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Report Highlights:

Serbia's 2009 "Law on Genetically Engineered Organisms (GEOs)" prohibits the importation and commercial production of genetically engineered crops. While Serbia's Ministry of Agriculture, Forestry and Water Management has prepared a more forward-leaning "Law on GEOs" amendment in 2018, the current Serbian government has not considered adoption of this revision. Serbia's existing policy on agriculture biotechnology does not conform to European Union (EU) regulations or the World Trade Organization (WTO) Sanitary and Phytosanitary (SPS) agreement.

EXECUTIVE SUMMARY

Serbia's current "Law on Genetically Engineered Organisms (GEOs)" prohibits the importation and commercial production of genetically engineered crops. In 2018, Serbian authorities prepared an amended "Law on GEOs" but has never been submitted this revision through the national approval process. To become WTO compliant and more aligned with EU policies, this amendment would establish a general framework for regulating biotechnology and enact several by-laws covering the use of GE products in closed systems, the placement of GE products on the market, labeling and traceability, authorized laboratories, packaging, transportation and other related issues.

There is strong political resistance to approving changes to the current law. As of 2024, over 150 Serbian cities and municipalities have signed a so-called "Declaration on GEOs," advocating for a ban on GE products within their municipalities. Serbia is also a signatory to the "Danube Soya Association" declaration to promote non-GE soy cultivation and processing in the Danube region of Europe.

There are a significant number of Serbian civil society groups that sponsor anti-GE crop campaigns. Consequently, agricultural biotechnology remains generally unpopular. Several political organizations on the fringes of Serbia's political spectrum use false rhetoric on genetic engineering to fuel anti-EU and anti-U.S. sentiment. The country's Green Party and right-wing groups in the Serbian Parliament oppose lifting the current ban on GE products. Also, many local soybean producers and processors are against changing the current law which, in turn, bolsters their ability to sell non-GE soy and soy products at a premium.

There are no livestock clones or other GE animals (including fish, birds, insects, mammals) or GE genetics used in Serbia's commercial production.

TABLE OF CONTENTS

CHAPTER 1: PLANT BIOTECHNOLOGY	4
PART A: PRODUCTION AND TRADE	4
PART B: POLICY	5
PART C: MARKETING	9
CHAPTER 2: ANIMAL BIOTECHNOLOGY	10
PART D: PRODUCTION AND TRADE	10
PART E: POLICY	10
PART F: MARKETING	11
CHAPTER 3: MICROBIAL BIOTECHNOLOGY	11
PART G: PRODUCTION AND TRADE	11
PART H: POLICY	12
PART I: MARKETING	13
APPENDIX 1: RELEVANT REFERENCES	13

CHAPTER 1: PLANT BIOTECHNOLOGY

PART A: PRODUCTION AND TRADE

- a. RESEARCH AND PRODUCT DEVELOPMENT: There are no GE crops under development in Serbia. While there is a framework for conducting research under a strict application and monitoring process, there is no mechanism to approve GE crops for production. Permits for research and contained use of biotech materials can be obtained from the Serbian Ministry of Agriculture, Forestry, and Water Management (MAFWM) after the State's regulatory requirements have been met. Permit applications must provide all the necessary data on the biotech event or biotech crop and stipulate safety procedures and measures parameters. Risk assessments are evaluated by the Biosafety Expert Council, which is composed of representatives from scientific research institutions in agriculture, ecology and biological science. The applicant must submit any renewal requests to MAFWM six months before the expiration¹ of the original approval.
- b. COMMERCIAL PRODUCTION: Serbia does not cultivate GE crops. In the spring of 2024, the area planted with non-GE soybeans for the marketing year² (MY) 2024/25 was 219,083 hectares.
- c. EXPORTS: Serbia does not export GE crops and only sells non-GE crops, such as corn, wheat and soybeans to foreign markets. Serbian soybean exporters obtain official certificates from the Serbian Ministry of Agriculture, Forestry and Water Management (MAFWM) stating the "Law on GEOs" prohibits commercial growing, trade, and transit of GE varieties in Serbia. With this official statement, exporters have been more competitive internationally with those buyers seeking non-GE crops. Serbia exports soybeans and products mainly to EU countries like Hungary, Austria, Germany, France, Belgium, Italy and Romania and there has been increasing demand for Serbian non-GE soybeans from Japan and South Korea over the past several years.
- d. IMPORTS: Imports of GE crops are not allowed. Non-GE Soybean imports have increased significantly over the last three years due to growing demand in Serbia's processing industry. Before adopting the current "Law on GEOs" in 2009, Serbia imported up to 100,000 metric tons of "round-up ready" soybean annually, valued at approximately \$60 million dollars.
- e. FOOD AID: Serbia is not a food aid recipient country and does it provide food aid for other countries.
- f. TRADE BARRIERS: The current "Law on GEOs," is a significant trade barrier as it prohibits all imports and production of GE crops or products containing GE traits. Additionally, there is no Serbian policy that would consider future products to be reviewed and there is no science-based risk assessment/approval process in place.

PART B: POLICY

a. REGULATORY FRAMEWORK:

Legal term (in Serbian)	Legal Term (in English)	Laws and	Legal Definition (in
		Regulations where	English)
		term is used	
Genetički modifikovani	Genetically Modified	"Law on GEOs"	Genetically modified
organizmi (GMO)	•	adopted in May	organism definition is
		2009, published in	an organism whose
		the Official Gazette	genetic material has
		No.41/2009.	been modified through
			methods of modern
			biotechnology.

Source: FAS Office Belgrade

Serbia's current "Law on GEOs," published in the Official Gazette No. 41/2009, went into effect on June 12, 2009. This law bans all trade and commercial cultivation of biotech products and was instituted without a scientific review or risk assessment as required by the WTO.

While MAFWM has purportedly drafted several revisions to the "Law on GEOs" incorporating U.S. and EU suggestions to make it more WTO-compliant, the latest 2018 version has never been submitted for national review and approval. The draft law includes establishment of a risk assessment and review process for applications to import or grow GE crops and their products. It also establishes a general framework for regulating biotechnology in Serbia via new and revised by-laws (Rulebooks).

The following Rulebooks that are valid but inactive since 2009:

- Rulebook on "Contained use of genetically modified organisms," No.1244/1 issued November 13, 2002.
- Rulebook on "Regulation on the content and data of products derived from GEOs," No. 1669/1 issued December 15, 2002 (will be amended with new terminology after the adoption of the new Law on GEOs).
- Rulebook on "Commercial release of 'GEOs' or products derived from same," No.1245/1 issued November 13, 2002 (not used due to the current Law on GEOs).
- Rulebook on "Deliberate release of biotech products into the environment," No.1246/1, issued November 13, 2002.

Serbia's 2018 revised law on GEO's was reviewed and approved by the country's 18-member National Biosafety Council. The final version requires approval by the Minister of Agriculture, Forestry and Water Management, Serbian Government, and adoption by the National Parliament. Concurrently, MAFWM is responsible for drafting several by-laws that would align with EU regulations governing agricultural biotechnology.

MAFWM is the competent authority responsible for all GE issues in Serbia. It is the country's focal point for the Cartagena Protocol, Biosafety Clearing House, plant variety registration and protection, genetic resources and accreditation of laboratories and appoints members to its Biosafety Expert Council. Members are typically appointed for five years. However, in 2022 the Ministry extended all current members appointments to 2026.

- b. APPROVALS: There are no GE products approved for import or cultivation and no research applications are underway.
- c. STACKED OR PYRAMIDED EVENT APPROVALS: There is no mechanism for approving stacked or pyramided events or products. Amendments to the current "Law on GEOs," will likely stipulate each GE event will require individual approval.
- d. FIELD TESTING: Currently, no GE field trials are being conducted. The application for field testing must be submitted to MAFWM for review and approval. The Biosafety Expert Council evaluates risk assessments. The application must provide all the necessary data on the biotech event or crop and stipulate the safety procedure parameters and measures.
- e. INNOVATIVE BIOTECHNOLOGIES: Serbia has not determined the regulatory status of innovative biotechnologies (such as genome editing) in plants or plant products. By amending the current restrictive "Law on GEOs," Serbia may address this topic through a separate Rulebook.
- f. COEXISTENCE: Serbia does not have a coexistence policy; it has a strict ban on planting GE crops. However, a coexistence policy is incorporated into proposed amendments to the "Law on GEOs."
- g. LABELLING AND TRACEABILITY: Under the current "Law on GEOs," labeling and traceability are not defined. Once the law is amended, MAFWM plans to adopt a separate regulation on the labeling and traceability of GEOs and products of GEOs, per EU regulations.
- h. MONITORING AND TESTING: The responsibility for monitoring and testing GE food, feed and seeds falls under MAFWM, as defined by the "Law on GEOs." Serbia's phytosanitary inspectors are instructed to monitor possible unauthorized imports of GE crops or products at the border. Inspectors from MAFWM control what is planted in the fields. Phytosanitary inspectors use "Reveal for CP4" test strips to test for Roundup Ready soybeans and apply herbicides to small test areas in soybean fields to determine if any illegal GE soybeans have been planted.

Annually, the Serbian Phytosanitary Inspectorate of e MAFWM's Plant Protection Directorate inspects approximately 2,500 soybean plots (about 100 hectares) for the presence of GE plants and of those samples detects between 50-70 hectares as GE. The most significant GE soybean plots are in North-West Serbia. When detected by the phytosanitary inspection, GE soybeans are removed from the field and destroyed, and the farmers are fined 30,000-50,000 dinars (\$270-\$455). Companies found with GE products are fined from 500,000 to 3 million dinars (\$4,500-\$27,300) for deliberate release into the environment without approval.

The Phytosanitary Inspectorate inspects every imported shipment of corn and soybean for the presence of GE products. Any imported corn or soy must be non-GE. If detected, the product cannot be imported and is returned or destroyed at the importer's expense.

MAFWM works with the following six accredited laboratories for the testing of "GEOs":

SP Laboratory

Phone: +381 21 6811 603

E-mail: splaboratorija@splaboratorija.rs
Web page: https://splaboratorija.rs/en/

Laboratory for Seed Testing

E-mail: institut@nsseme.com Phone: +381 21 4898 100

Web page: https://nsseme.com/en/

• A Bio Tech Lab

E-mail: <u>info@abiotechlab.rs</u> Phone: + 381 21 489 3661

Web page: https://www.abiotechlab.rs/en/

• Institute for Molecular Genetics and Genetics Engineering

Phone: +381 11 3975 744

E-mail: beogene@imgge.bg.ac.rs

Web page: https://www.imgge.bg.ac.rs/en/

Institute of Meat Hygiene and Technology

E-mail: <u>institut@inmes.rs</u> Phone: +381 11 2650-655

Web page: https://inmehttps://www.abiotechlab.rs/en/s.rs/?lang=en

Rea Lab Belgrade

E-mail: office@realab.rs Phone: +381 11 3444 560

Web page: http://realab.rs/ (in Serbian only)

- i. LOW-LEVEL PRESENCE (LLP) POLICY: According to the Serbian law, agriculture products of non-animal origin are not considered "GEOs" if the presence of "GEOs" falls under the 0.9% threshold. Seeds and reproductive material are not considered "GEOs" if they contain up to 0.1% threshold of genetically engineered organisms.
- j. ADDITIONAL REGULATORY REQUIREMENTS: N/A
- k. INTELLECTUAL PROPERTY RIGHTS (IPR): Although Serbia is not yet a WTO member, the legal regime for IPR protection has improved substantially in recent years as Serbia has revised laws to meet the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) standards.
- CARTAGENA PROTOCOL RATIFICATION: Serbia is a party to the Convention on Biological Diversity, ratified in 2002, and ratified the Cartagena Protocol on Biosafety (https://bch.cbd.int/protocol) in 2006. According to Serbia's obligations under the protocol, it created a Biosafety Clearing House (BCH) consisting of a national database of all biotech trials, production, and trade activities for Living Modified Organisms (LMOs).
- m. INTERNATIONAL TREATIES AND FORUMS: Serbia is currently a member of Codex Alimentarius, the European Plant Protection Organization (EPPO), the Convention on Biodiversity (CBD), the International Union for the Protection of the New Varieties of Plants (UPOV), the World Intellectual Property Organization (WIPO), the European Cooperative Program for Crop Genetic Resources Networks (ECP/GR) and is a signatory of the Aarhus Convention and the International Plant Protection Convention (IPPC). Serbian scientists often speak in favor of innovative biotechnologies at international forums.

Serbia's accession to the European Union has been slowed due to the political instability in the country. According to the Annual Progress Report of the European Commission for Serbia for CY2022, in Claster 6, Chapter 30 (External Relations), it stated that Serbia must finalize its accession to the World Trade Organization (WTO) by adopting a WTO-compliant law on genetically modified organisms and complete remaining bilateral market access negotiations with a small number of WTO members.

n. RELATED ISSUES: N/A

PART C: MARKETING

a. PUBLIC/PRIVATE OPINIONS: In general, Serbian politicians and the public are misinformed about GE products and view them as potentially dangerous. There have not been any systematic attempts by the Serbian government to educate consumers. The media consistently chooses to reinforce negative perceptions rather than report on technological advances. As a result, the issue has become politically charged in Serbia and politicians prefer not to take a public stance. Grain farmers and trader organizations are not united on the issue, as there are competing import and export interests. Serbian researchers are well educated and are aware of the benefits of agricultural biotechnology. However, they are not active in advocating these positive messages to the public. Serbian livestock and poultry farmers are eager to buy EU-approved GE soybean meal from Argentina, Brazil, or the United States to reduce input costs. Serbian consumers continue to reject biotechnology based on erroneous information and the belief that their domestic production is effectively "organic and natural."

Many city mayors in Serbia have adopted a "Declaration on 'GEOs" and designated their territories as GE-free. During recent years, several civil society groups have sponsored anti-GE crop campaigns. The number of public events and media coverage on the agricultural biotechnology issue has increased over the last several years. GE products remain extremely unpopular in Serbia, and the press typically covers this issue in negative light. Several political organizations on the far ends of Serbia's political spectrum have spun the issue of GE to fuel anti-EU and anti-U.S. sentiments. Both the Green Party and right-wing groups are vocal opponents and are against lifting the current ban on agricultural goods produced from biotechnology.

Serbia officially supports the Danube Soya Association. The Association opened a representative office in Serbia and is active in organizing different events. The purpose of the activities in Serbia is to promote the production of non-GE varieties of soybeans to the Serbian Farmers Associations and encourage production based on "GE-Free" standards.

b. MARKET ACCEPTANCE AND STUDIES: Similar to other countries in Southeastern Europe, Serbia's agricultural producers are leery of a pro-agricultural biotechnology policy that may increase competition and disrupt their ability to fetch market premiums for their "natural" or "organic" goods. Additionally, there is a strong bias against GE products as being "unnatural." As a result, elected officials and Serbia's government writ large has done little to dispel misinformation about agricultural biotechnology and instead are more comfortable promoting Serbia's non-GE and organic food production.

There are no known prominent market studies regarding the acceptance of GE imports or GE production in Serbia.

CHAPTER 2: ANIMAL BIOTECHNOLOGY

PART D: PRODUCTION AND TRADE

- a. RESEARCH AND PRODUCTION DEVELOPMENT: No known applications have been submitted to MAFWM to research GE animals or cloned animals.
- b. COMMERCIAL PRODUCTION: There are no livestock clones or GE animals (including fish, birds, insects, mammals) or GE genetics used in commercial production in Serbia.
- c. EXPORTS: Serbia does not produce GE animals, livestock clones or products from these animals, including genetics (semen and embryos).
- d. IMPORTS: It is unknown whether genetic material produced with modern biotechnology techniques is imported. It is also unknown whether products from the offspring of cloned animals are imported.
- e. TRADE BARRIERS: No country-specific legislation.

PART E: POLICY

a. REGULATORY FRAMEWORK:

Legal term (in official	Legal Term (in	Laws and	Legal Definition (in
language)	English)	Regulations where term is used	English)
Example: Organismo Vivo Modificado (OVM)	Living Modified Organism (LMO)	• N/A • N/A	Any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology.

Source: FAS Office Belgrade

There are no laws or regulations covering animal biotechnology and they do not appear in proposed amendments to the "Law on GEOs". The institutions listed under Plant Biotechnology in Chapter 1, Part B, sub-paragraph a also have coverage of issues relating to animal biotechnology.

- b. APPROVALS: There are no approvals of GE animals.
- c. INNOVATIVE BIOTECHNOLOGIES: Currently, Serbia has no regulations addressing innovative biotechnologies in animals.
- d. LABELING AND TRACEABILITY: Serbia has no regulations on traceability and labeling of livestock clones, GE animals, their products (including genetics), and their offspring.
- e. INTELLECTUAL PROPERTY RIGHTS (IPR): Currently, there is no legislation that addresses intellectual property rights for animal biotechnologies. Please see Chapter 1, Part B, subparagraph k for other details.
- f. ADDITIONAL REGULATORY REQUIREMENTS: N/A
- g. INTERNATIONAL TREATIES AND FORUMS: Serbia is a member of Codex Alimentarius (Codex) and the World Organization for Animal Health (OIE). Serbia is not currently discussing GE animals or their products in expert forums.
- h. RELATED ISSUES: N/A

PART F: MARKETING

- a. PUBLIC AND PRIVATE OPINIONS: Generally unfavorable. The Serbian public is not privy to current information on this topic.
- b. MARKET ACCEPTANCE AND STUDIES: With current public perceptions about biotechnology- animal biotechnology would likely encounter opposition. There are no known market studies regarding the acceptance of GE animals.

CHAPTER 3: MICROBIAL BIOTECHNOLOGY

PART G: PRODUCTION AND TRADE

- a. COMMERCIAL PRODUCTION: There is no information available on the use of microbial biotechnology in commercial applications.
- b. EXPORTS: There is no information on microbial biotechnology in products that may be exported.

- c. IMPORTS: Serbia's legislation bans imports of all GE products, including biotech microbes. The only microbial biotech-derived food ingredients imported by Serbia are those traditionally used to produce alcoholic beverages, dairy products, and processed products. Likewise, Serbia imports alcoholic drinks, dairy products, and processed products that may contain microbial biotech-derived food ingredients.
- d. TRADE BARRIERS: Serbia's legislation bans imports of all GE products, including biotech microbes.

PART H: POLICY

a. REGULATORY FRAMEWORK:

Legal term (in Serbian)	Laws and Regulations where term is used	Legal Definition (in English)
Genetički modifikovani organizmi (GMO)	"Law on GEOs" adopted in May 2009, published in the Official Gazette No.41/2009.	Genetically modified organism definition is an organism whose genetic material has been modified through methods of modern biotechnology.

Source: FAS Office Belgrade

The Serbian Parliament adopted the current "Law on GEOs" in 2009. This law banned all trade and commercial cultivation of biotech products, including products of microbial biotechnology. Once Serbia changes its current GE law, it is likely adopt EU legislation on biotechnology. Currently, there is no proposal to adopt additional regulatory frameworks covering microbial biotechnology.

- b. APPROVALS: Microbial biotechnology-derived product approvals are treated the same as GE products in Serbia, there is no approval for their use.
- c. LABELING AND TRACEABILITY: There are no labeling and traceability regulations in Serbia on microbial biotechnology since trade and production of these products is prohibited.
- d. MONITORING AND TESTING: Monitoring and testing of microbial biotechnology is not regulated in Serbia.

- e. ADDITIONAL REGULATORY REQUIREMENTS: N/A
- f. INTELLECTUAL PROPERTY RIGHTS (IPR): Serbia maintains legislation on intellectual property rights but does not have IPR legislation specific to microbial biotechnology.
- g. RELATED ISSUES: There is no information available on other issues related to this topic.

PART I: MARKETING

- a. PUBLIC/PRIVATE OPINIONS: There are active organizations that lobby against genetic engineering, historically Serbia's press has not been favorable to this technology.
- b. MARKET/ACCEPTANCE STUDIES: Currently, there are no known market studies on microbial biotechnology. Public reaction would likely be negative to these types of products. Serbians are not widely aware of food ingredients derived from microbial biotechnology.

APPENDIX 1: RELEVANT REFERENCES

Serbian Ministry of Agriculture, Forestry and Water Management

Phone: +381 11 260 7960 E-mail: info@minpolj.gov.rs

Web page: http://www.minpolj.gov.rs/ (in Serbian only)

Serbian Ministry of Environmental Protection

Phone: +381 11 311 0271

E-mail: info@ekologija.gov.rs

Web page: http://www.ekologija.gov.rs (in Serbian only)

Serbian Ministry of Health

Phone: + 381 11 3616 596

E-mail: <u>kabinet@zdravlje.gov.rs</u>
Web page: <u>www.zdravlje.gov.rs</u>

Serbian Ministry of Internal and Foreign Trade

Phone: +381 11 3633 721 E-mail: kabinet@must.gov.rs

Web page: https://must.gov.rs (in Serbian only)

Ministry for Science, Technological Development and Innovation

Phone: +381 11 363 3701 E-mail: <u>kabinet@nitra.gov.rs</u> Web page: <u>https://nitra.gov.rs/en/</u>

GEO approvals and registrations

Contact person: Mrs. Vanja Kojic, Biotech Adviser

Phone: +381 11 311 7591

E-mail: Vanja.Kojic@minpolj.gov.rs

Serbian Environmental Protection Agency

Phone: +381 11 635 6788 E-mail: office@sepa.gov.rs Web page: https://sepa.gov.rs/

Consumer Protection Department

Serbian Ministry of Internal and Foreign Trade

Phone: +381 0800 103 104

E-mail: zastita.potrosaca@must.gov.rs

Web page: https://www.zastitapotrosaca.gov.rs (in Serbian only)

National Association for Consumer Protection

Phone: +381 11 404 6 300 E-mail: pravnitim@nops.org.rs

Web page: https://www.consumersinternational.org/members/members/national-consumer-

organisation-of-serbia-nops

Institute for Molecular Genetics and Genetic Engineering

Phone: +381 11 397 5744

E-mail: beogene@imgge.bg.ac.rs

Web page: https://www.imgge.bg.ac.rs/en/

Institute for Biological Research "Sinisa Stankovic"

Phone: +381 11 20 78 300 E-mail: <u>ibiss@ibiss.bg.ac.rs</u>

Web page: https://www.ibiss.bg.ac.rs/index.php/en/

BioSens Institut Novi Sad

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For further information on this report, please contact the following office in Belgrade:

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E-mail: <u>AgBelgrade@fas.usda.gov</u>

Web page: https://rs.usembassy.gov/foreign-agricultural-service/

Attachments:

No Attachments