

Sanitary and Veterinary Regulations of Pesticides Use: International Law and Its Significance for the Republic of Kazakhstan

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“Food safety involves everybody in the food chain.”

Mike Johanns, US Senator

“One of the trends we’re seeing in food and agriculture is more and more consumers wanting to know things about their food and where and how it’s grown and what’s in it.”

Dan Glickman, Oxfam America board member & former US Secretary of Agriculture.

Abstract

Every year 2 million people in the world have direct poisoning by pesticides, and about 50 thousand die. Depending on the structure of pesticide contamination, it is observed increase in cardiovascular and endocrine diseases, and increase of the amount of allergic diseases. Thus it is much more dangerous to human health, mostly hidden, are small amounts of pesticides and their metabolites, which may contain residues in food, not only in the plant, but also in meat, milk, fish, poultry. Some metabolites of pesticides toxicity are superior to the original substance.

In international law, there are a great number of international agreements that regulate food safety issues, international trade of food products and in particular the order of distribution and use of pesticides.

Integration and development of agricultural and food industries, globalization of food trade are changing the established system of production and distribution of food products. This leads to the creation of conditions in which both known and new foodborne illness is spreading, which in recent years have become a heavy burden for many people around the world. According to the WHO, the US annual economic loss from the use of poor-quality food and related diseases are estimated at between 6.5 to 35 billion US dollars. Thereby, by eating unsafe food, hundreds of millions of people suffer, and millions die.

Keywords: chemical safety, pesticides, international law, agreement, harmonization, Kazakhstan

1. Introduction

International attention to the issue of pesticides, as well as the facts on the health effects of pesticides once again prove the need for regular inventory of hazardous chemicals, including obsolete, unusable and banned for use pesticides and pesticides out of persistent organic pollutants. Inventory of possible sources of pesticides in the environment allows to identify contaminated territories, stocks of obsolete and banned pesticides, pockets of unregistered chemicals and to propose environmentally sound ways to eliminate them. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, adopted on 10 September 1998 during the Plenipotentiary Conference in Rotterdam that entered into force on 24 February 2004. Its main idea - the creation of an early warning system on trade of hazardous pesticides.

International Code for the distribution and use of pesticides was adopted in November 2002. Compared to the old code of 1985, the new one has more stringent standards on the use of pesticides. It provides clearer guidance to governments, farmers, industry and trade (Lozowicka et al., 2014, pp. 238-248).

Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization (SPS Agreement) is intended to prevent the abuse of pesticides. It establishes mechanisms to ensure the conditions under

which WTO Members will not use SPS measures for protectionist purposes, to the implementation of these measures do not create unnecessary barriers to international trade (Nurbayeva, 2009, p. 13).

Codex Alimentarius (it means "the law or set of laws about food" in Latin) - is a set of international food standards adopted by the International Commission of FAO/WHO to implement the code of standards and regulations for food. Codex standards cover basic food as processed and, semi-processed and unprocessed. In addition, to the extent that is necessary to achieve the policy objectives of the Code - the health of consumers and facilitate fair food trade, as well as presented materials used in further processing of food products ("Codex Alimentarius", 2007, p. 7).

This article aims to examine the international legislation on pesticides regulation and harmonization of legislation of the Republic of Kazakhstan referring to the rules of international law in matters of sanitary and veterinary standards, and in particular with regard to determining the maximum residue levels of pesticides in food.

2. Methods

2.1 Background of Chemical Food Safety

The availability of safe food is a basic human right. The importance of adequate nutrition is recognized as a right in the 40 international legal documents relating to human rights since 1924. Among them there are declarations, conventions and covenants, which are treaties has legal power (Global Health Observatory, 2012).

The group of agricultural chemicals (pesticides) includes hundreds of substances of different chemical compositions, physical properties, toxicity and purposes of use. Chemicals such as pesticides play an important role in the production, distribution and storage of foods. In addition to food additives, there are also used "agrochemicals" in the production of meat and plants to control pests and diseases in agricultural animal husbandry and cultivation of plant products (Ministry of economic development of the Russian Federation, www.ved.gov.ru/mdb/information/restrictive_measures/sanitary_measures/). However, these chemicals can persist in the environment as pollutants or as residues in food, as well as potentially harmful in comparison of the benefits derived from their use. As a rule, national legislation aimed at establishing the right balance between risks and benefits of these substances that are used intentionally and are aimed at reducing pollutants in accordance with a high level of consumer protection.

Attempts to study the morbidity associated with the use of foods containing pesticide residues, have not yet yielded some results. This is because, in addition to pesticides, human health can be affected by a number of other environmental factors. Besides, it is not sufficiently aggregated data regarding the true content of residues of pesticides in a number of foods. The problem is further complicated by the fact that the practice of agriculture for the treatment of the same culture is increasingly used together or sequentially with several drugs. This creates the conditions for the combined toxic effect.

Safety and quality are relevant for all countries, regardless of their maturity of the market economy. Suffice it to recall, as a subject after World War II Germany and Japan skillful application of standardization and certification allowed to provide quality products and thereby gave a start to upgrade their economies.

For Kazakhstan, the problem of food security is particularly relevant in connection with the ongoing changes in recent years in all areas of the country, as well as on the eve of accession to the WTO.

The residues of the means of protection products (pesticides used to protect meat products) in the products is a very important element of chemical contamination of food that is potentially harmful to human health. Pesticides are one of the class of so-called "pollutants" in the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization. They require all measures for food safety and are applied to imports that should be "scientifically based" and "non-discriminatory". Therefore, contamination by pesticides has become one of the most important issues in trade relations, in particular, in the case of food exports. After studying the pesticide residues in the general context of food safety and in the context of international trade rules, this article explores the legal framework to establish the maximum allowable level of residual concentrations of pesticides (MRLs).

The different approaches to "zero tolerance" in the definition of specific pesticides are particularly noteworthy in a number of international rules governing sanitary and veterinary norms. First of all is the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization, and secondly it is Codex Alimentarius of Food and Agriculture Organization and the World Health Organization, and finally it is a number of international conventions.

2.2 The Significance of the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization

Crucial from the point of view of safety of imported goods is the passage of certain procedures to prevent the presence of these pathogens and harmful substances. These procedures are in the nature of pre-market inspections, market surveillance, quarantine mode. Together with the relevant laws, regulations, rules, requirements, risk assessments, etc. they are called sanitary, phytosanitary and veterinary measures.

Hereby, the liberalization in the GATT/WTO tariffs today do not create serious barriers to international trade in goods, as it was before. However, in such circumstances, the role of non-tariff regulatory measures in the form of restrictive measures against imports of certain goods from certain countries. Such measures may be hidden tools and protection of national interests, and an obstacle to low-quality foreign goods. Among non-tariff measures are particularly important sanitary and phytosanitary measures (SPS measures of WTO).

The concept of sanitary and phytosanitary measures. SPS measures of WTO are the legal provisions designed to protect the life and health of humans, animals and plants. Sanitary measures are designed to protect human and animal health from diseases, pests, as well as risks arising from additives, contaminants and toxins in foods. Phytosanitary measures deal with the protection of plant health from pests.

In general, the SPS measures include a variety of laws, regulations, rules, and procedures covering veterinary, quarantine and sanitary-epidemiological requirements to the final product (for example, the permissible level of pesticides in the feed), the production process and product handling, inspection procedures and certification, and so on.

SPS Agreement is the balance of rights and obligations. Because of the fact that SPS measures are less transparent way to regulate trade than tariffs, and may vary depending on the country of origin of imported goods, it becomes possible for countries to abuse the right application of SPS measures and to discriminate against some goods in relation to others.

The agreement provides the rights of the member countries to impose restrictions in order to protect the life and health of humans, animals and plants against:

- 1) The risks arising from the entry, establishment or spread of pests, diseases, pests - disease vectors or pathogens;
- 2) The risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs;
- 3) Risks arising from diseases carried by animals, plants or products thereof, or in connection with the entry, establishment or spread of pests;
- 4) Other damage caused by the entry, establishment or spread of pests ("Agreement on the Application of Sanitary", 2007).

At the same time, the SPS Agreement recognizes the sovereign right of WTO members to set a level of sanitary and phytosanitary protection, which seems to them necessary to protect the life and health of humans, animals and plants, based on the climate, the incidence of diseases and pests, as well as other internal specific conditions for a given country. However, the installed level of sanitary and phytosanitary protection must necessarily be based on scientific evidence (Ministry of economic development of the Russian Federation, www.ved.gov.ru/mdb/information/restrictive_measures/sanitary_measures/).

The SPS Agreement is part of the WTO agreements, mandatory for accession. That is, Kazakhstan, becoming a member of this organization shall be fully taken obligations under this Agreement.

3. Results

What will benefit Kazakhstan from the SPS Agreement?

Firstly, in accordance with the requirements of the SPS Agreement of WTO, national standards of members should be harmonized with international standards. They are, in particular, the requirements of international organizations such as the Commission 'Codex Alimentarius' Food and Agriculture Organization, Office International Epizootic Bureau, as well as with the provisions of international plant Protection Convention ("Agreement on the Application of Sanitary", 2007, pp. 59-72). This is generally a positive impact on foreign trade of Kazakhstan, as it means that national legislation is brought into line with the majority of countries recognized trade rules.

Application of international standards in the field of veterinary and phytosanitary and implementation of quality

management systems and security based on international standards ISO and HACCP, should positively affect the quality of domestic producers and therefore their competitiveness in international markets.

However, the SPS Agreement, as mentioned above, allows countries to set a level of sanitary and phytosanitary protection which they consider necessary, provided that the scientific validity of the measures and risk assessment (Agreement on the Application of Sanitary, 2007, pp. 59-72). That is Kazakhstan, with the appropriate scientific justification, can set more stringent standards than those provided by international organizations and trading partners are unfounded accusations to Kazakhstan in excessive protectionism.

It should also be noted that the WTO membership, in particular adherence to the SPS Agreement, would allow Kazakhstan to protect the export of domestic goods from discrimination and unreasonable protectionist SPS measures applied by importing countries. So the importing country will be able to ban the import of Kazakhstan meat only if scientific evidence that imports of the product in any way jeopardize the life and health of the population of animals or plants of the country. In the case of the introduction of unjustified ban Kazakhstan, as a member of the WTO, can challenge their rights, using the mechanism of the WTO Dispute Settlement.

Examples of positive developments in Kazakhstan are already in progress to bring national legislation into conformity with the provisions of the SPS Agreement, there has been some progress in improving the national system of veterinary, phytosanitary and food safety, both in law and in terms of improving the material and technical base. A striking example is the situation with the production of genetically modified products (GMO). Until now, there has been no legal framework to regulate the importation of GMO products. We cannot say with confidence that Kazakhstan is not importing genetically modified food products, and, consequently, we cannot be sure of the safety of imported food. The negotiation process on Kazakhstan's accession to the WTO and, in particular, the harmonization of its legislation with the requirements of the SPS Agreement made the question of the regulation of GMO one of the priorities of the national policy in the area of food safety. Now the country is developing legislation on the regulation of GMOs, including the rules of registration, importation and trafficking of such products. In addition, in 2008 52 million tenge (more than 287 thousands of US dollars) was allocated for the deployment of the four regional laboratories for the qualitative detection of GMOs in food. Carried out and training for work in these laboratories.

Thus the process of WTO accession and accession to the SPS Agreement in Kazakhstan became a kind of catalyst for the development and improvement of the national system of veterinary, phytosanitary and food safety. Further work in this direction, ultimately, allow, on the one hand, to increase the credibility of the Kazakh products in the importing countries that affect the growth of exports of national products, on the other hand, the import into the country provide only quality and safety of imported products.

Ensuring the safety of food and other commodity groups, the health of people, animals and plants, scientific substantiation and balanced assessment of the risks, the proportionality of restrictive measures are the main problems, the solution of which the Customs Union, the Common Economic Space and in particular in the Republic of Kazakhstan work is needed.

3.1 Codex Alimentarius of FAO and WHO as a Principal International Treaty in Terms of Sanitary and Veterinary Security

The problem of ensuring food security includes political, social, technical, economic, health and other aspects. There are many practical tools to ensure food safety. One of them - the technical regulation.

Technical regulation provides the legal basis for regulating relations arising from the formation of mandatory and voluntary requirements for products and processes, as well as the conformity assessment of the objects of regulation with the requirements. The quality of food is confirmed by checking for compliance with the technical regulations, standards, indicators. And the main requirement is always safety.

Technical regulation should provide a basis for the solution of two complexes of problems:

- 1) Regulation of the internal market;
- 2) The creation of favorable conditions for the development of foreign trade.

The first problem is caused by the need to develop a mechanism for the formation of product requirements and to assess their compliance with the process of creation and movement of goods. This would meet the requirements of the reform of the economy, giving it a social orientation, enhance product competitiveness and the economy as a whole. The state thus establishes safety requirements on the framework of a risk assessment taking into account the implementation of the product of real social and economic opportunities. Consumer properties are emerged by markets. The task of the state in this area is to create equal and favorable conditions for all market

participants.

The second problem is caused by the challenges of globalization. It is necessary to create a mechanism of technical regulation, which on the one hand, would allow conducting cost-effective for the state policy in foreign trade, and on the other would be harmonized with the rules established by the international community.

In the international market coordination of governments WTO members in the preparation of standards and regulations relating to food safety provides the Codex Alimentarius Commission (joint FAO/WHO Codex Alimentarius Commission), founded by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) in 1963. Members of the Codex Alimentarius Commission are more than 170 countries, including Kazakhstan since 2002. The main purpose of the Codex Alimentarius Commission is the development of international standards in order to ensure food safety and the removal of barriers to world trade.

Provisions of the Codex relating to hygiene and nutritional value of food, including microbiological criteria, requirements for food additives, pesticide residues and veterinary drugs, contaminants, labeling and appearance, as well as the sampling methods and risk assessment (Law of the Republic of Kazakhstan, 2007).

The Code also includes provisions of an advisory nature in the form of technical standards and regulations, guidelines and other recommended measures to assist in achieving the objectives of the Codex Alimentarius.

One of the most effective methods of ensuring food safety, recognized by Codex Alimentarius is worldwide known HACCP system (HACCP - Hazard Analysis and Critical Control Points), Risk analysis and management at critical points. The essence of the system lies in the fact that the process of manufacture of products from raw materials to finished products of consumption is divided by the stage with the control in the intermediate stages. After each subsequent risk of getting the "output" defective product decreases. Thus, the HACCP system is a kind of instruction of self-control of quality. This is a methodological tool for addressing food quality and safety.

With the implementation of the HACCP system a combination of problems emerge with the system already operating in the enterprises. It is also important that HACCP system is not wearing a formal nature, and has the effectiveness and efficiency.

HACCP certification system is not limited to the certification audit and includes regular internal audits and annual external audit specialists certification bodies.

The role of the HACCP system to ensure food security will eventually grow more and more. Barely this is not a system chosen by individual countries, but also at the global level, making an important contribution to the expansion of international trade.

Codex Alimentarius Commission publishes the database of maximum residue levels of pesticides and maximum residue levels of potentially hazardous chemicals. This database contains information on the maximum residue levels of pesticides (MRLs) and the maximum permissible levels of potentially hazardous chemicals, developed by Codex for pesticides or their individual types, as well as for individual products and product groups.

These foods in the database should not contain more pesticide residues set by MRL (doses indicated in mg/kg and determined individually in each case). Permissible doses given for products that are in various stages of advancement in the market: a) at the time of entry into the country, or b) at the time of admission to trading networks in the country. In any case, the allowable dose must not be exceeded, at whatever stage of the product.

MRLs are used for calculating the dose of the residue contained in the final sample that is selected from a plurality of such food products as well as food groups that are analyzed.

Codex Alimentarius is written as if it is mandatory for technical standards for food safety, the use of vitamins and minerals. Supporters of the Codex state that it is a voluntary reference standard, and for the countries there is no obligation to apply the Codex. However, the WTO considers the Codex Alimentarius as an international standard when dealing with issues related to food safety and consumer protection.

Codex Alimentarius can legitimately be regarded as the most important international reference in the field of food quality. It takes into account the latest achievements of research in the field of nutrition. Codex has significantly raised awareness of the international community on such vital issues as food quality, food safety and public health activities.

4. Discussion

4.1 International Treaties Regulating Sanitary and Veterinary Issues of the Pesticides

The sharp increase in production and sales of chemical products in the past three decades has put on the agenda

the question of the potential risks posed by hazardous chemicals and pesticides. Particularly vulnerable in this situation are countries where there is no adequate infrastructure to monitor the import and disposal of such chemicals. Responding to these concerns, UNEP and FAO began in the mid-1980s to the development and promotion of voluntary information exchange. FAO has put in place in 1985 the International Code of Conduct on the Distribution and Use of Pesticides and UNEP has adopted in 1987 the London Guidelines for the Exchange of Information on Chemicals in International Trade. In 1989, the two organizations, working together, have included in these two documents voluntary Prior Informed Consent (PIC). Documents referred to in its entirety to help provide the necessary information to enable governments to evaluate the risks associated with hazardous chemicals, and make informed decisions about their future import.

Aware of the need to introduce mandatory controls, officials - participants of the Earth Summit, held in Rio de Janeiro in 1992, adopted Chapter 19 of Agenda XXI Century, which calls to develop by 2000 a legally binding instrument on the PIC procedure. In response to this call, the FAO Council (in 1994) and the UNEP Governing Council (1995) directed their executive heads to organize the relevant negotiations. In consequence of these negotiations, which began in March 1996 and ended in March 1998, the text of the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade was finalized. The urgent need to address the issues of international trade in hazardous chemicals is clearly evidenced by the fact that the government concluded negotiations on the Convention in just two short years, beating well as a two-year deadline set by Earth Summit in Rio de Janeiro.

The Rotterdam Convention was adopted at a diplomatic conference held in Rotterdam on September 10, 1998. It entered into force on February 24, 2004, 90 days after the deposit of the 50th instrument of ratification. In the period between the adoption of the Convention and its entry into force, it was used on a voluntary basis as the interim prior informed consent (PIC), the aim of which was to ensure the continuity of the original PIC procedure and to prepare the ground for the effective functioning of the Convention after its entry into force. During the interim period, over 170 countries have designated some 265 national authorities (DNAs) which are authorized to act on their behalf in the performance of administrative functions under the Convention.

Once the Convention enters into force, it became legally binding for its Parties.

The purpose of the Convention is to promote shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals. In order to protect human health and the environment from potential harm and to contribute to their environmentally sound use the convention facilitates information exchange about their characteristics. It also provides a provisions for a national decision-making process on their import, export and by disseminating these decisions to Parties.

In other words, the Convention creates the conditions that allow countries in the world to monitor and control trade of certain hazardous chemicals. It is not a recommendation to ban the global trade in certain chemicals or disposal. Parties of the Convention confers power to make informed decisions about the chemicals they want to receive and to exclude those sound management of which they are not able to provide. In the case of trading operations introduction of mandatory labeling and presentation of information on the potential adverse effects on human health and the environment will encourage the safe disposal of such chemicals.

International Code of Conduct on the Distribution and Use of Pesticides was one of the first voluntary codes of conduct that enhance food security while simultaneously aimed at protecting human health and the environment. It was adopted in 1985 at the 23rd Session of the FAO Conference and was subsequently changed on the 25th Session of the FAO Conference in 1989 to include provisions on the Prior Informed Consent (PIC). The Code establishes voluntary standards of conduct for all public and private organizations involved in the distribution and use of pesticides or related to this kind of activity. Since its inception, the Code serves as the globally accepted standard for pesticide management.

Experience over the past 25 years has shown that the Code and supporting technical guidelines provide an effective mechanism to assist countries in implementing or strengthening pesticide management systems. The survey revealed that the number of countries without legislation to regulate the distribution and use of pesticides has dropped dramatically. Significantly raised awareness of the potential problems associated with the use of pesticides; enhanced participation of NGOs and the pesticide industry in various aspects of pesticide management. Continues implementation of successful programs as integrated pest management (IPM) is being held in developing countries.

However, although these positive signs, there are still significant weaknesses in certain areas of management of pesticides, mainly in developing countries. For example, due to a lack of technical expertise and resources national legislation regulating the use of pesticides are not widely enforced; all still widely sold particularly

dangerous or substandard pesticide formulations; and end-users are often insufficiently trained and protected to minimize risk when working with pesticides.

After the adoption of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade in September 1998, the provisions of the Code relating to the PIC procedure, became redundant. In addition, the changing structure of international politics and the continued availability of certain problems in the management of pesticides prompted FAO to initiate the revision and updating of the Code. This process began in 1999 with a number of recommendations by the Expert Group on specifications, registration requirements and standards for the use of pesticides and the PIC procedure. In the process of revising the Code was attended by government experts, NGOs, the pesticide industry and other organizations of the United Nations. Then carried on consultations with governments established the basic text of this revised version of the Code.

The revised version of the former structure and nature of the Code have not been altered. 12 articles of the Code, supporting technical guidelines and a new application, including references to international policy instruments relevant to the Code, is an updated standard for pesticide management. It represents a modern approach, providing reliable control of pesticides. It is focused on risk reduction, protection of human and the environment health. It supports sustainable agricultural development through the efficient use of pesticides and the use of IPM strategies.

In addition, the revised Code includes the concept of regulation of pesticides throughout their life cycle and an expanded definition of IPM. Article 9 was completely revised since the PIC provisions are now covered by the Rotterdam Convention. Finally, the revised text strengthened the monitoring of the Code and governments, the pesticide industry, NGOs and other interested parties. They are invited to inform regularly the right information on the implementation of the Code.

The Code demonstrates that pesticide management should be considered as part of the management of chemicals and sustainable agriculture. This means that it is extremely important now the collaboration, cooperation and exchange of information between various governmental and non-governmental organizations, particularly those that are involved in agriculture, health, environment, commerce and trade. Identified as new actors, such as enterprises producing equipment for pesticide application, and the food industry, which is important to enhance cooperation.

The primary function of the Code is to serve as a methodological and reference tool for the rational use of pesticides for all subjects involved in this area, especially as long as countries have implemented adequate and effective legal and regulatory infrastructure for the rational use of pesticides.

In addition to these conventions in the field of chemicals there are a number of other international treaties. It includes the Stockholm Convention on Persistent Organic Pollutants and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. These documents provide in aggregate general structure that help the state to eliminate the risks associated with chemicals and pesticides throughout their life cycle.

In 1985, PAN (International Network Pesticide Action) launched an international campaign called "Dirty Dozen", whose mission - to draw the world's attention to the environmental problems caused by the use of pesticides.

In the example includes some selected substances, this campaign demonstrates the common problems arising from the use of pesticides. "The Dirty Dozen" is an example of pesticides because of their overt toxicity, are extremely dangerous - lead to health problems, and often to death, which is primarily celebrated in the Third World. The campaign "The Dirty Dozen" draws attention to the fact that pesticides can be extremely persistent and, in this connection, can accumulate in the environment.

Today, they threaten every living being.

Persistent pesticides included in the "dirty dozen" are from 2001 subject to the Stockholm Convention. The Stockholm Convention - to eliminate all over the world, these extremely dangerous persistent toxic substances. This Convention was signed in May 2001 in Stockholm as part of a diplomatic conference and come into force if it is ratified by 50 states. Then when that happens depends on the will and the degree of government involvement in these countries.

Since negotiations began the Stockholm Convention, PAN together with IPEN (International Network for the exclusion of persistent organic pollutants) started active work on the preparation as efficient as possible the Convention. These efforts are justified.

From the point of view of PAN Germany, the Stockholm Convention is an important document that will lead to the elimination of persistent organic pollutants (POPs) throughout the world.

In the framework of the Convention on POPs put the precautionary principle enunciated in the Rio de Janeiro Declaration. This principle is the basis for determining the objectives of the Convention (Article 1) and for the listing of new substances (Article 8).

Convention on POPs aims to address global environmental problems caused by the action of persistent organic pollutants, and prevent further damage to the health of humans and animals.

Implementation of the Convention will lead to stop page of the production and use of POPs, eliminate stocks of POPs, and, most importantly, will be prevented from entering new POPs into the environment.

It should be noted that the successful outcome depends entirely on whether the required activities held throughout the world, and will be whether to obligations under the Convention leading industrialized nations in supporting the poor and resource-poor countries.

Of course, the implementation of the Convention will not be easy. It requires active local, national and international participation, so that, in the end, dangerous persistent pollutants are gone from our world. In addition, the degree of participation of non-governmental organizations also depends on how well and for how long will the objectives of the Convention be.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted on March 22, 1988 in Basel (Switzerland) and entered into force on May 5, 1992 to ratify the Convention in 166 countries.

The main objective of the Convention is to ensure control of transboundary movement of hazardous wastes. The main provisions of the Convention: a ban on the export and import of hazardous waste, prevention of illegal waste trade, coordination of government agencies, industry, academia and others. Control the transboundary movement of waste through a system of written notices and permits. The Convention gives countries the right to reject the proposal or to impose a ban on the import of hazardous waste for disposal.

Basel Protocol on Liability determines the party to be financially responsible in the event of an accident.

For the purposes of training and technology transfer of hazardous waste management in developing countries and countries with economies in transition have been established regional centers. Activity centers includes advice on technical and technological matters and monitoring the implementation of the Convention, as well as the promotion of cleaner production technologies and the use of environmentally sound technologies and waste management.

4.2 The Legislation of the Republic of Kazakhstan in the Field of Phytosanitary and Veterinary Issues on Determination of Pesticides

The basic law of the Republic of Kazakhstan in the protection of food is the Law of the Republic of Kazakhstan dated July 21, 2007 № 301-III "On food safety". This law was adopted originally in 2004 due to concerns over the negative impact of pesticides and agricultural chemicals in food. Relatively minor changes were made in 2009, 2011, 2012, 2013, and recent changes in 2014.

The law applies to food products produced in the Republic of Kazakhstan and imported into the territory of the Republic of Kazakhstan, as well as the processes (stages) of development (creation), production (manufacturing), circulation, utilization and disposal of food products.

The main goals in food safety state regulation are:

1) The provision of:

- food security for life and health of human and environment;
- protect the legitimate interests of consumers; environmental security; national security;

2) Promoting entrepreneurship;

3) Harmonisation of legislation of the Republic of Kazakhstan with the international rules and regulations for the protection of human life and health, the legitimate interests of consumers;

4) Improving the competitiveness of domestic products;

5) Creation of conditions for the development of international trade.

State regulation in the field of food safety is based on the following principles:

- a) Priority food safety for human life and health and the environment;
- b) Prevention of possible adverse effects on human health and the environment;
- c) Transparency of activities carried out by the state;
- d) Transparency, accessibility, reliability of the information;
- e) The scientific validity of the risk assessment;
- f) Traceability of food products in all processes (in stages) of its development (creation), production (manufacturing), circulation, utilization and disposal;
- g) Responsibility for ensuring the subjects of food safety in all processes (in stages) of its development (creation), production (manufacturing), circulation, utilization and disposal (Shamanov, Bakanov, & Zhamanshina, 2009, pp. 32-40).

As can be seen above the goal of the Law pursue all those principles that guide the main international treaties in the field of food safety.

Enforcement of the Law "On food safety" is supported by a number of regulations.

In our case it is the Order of the Ministry of Health of 11.06.2003 № 447 "On approval of sanitary rules and regulations" Hygienic requirements for safety and nutritional value of food products "(SanPiN № 4.01.071.03 from 11.06.2003).

At this time, the acquisition of highly efficient and safe use of modern drugs in the private sector and in small farms is constrained by the lack of a clear separation of the list approved for use pesticide products in agriculture in terms of their toxicity and the risk of their use for human health. There is no system of training businesses. No ranking of drugs approved for use in the territory of the Republic of Kazakhstan in their toxicity (Jadhav & Waskar, 2011).

According to SanPiN № 4.01.071.03 from 11.06.2003 the question of "permissible deviation" pesticide residues interpreted in two ways. In some cases, the maximum residue level specified as the minimum concentration of active ingredient for a pesticide. In another case, one or the other pesticide simply not allowed. This dual approach to pesticides that are not authorized to use, compatible with international standards. In addition, the definition of a list of pesticides for meat production still quite meager in comparison with, for example, the European Union.

- Taking into consideration that the above classification of pesticides in the country needs to be improved, it is desirable that the distribution of substances for hazard classes take place in accordance with the widely used recommendations of the FAO/WHO. They provide 5 classes: extremely hazardous, highly hazardous, moderately hazardous, there is little danger, the danger is unlikely when used properly (Nazhmetdinova, Bagryantseva, Fayzullaeva, Kaliyeva, & Rashitova, 2008, pp. 3-7).

Thus, pesticides and nitrates up to nowadays represent a real factor in determining the risk of chemical food safety in the Republic of Kazakhstan, which requires improving the system of control, monitoring and methodological support. To improve the control and to reduce the risk of product contamination by pesticides, the distribution them into classes depending on the degree of toxicity must be done:

- 1) Particularly dangerous. Limited use only with the mandatory provision of information about the acquisition of the controlling bodies of these drugs, and indication of the number and address of the recipient.
- 2) Medium and low toxic. Widespread use of pesticides in large farms and agricultural associations with the expertise with relevant professional qualifications (to allow implementation only with the admission of a specialist).
- 3) The low-toxic. Health permitted pesticides for sale in the trading network for use in the public gardens and suburban areas (Kireeva & Black, 2011, pp. 174-186).

4.3 Questions on Harmonization of the Republic of Kazakhstan Legislation with International Requirements

- In March 20, 2007 the Government of the Republic of Kazakhstan has ratified the Rotterdam Convention "On the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade". However, despite the measures of Government of Kazakhstan to protect consumers from substandard and dangerous food, the situation in general is not very favorable. The share of diseases resulting from eating foods containing pesticide residues, remains very high (Maximum Residue Limits: Protectionism or Food Safety? presentation at the Agricultural & Applied Economics Association's, 2012).

In connection with the entry of Kazakhstan in the near future into the WTO it is necessary to conduct a comprehensive approach to harmonize legislation in the field of sanitary and veterinary standards.

In accordance with the WTO SPS Agreement, the requirements for national import food containing contaminants such as pesticides will have to meet the requirements of the global trading system created by the WTO if the requirements will be implemented in one of two ways:

- a) To adopt the international standard, in this case the Codex Alimentarius on the maximum residue levels of pesticide; or
- b) Adopt a national standard that is higher than the standards of the Codex Alimentarius, but at the same time to be scientifically justified (Farnsworth, 2012).

Harmonization of rules relating to the MRLs in the Republic of Kazakhstan can be done in several ways (complementary and not mutually exclusive):

- a) Reference to the Codex Alimentarius in order to avoid the need for scientific evidence in accordance with the SPS Agreement.
- b) Adoption of a rigorous and comprehensive scientific approach to the identification and registration of pesticides.
- c) Where MRLs in Kazakhstan lower (or stricter) than international standards, there should be greater transparency in order to demonstrate that the Kazakhstani procedures and standards in determining pesticide MRLs equivalent to international practice (Official Journal of the European Union, L 7011, 2005).

1) In this direction the active work is being done. Under the World Bank project a program "Food security in the framework of the WTO accession" was put in place that provides consulting services in the field of harmonization of standards in terms of food safety, including maximum residue concentrations of pesticides, nitrates, radionuclides, antibiotics, veterinary drugs in food provided technical regulations of the Customs Union in accordance with the requirements of the international Codex Alimentarius (World Health Organization, 2009).

At the stage of development is an integrated information system "Unified database of product safety", which will allow camera control at all stages of production and turnover that will ensure transparency of the procedures for conformity assessment of products (On-line mode).

Within the framework of the project "Improving the competitiveness of agricultural products" in Kazakhstan Russian translations of 115 standards of Codex Alimentarius Commission were made with confirmation of RSE "Kazakhstan Institute of Standardization and Certification". Translated Codex standards are used for the harmonization of national standards and other normative documents in the field of safety of agricultural food products (Castoldi et al., 2008, pp. 201-214).

5. Conclusion

The accession process to WTO and adoption of the SPS Agreement became as a catalyst for development and improvement of the national system of veterinary, phytosanitary and food safety in Kazakhstan. Further work in this direction, ultimately, allow, on the one hand, to increase the credibility of the Kazakhstani products in the importing countries that affect the growth of exports of national products, on the other hand, the import into the country provide only quality and safety of imported products.

The main problems are the ensuring the safety of food and other commodity groups, the health of people, animals and plants, scientific substantiation and balanced assessment of the risks, the proportionality of restrictive measures. The efforts in the question of solving these problems in the Customs Union, in the Common Economic Space and in particular in the Republic of Kazakhstan are needed to be done (European Commission, 2007).

By the time of the creation of the Eurasian Economic Union in 2015 a single codified legal framework of the Customs Union on sanitary, veterinary and sanitary and phytosanitary measures will be formed, which will meet all the canons of international practice.

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