan – legal name, location, information on state registration (re-registration) as a legal entity, information on the leaders and participants or shareholders of the applicant legal entity, indicating the size of their share in the authorized capital (from total amount of the authorized capital), information about the affiliated persons of the applicant;

2) For individuals – first and last name (if it is indicated in the identification document) of the applicant, place of residence, citizenship, individual identification number, information about the identity document of the applicant;

3) The location of the land plot claimed by the applicant;

4) Tender offer;

5) Obligations to conclude a contract for temporary reimbursable land use (lease) of an agricultural land plot for conducting peasant or farm farming or agricultural production within three working days from the day of receipt of notification of the need to sign this agreement if the applicant is recognized as the winner of the tender for granting the right to temporary compensation land use (lease) for peasant or farm farming, agricultural production.

Competitive bid should maintain:

1) A business proposal (forecasted investment, cultivated area, livestock population, applied agricultural technologies, the availability of agricultural machinery and technological equipment, qualified specialists in the field of agriculture, the number of jobs created);

2) Obligations on the preparation and development of the on-farm land management project, the implementation of measures for the development of agricultural infrastructure;

3) Obligations to fulfill the requirements of the land legislation of the Republic of Kazakhstan, including the rules for the rational use of agricultural land, to fulfill indicative indicators for diversifying the structure of sown areas of agricultural crops in accordance with the region’s specialization, observing scientifically based agricultural technologies, phytosanitary and quarantine requirements (www.online.zakon.kz).

In order to maintain phytosanitary safety in satisfactory condition, Article 115 of the Land Code of the Republic of Kazakhstan prohibits the construction of buildings and structures, as well as laying utilities within the right of way along a public highway, with the exception of road service facilities, outdoor (visual) advertising, traffic police posts, sanitary and epidemiological control, customs authorities, border, transport control, veterinary and phytosanitary control x posts (www.online.zakon.kz).

One of the problems in the sphere of protection and quarantine of plants is the lack of budget. Annually, at the expense of the republican budget allocated for phytosanitary and quarantine measures against especially dangerous pests and quarantine objects, no more than 50% of the area to be treated is cultivated. From the allocated funds for the purchase of pesticides have from 30% to 50%, i.e., about half of the funds spent on the procurement of services.
for the storage, transportation and use of purchased pesticides (www.senate.parlam.kz).

Up to date, the Senate of the Parliament of the Republic of Kazakhstan is considering amendments to the legislation on agricultural issues. According to the Project in the field of legal support of phytosanitary safety, the following changes are made: in order to increase the efficiency of functioning of this area, it is recommended that the division of responsibilities between phytosanitary and quarantine measures between the state and agricultural producers is recommended. Thus, it is proposed that the state retain responsibility for carrying out measures against pests, diseases and weeds that pose a high phytosanitary risk, as well as measures against quarantine weeds on state-owned lands, agricultural producers will be held responsible for carrying out treatments against the remaining pests and diseases, as well as against quarantine measures on land owned and (or) land use by individuals and legal entities. At the same time, subsidies will be provided for agricultural producers to purchase pesticides for phytosanitary and quarantine measures. In addition, it provides for reimbursement to individuals and legal entities of the costs of planting and growing destroyed fruit and berry crops infected with fruit bacterial burns. The list of quarantine objects and alien species with respect to which localization and elimination of outbreaks is carried out at the expense of budgetary funds, the authorized body approves (www.senate.parlam.kz).

Given that agricultural producers will be responsible for carrying out treatments against pests and diseases, as well as against quarantine measures on land plots owned and used by the land, the natural question arises, how will they conduct phytosanitary measures for plant quarantine on their own? The use of pesticides poses a real danger not only to the environment, but also to gardeners and consumers. Ignorance of the dangers of using pesticides can be a major source of health problems. For work related to the handling of pesticides, special knowledge is required (higher education in the field of agronomy), special techniques and equipment, special clothing, etc. in the field of pesticides. Therefore, in the current state of entrepreneurship in the field of agriculture, legal regulation of the development of phytosanitary entrepreneurship is necessary. We offer the author’s concept of phytosanitary entrepreneurship, so phytosanitary entrepreneurship is understood to mean activities to perform work and provide services that have as their main purpose phytosanitary measures for the use of pesticides (pesticides) for the disinfection of especially dangerous and harmful quarantine plants.

According to the Law of the Republic of Kazakhstan «On Permits and Notifications of May 16, 2014, a permit or notification procedure is introduced depending on the level of danger of activities or actions (operations) to be carried out and is divided into three levels, permissions of the first category – licenses that are introduced in relation to types (subspecies) of activity or actions (operations) associated with a high level of danger» (www.online.zakon.kz). Activities in the field of pesticide handling obtaining a license for the production (formulation) of pesticides (pesticides), the sale of pesticides (pesticides), the use of pesticides (pesticides) by aerosol and fumigation methods belongs to the first category. It turns out that private business entities have the right to engage in entrepreneurial activity in the field of plant protection and quarantine. Now there is a need for a legislative level to oblige farmers to carry out treatments against pests and diseases, as well as against quarantine measures on land plots owned and (or) land use (their own subsidiary plots), but did not involve themselves, but involved an enterprise that has a license for production (formulation) of pesticides (pesticides), the implementation of pesticides (pesticides), the use of pesticides (pesticides) by aerosol and fumigation methods. This provision is, firstly, to ensure that phytosanitary measures are carried out at an appropriate level, since they have special knowledge and technology in the field of pesticide management. Secondly, for any state, the preservation of human life and health is a top priority.

Based on past experience of the Rating agency of regional financial center of Almaty (RFCA), it has emerged that a survey of the capacities of grain receiving points and elevators in certain areas of the republic showed the presence of dangerous insect species, such as: flour mite, fusty flour beetle, grain weevil, etc. All this makes it difficult to promote Kazakhstan grain to the world market. Over and above, quarantine weeds (dodder, common ragweed, and knapweed) and pests (khapra beetle) that damage the grain are registered in the republic. Their further distribution may disqualify Kazakhstan grain on the world market, as laws on quarantine control of imported products are in force throughout the world (www.analitika.kz). Food safety and agricultural health security measures have a major impact on international agro-food trade (Jaffee, Steven M.: 2015).

For the prevention of the presence of especially extremely hazardous of pests in grain products, it
is necessary to tighten the sanctions of the norms of legislation providing for administrative responsibility. Article 401 of the Code of Administrative Offenses of 2014 provides for administrative liability for violation of the legislation of the Republic of Kazakhstan on grain: «Non-observance by grain receiving enterprises of the procedure for storing grain, as well as measures ensuring their quantitative and qualitative preservation, failure to ensure in the established manner grain sampling by its owner – entail a fine on medium-sized businesses in the amount of one hundred, on large businesses – in the amount of one hundred and fifty monthly calculation indices» (www.adilet.zan.kz). Since Kazakhstan is a major exporter of grain, food safety of grain products is especially important and directly related to human health. Therefore, in cases of non-conformance of phytosanitary requirements, it is necessary to tighten sanctions up to the deprivation of a license or the closure of organization data.

**Conclusion**

In order to improve the effectiveness of legal support of phytosanitary security deems it necessary to implement the following:

1. Lock in full-time personnel trained and advanced work on plant quarantine
2. Look up inventory and logistics management.
3. Introduce plant quarantine laboratories in each region.
4. Commonly intrude enterprises for the disposal of containers and other packaging material used for storage and transportation of pesticides.

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