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Legal Regulation of Genetically Modified Products in Azerbaijan

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Abstract

The research focused on legal regulation of spread, import and production of GMOs, analyzing GMO issue as new and important for Azerbaijan. This problem is topical for the Azerbaijani public and scientific society as well as the state governance. GMO issues reflected in the laws of Azerbaijan have been studied and compared with the laws of other countries, in particular, CIS countries. As a result, the authors made certain suggestions to include GMO issues in Azerbaijan laws, even to pass a separate law.

Keywords: GMO; GM plants; Transgenic products; Food safety; Legislation; Certification; Labeling; Import; Export; Consumers

Abbreviations: GMOs: Genetically Modified Organisms; CIS: Commonwealth of Independent States; AR: Azerbaijan Republic; EU: European Union; ANSA: Azerbaijan National Academy of Sciences

Introduction

For more than 10 years the GMOs and products containing GMO, which have played an important role in solving the world food problem, have been imported to AR. According to non-official information, the range and assortment of such products continue to grow. The negative impact of GMO products on human health, biodiversity and environment observed for the last years has forced scientists to think. There is no scientific concern on benefits and harms of GMO containing products and due to it many countries import, produce, cultivate and use GMO products [1]. In 2012 in the world there was 170mln.ha of cultivated areas of transgenic plants that expanded rapidly. Cultivation of GMOs and production of food products containing GMO create a number of risks [2,3]. Ecologists are concerned that widely cultivated GMOs are a threat to agriculture because such cultivation can cause significant changes in ecosystems and destruct biodiversity [4]. Public health workers are concerned that the use of products containing GMO can bear serious risks for the health of the population. These risks include such health problems as increasing allergen diseases, cancer, infertility cases, weakening of the immune system, creation of changes in genome, acceleration of aging, etc [5-10].

The annual growth of GMO cultivated area is more than 6%. In 2012 farmers of more than 30 countries around the world were engaged in GMO plants. In the world there are 11 countries with more than 1 million hectares of GMO fields. Approximately 60% or 4 billion of the world population live in 28 countries which cultivate GMO plants. 17 million small and large farmers cultivate GMO plants around the world. In 2012 in China and India alone 7.2 million small farmers cultivated about 15 million hectares of GMO crops. 52% of world GMO products are produced in developing countries. The United States is the world leader in GMO production with 69.5 million hectares of GMO planted areas in 2012. Spain is one of the leaders of GMO cultivating countries in Europe with 90% of the total planted area of GMO crops across Europe. Four African countries, Sudan, Burkino Faso, Egypt and South Africa cultivate GMO [11].

The analysis of the international scientific literature on GMOs and GMO containing products shows that the use of GMOs is a global problem and to solve it every country must make its own contribution. The main problem of the transgenic products is its

uncontrolled distribution and use, which is also true for our country, and constitutes a topical problem. Rich natural ecosystems, flora and fauna and nine climatic zones in our country require regulation on production and distribution of GMOs and GMO containing products by specific legislation. It is necessary to develop laws regulating import of products containing GMOs to Azerbaijan. Without such legislation, the uncontrolled use of GMOs will create problems for our country and people in future.

When addressing this problem, one has to consider the country's current status (lack of the laboratory equipment for a GMO-analysis, great opportunities of our country in agrarian sector, constant food security, absence of the threat of hunger, population size, etc.). Since in other countries food legislation started to develop in the positive direction, the scientists and society activists have achieved a total prohibition of the GMO containing food products in Switzerland, Austria, Poland, and Turkmenistan. There is no research on effects of the use of GMOs and, therefore, our scientists should pay attention to this problem. There are certain arguments against the uncontrolled and free import of the GMOs and GMO containing products to our country which are: 1) no information about GMO products; 2) no possibilities to test GMO contents at the customs control; 3) no legislation on import of products containing GMOs. How are GMO products regulated, and what is the position of Azerbaijan? Depending on the economic, social and political situation different countries regulate the import and export of GMO products in different ways.

Regulation GMO products in Azerbaijan

Food safety is one of the main goals of the state agrarian and economic policy in our country. The Decree № 640 on "Food Security Programme of the AR" dd. March 02, 2001 signed by the President of the Republic of Azerbaijan states that the main factor in food safety is human dignity and it is one of the fundamental human rights. Our government pays special attention to the problem of

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malnutrition. This problem is one of the aspects of the human right to life guaranteed by the Constitution of the AR. In Azerbaijan, as well as in other countries, food safety is regulated by the law. The main law of the AR in this field is the law "On Food Products" dd. November 18, 1999. This law was changed twice, in 2001 and 2008 [12]. Scientific research on GMO and food products started in the 1970s-80s due to the increasing productivity and need to prevent hunger on the Earth. In some countries transgenic products have been sold freely since 90s. However, in some EU countries, Turkey, Russia, Ukraine, Belarus and other CIS countries we can witness a renewal of relevant laws and normative documents on the use of GMO containing food products [13,14]. This correlates with the emergence of food safety problems from the medical point of view (food counter allergy and sensitivity, food origin diseases, intoxication, etc.). Since 2000 many countries have started to legally regulate the use and dissemination of GMO containing products. Unlike them, current Azerbaijani legislation does not reflect the issue of the GMOs and GMO containing products. The situation in the world with GMOs and the increasing focus on this issue reflected in the legislations of the CIS countries once again proves its topicality [15].

In Azerbaijan there is the concern both at the state level and in the society in last years due to the increased import and trade of products containing GMOs. The main reason for this concern is unequivocally the attitude to the GMO products on a global scale: publications and discussions gradually increase the awareness on the impact of GMOs on human health, environment and genetic pool.

There is no separate law in Azerbaijan that prohibits the spread of GMO crops. In 2005 Azerbaijan joined certain international documents in this field, including the minutes of Kartagen. This protocol is about biosafety involving more than 150 countries. By this protocol all countries have taken the obligations to regulate the uncontrolled release of GMOs in the environment, risk assessment, its spread, prevention of the use in commercial goal. At present, this issue is regulated by some laws of the AR [16,17].

GMO issues and problems connected with it are reflected in the following laws of the Republic of Azerbaijan: Law "On Protection of environment", "On Medicines", "On Food products", "On Biometric information", "On Veterinary", "On Environmental Safety", "On protection of public health", "On Seed production", "On Biological diversity", "On Ecologically clean agriculture" and "On safety of genetic engineering activity" (project).

In the law on "Environmentally clean agriculture" adopted on June 13, 2008 there are three articles regulating GMO products [16]:

- $\scriptstyle{-}$ 6.0.5. Refusal to use genetically modified organisms and their products in ecologically clean agriculture and food production process.
- 18.4. Information on use of genetically modified organisms and their products in ecologically clean agriculture and food products imported to the AR must be indicated.
- 16.9. To guarantee the right of consumers, the label of environmentally friendly agriculture and food products sold in Azerbaijan must contain the information on genetically modified organisms and their products.

In the law "On seed production" adopted in 1997 the import of GMO seeds to Azerbaijan is prohibited. However, by Decree No.53, approved by the Cabinet of Ministers of the AR on February 18, 2006, the import of GMO seeds to the AR is allowed in the following cases [17]:

- Under bilateral, regional, multilateral (inter-governmental) and international agreements;
 - For seed breeding;
 - For scientific research and a closed system testing;
 - For demonstration at the exhibition.

GMO seeds may be imported to the AR with the permission of the Ministry of Agriculture of the Azerbaijan Republic and the National Academy of Sciences that shall include the following:

- Exporter and importer name, address and contact information;
- GMOs adopted name, a declaration on features and specifications of identification;
 - Purpose of the export of GMOs;
- GMOs safe transportation, storage, processing and use of the procedure, the liquidation procedure and, if necessary, in emergency situations, including the recently proposed methods of employment, biodiversity, and human health risk assessment and monitoring methods for the determination of impairment;
- Use of GMO status on the territories of other countries (prohibitions or restrictions should be allowed to use);
- GMO-related risks to human health and environment at the expense of the next assessment by the exporter and his obligations to carry it out;
 - GMOs date of delivery;
 - Amount and volume of GMO.

GMO imported to the AR shall not exceed the amount of a kilogram.

Consumers reasonably require the state to ensure that commercially available products meet all safety conditions; at least, consumers have the right to expect that all food is safe. Governments, in turn, must ensure the safety of food products and develop systems to achieve this goal. Of course, the main part of this system is the national legislation in the field of food products.

The main document on food products is the Law of the AR "On food products" adopted in November, 1999 [12]. The law was amended on November 23, 2001; December 3, 2002; December 5, 2003; April 17, 2007, December 16, 2008.

Regulation GMO products in CIS countries

In our work we have analysed and compared this law with the laws of the Russian Federation "On quality and safety of food products" adopted on 18 November, 1999 [18], Ukraine "On quality and safety of food products and food raw materials" adopted on September 6, 2005 [19], the Republic of Belarus "On quality and safety of food raw materials and food products for human life and health" adopted on June 29, 2003 [20], Georgia "On food and tobacco" adopted on June 25, 1999 [21] and "On quality and safety of foods" adopted in 2005 [22], Armenia "On safety of food products" [23], the Kazakhstan Republic "On food safety" adopted in 2009 [24], and the Turkmenistan Republic "On quality of food products" adopted on April 18, 2009 [25].

Results of our research show that the law of our national legislature differs from the law of the given countries on following issues: The article "General Provisions" of this law is not about the concept of

GMO, quality and safety of GMO containing foods, features of their certification and hygienic registration, about requirements of their production and trade. However, in similar law of many countries, including CIS countries, these principles are enshrined in their laws [26-28]. This law does not reflect any responsibility of the people exercising turnover of food products. This condition is identified in laws of CIS countries, as well as in the laws of different states.

For the regulation of GMOs proposals for changes to the Azerbaijan's laws

Studies have shown that the law does not respond to changes in production of food available in the world market and technological conditions in last decades. The analysis proves that the law, under the current legislation of the country, does not provide for the human right to food safety.

Therefore, in order to amend the law the scientists of the Human Rights Institute of ANSA have developed certain recommendations. For example, the provision of the concepts "nutrition products" and "food products" separatly because of the ambiguity leads to the confusion and equivocal in the explanations of the next articles of the law. There are no such cases in the legislation of CIS countries. Therefore, a unified understanding of all articles of the law "Food products" is recommended.

The following provisions should be included in the articles of common definitions - "counterfeit food products, materials and products - deliberately changed (falsified), and (or) food products, materials and wares having hidden lineament and quality, incomplete and untested informations".

It has been suggested to amend Chapter II, Article 5 "Normalization of requirements for food products quality and safety": "Foreground directions of preparing new standards of food products, materials and goods consist of protection of consumers' rights and their safety".

To add the following paragraph: "If a manufacturer of quality food products that are certified violates the requirements of normative documents and the relevant certificate, the organization which has issued the licence may cease its activities. If it is impossible to eliminate violations, then the certificate becomes null and void" to Article 6 "Certification of food products". This paragraph is taken from the law of the Russian Federation "On quality and safety of food products" adopted on 2 January, 2000.

To add the paragraph: "The list of foods not allowed for state hygienic registration "containing narcotic drugs and psychotropic substances, as well as genetically modified organisms or other substances and connections dangerous to human life and health" to Article 7 "The state registration of food hygiene". (We understand that absolute prohibition of products containing GMO in the country is the last measure). Such a radical approach to the GMO containing products can be only observed in the legislation of Turkmenistan. GMO-containing products are allowed for trade in other countries. However, this permission is issues after their safety is scientifically proved, and full warranty for their quality and safety is given. At the same time, there are limitations. For example, the law of the Republic of Kazakhstan prohibits the production of child food, diet and medical-prophylactic food (in preparation), artificial food additives and food materials made through the use of GMO [24].

In accordance with the Kazakhstan law "On quality and safety of food products" the labeling is mandatory. In accordance with the Moldova law "On Biological safety", products containing GMO can

be introduced to the food market only after labeling. There are laws on "Protection of consumers' rights" in Belarus, Russia and Ukraine with norms on labeling. Norms on labeling of products containing GMO are present in the legislation of Armenia, too. Only in Georgian legislation there is no demand of labeling transgenes. But starting from this year the steps have been taken to strengthen this sphere.

It has been suggested to add the paragraphs: "To ban the import of food which expiration date (after production) is less than 50 percent to Azerbaijan", "In case of default the requirements of this article by the producer, materials will be sent to investigating authorities to bring him to justice" and "Import of food and dietary supplements, general requirements for the use and distribution among population" to Article 14 on import and export of food products.

- 1. Import of food and biologically active additives to Azerbaijan can be realized only with regard to consent of sanitary-epidemiological service of the Ministry of Health of the AR.
- 2. Import and state registration of food and biologically active additives can be realized only under documents confirming their quality and safety for human health:
- Characteristic of substance or preparation of substance with chemical formula, physical and chemical properties, acquisition method, composition of the substance, availability and composition of intermediate product, mixtures, GMO, level of cleanliness, toxicological characteristics, at the same time, metabolism in animal organism, mechanism to obtain the desired technological effect, provision of products that may interact with nutrients;
- Technological justification to use a new product, advantages of the already implemented applications;
- List of food products with applications and supporting substances used in their production, doses necessary to gain technological benefit;
- Technical documentation and methods of control of food and biologically active supplements in food products (products participating in metamorphosis);
- Consent to use these products by the health authorities in the exporting country (the country of production).
- 1. Safety and quality of foods and dietary supplements are defined on the basis of sanitary-epidemiological examination of the particular type of product, regulations of the AR, international guidelines AB Directive, the FAO-WHO specifications and other documents [29,30]. Monitoring of use of food and dietary supplements is conducted, and depending on changes in the conditions of use, gaining new scientific information about their negative qualities, the use of those supplements is limited or banned.
- 2. Food and biologically active supplements must be determined by quality, safety, and meet the criteria to be used in accordance with the prescribed doses.
- 3. Food and biologically active food supplements intended for retail sale must be prepared according to regulatory and technical documenting with packaging, marking and instructions for use (methods of use, doses, etc.).
- 4. Producers and sellers must guarantee safety during preparation and dissemination of food and biologically active additives. The manufacturer must confirm that while preparing food and biologically active additives, genetically modified organisms and genetically modified sources were not used.

5. In order to get a certificate of compliance of food and biologically active supplements the manufacturer should present the results of the laboratory investigations (tests).

It has been suggested to add the paragraph: "Unquality, a threat to human life or health foods".

- 1. In the following cases the food products are considered dangerous to human life and health and their turnover is prohibited:
- Certificate of conformity, lack of documents confirming the origin of food by producer and procurement officer;
 - No information on state registration;
- If food products do not meet the requirements of normative documents regulating their quality and safety;
 - Poor quality;
 - No information on production and expiry dates;
- No information on weight scales, bending, packaging and marking of goods (provided by the legal documents);
 - In case of falsification;
- If the genetically modified organisms are used in their preparation.
- 2. Food products, which are threat to human life and health, are removed from the circulation by the decision of the relevant state control and inspection body.

We hope that legislative and executive organs will pay necessary attention to the above mentioned results of comparative analysis and recommendations in order to provide safety of current and future generations.

Conclusion

Recently there has been an increased attention to GMO issues in our country. There are scientists working on it and it is clear from their results that there is need to seriously discuss the issue, as the use of GMO containing products can cause risks for people's health and environment. It is necessary to pass laws that will regulate import of GMOs containing products to Azerbaijan. Without such legislation, the uncontrolled use of GMOs will create problems for our country and people in future. This problem is new and topical for the Azerbaijani public and scientific society as well as the state governance. First of all, the import, use and distribution of GMOs in Azerbaijan constitute a global and local problem and its solution depends on approaches at both regional and state levels. The legislation on GMOs in every country depends on correct development of scientific and legal fundamentals. Social, economic, medical, scientific and legal nature of the GMO problem is a new direction in science and its solution will play an important role in strengthening the statehood and independence of our country, in sustainable economic development and health protection of our population, in expansion of scientific research and widening of international relations.

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