



FOOD AND AGRICULTURE



Agriculture and the food industry are crucial for local and national economic development. Therefore, accelerated work is necessary to improve institutions, legislation, and the business environment in this area. The recent pandemic crisis and ongoing socio-economic and political events in Europe, as well as global climate change, have a significant impact on the functioning of many economic sectors, especially on the availability of raw materials, rising prices in the raw material and transportation markets. In these conditions, agriculture and food production must not stop but must operate faster and more efficiently.

Despite these challenges, there has been no significant progress in the functioning of the local food safety system, as official controls continue at the same pace. The physical exchange of documentation with competent authorities poses an obstacle to the efficient functioning of the food sector. A transparent and comprehensive risk analysis system would make the flow of goods more efficient. Reorganizing existing resources, focusing on high-risk products and entities in the food business would increase control over those that are truly risky, which is of multiple importance in such circumstances.

Harmonizing regulations with EU standards is not progressing at the expected pace. There are conflicts of jurisdiction, with the Ministry of Agriculture harmonizing food declaration, while the Ministry of Trade issues regulations that override harmonized rules in this area. Implementation in practice is challenging due to unclear institutional jurisdiction in interpreting regulations. Although some regulations are aligned, national laws limit the application of EU practices, posing a barrier to free trade and innovation in production and the development of new products. The focus must be on modernizing outdated regulations, eliminating trade restrictions, and focusing on the protection of local and traditional products.

The report of the Risk Assessment Expert Council, established in June 2017, and the activities of the Council are not known to the public.

There is room for improvement, both in improving the regulatory framework to ensure high standards in food quality control and in applying a consistent approach to controlling all food business entities, including importers and local producers. It is important to simplify testing procedures, strengthen transparency, and enable predictability of goods retention. Improving the capacity of control bodies and a risk-based approach are key to further strengthening the food safety management system. Enabling electronic data and document exchange between government institutions and the private sector is also of paramount importance.

It is important to emphasize the importance of regenerative agriculture, as these practices are still not widely applicable, although they are crucial for preserving our land and ensuring food supply for future generations. It is encouraging that awareness of the importance of regenerative agriculture is growing among farmers, and that there are companies and producers who have begun to apply these key practices to our land. In addition to preserving land and ensuring crops, it is important to note that the EU is increasingly concerned with the use of raw materials from regenerative sources. This is very important for producers who want to export to the EU, as it will become a limiting factor in competitiveness in the EU market if raw materials are not produced using regenerative agricultural practices. State support and subsidies for the purchase of equipment and farmer education are essential to raise awareness that investing in these practices is not a short-term solution but should become a new way of working. Therefore, it is necessary to include regenerative agricultural practices in national strategic and program documents and laws regulating the field of agriculture and rural development.



1. FOOD SAFETY LAW



WHITE BOOK BALANCE SCORE CARD

Recommendations:	Introduced in the WB:	Significant progress	Certain progress	No progress
Align the Law on Food Safety and all accompanying bylaws with EU regulations (178/2002 / EC and accompanying bylaws).	2017			√
Establish a transparent and comprehensive risk analysis system (combination of product, country of origin, manufacturer, destination and importer risk) by all inspection services, with the establishment of a functional IT system and digitization of supervision.	2015			√
Establish uniform rules in the procedures of inspection services in terms of costs, deadlines, field work mechanisms, taking the number of samples, determining the type and number of analyzes during official controls.	2014			√
To harmonize the criteria of the laboratory during control analyzes, with a clearly defined responsibility of the laboratory regarding the interpretation of regulations.	2020			V
Establish a national Food Safety Agency following the example of EU member states and neighboring countries and create conditions for the National Reference Laboratory to perform all tasks provided by law, in order to strengthen the capacity of the food safety system.	2018			√
Create legal conditions for food business operators to place new foods on the market from the list, according to a simplified procedure, and keep the approval procedure for novel foods that are not on the list in Annex 1, according to the EU model.	2020			√
Enable electronic exchange of data between state institutions and the economy.	2020			√

CURRENT SITUATION

The Food Safety Law (hereinafter: the Law), which was adopted in 2009 and amended in 2019, is still not fully implemented, and not all anticipated subordinate regulations have been adopted.

The amendments to the Law have led to a reorganization of inspection supervision responsibilities between the Ministry of Agriculture and the Ministry of Health. The National Reference Laboratory was established in 2015, and the amendments to the Law in 2019 defined its jurisdiction and introduced the concept of Reference Laboratories. The ministries select reference laboratories through competitions, and the list of reference laboratories is mandated to be published in the "Official Gazette of the Republic of Serbia."

A working group for milk was formed within the Ministry

of Agriculture in 2015, but by mid-2024, not completely and permanently alignment of the legal regulations related to milk safety has been achieved. The maximum allowable content of aflatoxin M1 in raw milk has been extended to 0.25 μ g/kg to accommodate milk producers in Serbia. It is anticipated that the maximum values will be aligned with the European standards (0.05 μ g/kg) from December 1st, but it is uncertain whether the maximum value of 0.25 μ g/kg will be extended for another year, following the practice of previous years. This measure opens the possibility of importing milk from neighbouring countries and the EU whose aflatoxin content exceeds the limit of 0.05 μ g/kg prescribed in the EU. To ensure food safety, measures need to be taken to reduce the presence of aflatoxins in animal feed.

The Risk Assessment Expert Council was officially formed in April 2017.







The Regulation on maximum levels of contaminants in food use to be annually harmonized with the applicable EU regulations for specific types of food under the jurisdiction of the Ministry of Agriculture. This regulation also incorporates the provisions of EU Regulation 2017/2158, which prescribe measures to reduce the presence of acrylamide in certain categories of food.

POSITIVE DEVELOPMENTS

The new Regulation on maximum levels of certain contaminants in food, which is aligned with EU Regulation (EU) 2023/915, came into force in September. For the first time, it includes categories of food under the jurisdiction of the Ministry of Health (e.g., baby food), marking a significant step in the efforts of both ministries to fully harmonize this area. This brings Serbia closer to fully aligning its food safety regulations concerning contaminants with those of the EU and neighbouring countries, despite the existence of requirements that differ from EU legislation (aflatoxin in milk, mercury in dietary products).

REMAINING ISSUES

The Food Safety Law and some subordinate regulations are not aligned with EU regulations:

- a. Current provisions of the Law limit full compliance, such as the mismatch of food categorization with EU legal categories, for example, food with modified nutritional composition.
- b. The Regulation on maximum levels of contaminants in food partially relies on Regulation EC 2023/915 in the EU. This is because the requirements for food for infants and young children is not completely in line with the EU requirements for contaminants. Some provisions related to contaminants, which are not specified by EU regulations, are still in effect from the regulation governing dietary products. The Coffee Product Quality Regulation prescribes requirements that are not specified at the EU level. The Fruit Juice Regulation also imposes additional quality requirements for fruit juices. This puts domestic food businesses at a disadvantage compared to businesses outside of Serbia.
- c. There is room for different interpretations by inspections, which can lead to inconsistencies in the application of the law.

d. National legislation is slow to adopt the latest amendments and updates to regulations regarding the use of food additives.

The lack of a comprehensive risk assessment system by inspection services has not led to progress and coordination in the application of methods for analysis and risk assessment:

- a. The establishment of the Risk Assessment Expert Council was intended to enhance risk analysis according to the Law, but this has not happened. After 6 years since its establishment, the activities of the Council are not known to the public.
- b. Risk analysis would enable the classification of food business operators as low risk or high risk, which would expedite the customs clearance process for low-risk goods. Importers assessed as low risk could save money and time through faster document processing and a reduced number of inspections during import.
- Risk analysis would reduce the burden on inspection services and relieve their limited resources, as resources would be directed towards examining high-risk products.
- d. The publication of the Regulation on specific elements of risk assessment for sanitary and agricultural inspections in 2018 created a framework for initiating the risk assessment process, but there is still inconsistency in its application among different inspections.

Unpredictable business conditions during the procurement of raw materials for food production:

- a. The lack of uniform rules in inspection procedures leads to different costs, deadlines, fieldwork mechanisms, sampling methods, and the determination of the number of analyses in laboratory processes.
- Laboratories apply different criteria for control analyses, and the responsibility of laboratories in interpreting regulations is not clearly defined.

Unclear procedure for placing novel food on the market:

 a. Although the Regulation on novel food adopts the list of food freely placed on the EU market, an additional procedure for placing new food on the market, unlike



the procedure in the EU, is repeated by all food business operators each time the same ingredients of new food are used as ingredients in other products.

 The Ministry grants approval based on the opinion of the Expert Council for Food, even though there is already a relevant scientific opinion from an internationally recognized institution (EFSA) on the use of that food in the EU, which has already been adopted in Annex 1 of this regulation. It is not known whether the Expert Council for Food has issued an opinion contrary to the EFSA opinion for the same food.

The exchange of documentation with competent authorities is still mainly done physically, which hinders the work of companies and slows down the flow of goods.

- Align the Food Safety Law and all related subordinate regulations with EU regulation (178/2002/EC and accompanying subordinate acts).
- Establish a transparent and comprehensive risk analysis system by all inspection services, including the establishment of a functional IT system and digitization of supervision.
- Establish uniform rules in inspection procedures regarding costs, deadlines, fieldwork mechanisms, sampling methods, and the determination of the type and number of analyses during official controls.
- Standardize criteria for laboratories during control analyses, with a clearly defined responsibility of laboratories in interpreting regulations.
- Establish a national food safety agency following the example of EU member states and neighbouring countries and create conditions for the National Reference Laboratory to perform all tasks prescribed by law in order to strengthen the capacity of the food safety system.
- Simplify the procedure for placing new food on the market from the list in Annex 1, while maintaining the approval process for new food not listed in Annex 1, following the EU model.
- Enable electronic data exchange between government institutions and the private sector.





2. FOOD AND FOOD CONTACT MATERIAL INSPECTIONS



WHITE BOOK BALANCE SCORE CARD

Recommendations:	Introduced in the WB:	Significant progress	Certain progress	No progress
Adopt the new Law on Sanitary Supervision and executive regulations on the work of sanitary and phytosanitary inspection harmonized with the Law on Inspection Supervision and EU regulations, as well as the Law on Official Controls based on Regulation (EU) 2017/625 and executive regulations on the conducting official controls manner. This would ensure the consistent application of uniform rules of the inspection services procedures.	2017			V
Modify the Decisions of the competent inspections so as to allow the use of raw materials in production, without the right to release the finished product until obtaining a decision on the release of raw materials.	2017			√
Clearly define the time period required for import procedures for all types of food.	2018			√
Enable electronic data exchange between state institutions and the economy.	2020			V

CURRENT SITUATION

Amendments to the Food Safety Law in 2019 reorganized the division of responsibilities for inspection supervision between the relevant inspections of the Ministry of Agriculture (phytosanitary, agricultural, and veterinary) and the Ministry of Health (sanitary). Additionally, the Ministry of Health establishes health and safety requirements for articles of general use, including food contact materials (FCM), while the sanitary inspection is responsible for enforcing the legal regulations that cover food contact materials, including packaging.

The work of inspection services is regulated by the Law on Inspection Supervision, which has been in effect since April 2016. Some inspections have developed models for implementing the Law on Inspection Supervision, but full alignment of sector-specific regulations with this law has not yet been completed.

The Ministry of Health has been in the process of adopting a new Law on Sanitary Supervision since 2016, which would provide more detailed regulations for the tasks of sanitary supervision.

POSITIVE DEVELOPMENTS

Improvement has been noticed in the work of the bor-

der phytosanitary inspection, considering the established internal traceability system that contributes to the implementation of risk analysis to a certain extent.

REMAINING ISSUES

Although announced several years ago, the Law on Sanitary Supervision and executive regulations on the work of sanitary and phytosanitary inspections, as well as the Law on Official Controls, have not yet been adopted, which would align them with the Law on Inspection Supervision and EU regulations. There is a lack of executive regulations, such as the Regulation on the Implementation of Official Controls, the approval and certification system, cooperation with customs authorities and competent authorities of EU member states and third countries, inspection, sampling, setting deadlines for conducting official controls, as well as reporting on conducted controls. Additionally, there is a lack of a Regulation on sampling and testing methods for food in the process of official control and other regulations. This situation creates inconsistency in the actions of inspection services and varies in the implementation of the risk assessment system. As a result, risk analysis is not applied in the work of the sanitary inspection, where all shipments are sampled and sent for laboratory analysis, including articles of general use and food contact materials, including packaging. This leads to unnecessary significant financial costs



for business entities where no irregularities are found, as well as delays in deliveries and unpredictability in business and planning.

Competent inspections do not allow the use of raw materials in production before obtaining the Decision on the release of raw materials into free circulation, resulting in loss of time and money.

Since the beginning of this year, the Directorate for Veterinary Medicine has experienced significant delays in issuing decisions on determining veterinary-sanitary conditions for the import or transit of shipments of food of animal origin, as well as mixed food, which the Ministry issues in accordance with Article 124, paragraph 2 of the Veterinary Law. These delays occur despite no changes in the law or bylaws. Importers face additional requirements and delays due to requests for additional documentation, even when it is necessary to renew existing decisions after their expi-

ration, without changes that would affect the risk analysis according to Article 124 of the Law. The decisions have a validity period of 3 months for milk, dairy products, meat, and meat products, while they last for 6 months for various mixed goods. The lack of transparency in the process and requests for additional documentation often lead to a significant extension of the deadline of one month for delivering the decisions. This poses a challenge for importers, who sometimes must submit requests for the next quarter before receiving decisions for the upcoming period to overcome delays in procuring goods.

The time required for import procedures for food is not clearly defined.

The exchange of documentation with competent authorities still largely takes place physically, which hinders the work of companies and significantly slows down the flow of goods.

- Adopt a new Law on Sanitary Supervision and executive regulations on the work of sanitary and phytosanitary
 inspections that are aligned with the Law on Inspection Supervision and EU regulations, as well as a Law on
 Official Controls based on Regulation (EU) 2017/625 and executive regulations on the implementation of official
 controls. This would ensure consistent implementation of unified rules in inspection procedures and a unified
 approach to comprehensive risk analysis.
- Amend the decisions of the competent inspections to allow the use of raw materials in production without the
 right to release the finished product into free circulation until the decision on the release of raw materials into
 circulation is obtained.
- To overcome delays in issuing decisions on veterinary-sanitary conditions for import or transit shipments, it is
 suggested that the Ministry of Agriculture adopt a bylaw that prescribes the list of necessary documentation
 and deadlines for submitting requests and issuing decisions. This will enable greater transparency in the process,
 more efficient procurement of goods, and predictability in business.
- Clearly define the time required for import procedures for all types of food.
- Enable electronic data exchange between state institutions and the economy.





3. QUALITY AND LABELLING OF FOOD PRODUCTS



WHITE BOOK BALANCE SCORE CARD

Recommendations:	Introduced in the WB:	Significant progress	Certain progress	No progress
Define the competence of institutions regarding the interpretation of regulations in the field of food safety and ensure the obligation to apply the official positions of the Ministry to all participants in the chain. Establish the competent Ministry for the area of declaring food and ensure uniform interpretations and application of the Rulebooks, Guides and Instructions it has carried out competent ministry.	2016			V
Adopt the Rulebook on the Conditions and Manner of Production and Food Market Placing for which Quality Conditions are not Prescribed.	2022			V
Adopt executive regulations arising from the Law on Food Safety and harmonize them with EU.	2017			V
Adopt Amendments to Article 34 of the Law on Trade in terms of clearly defining that the provisions of this Article do not apply to products to which the provisions of the Law on Food Safety apply, and bylaws prescribing the declaration and labelling of food.	2020			V

CURRENT SITUATION

Since June 2018, the Regulation on the Declaration, Labelling, and Advertising of Food has been in effect, which is largely aligned with relevant EU regulations. In September 2020, amendments were made to the Regulation to harmonize the provisions regarding the declaration of the country of origin of the main ingredient in accordance with EU regulations 2018/775 and (EU) 1155/2013, with effect from January 1, 2023. Additionally, in early 2022, provisions were added that further prescribe the appearance of the graphic mark "Originating from Serbia" for meat and meat products to support consumer information about local products.

There are a number of regulations that govern the quality of certain categories of food, but they are not fully aligned with the EU, are outdated, or there are no EU regulations defining the quality of these food categories. This vertical legislation puts economic entities at a disadvantage compared to producers in the region and the European Union. Often, due to the outdated regulations, it is difficult to find suitable raw materials and they have a higher cost, and some raw materials cannot even be placed on the market

or used in production due to the absence of a specific category within the regulations. A similar situation exists with finished products that do not fit into the categorization of the mentioned regulations.

The Trade Law, enacted in mid-2019 by the Ministry of Internal and Foreign Trade, stipulates the obligation to label the country of production on the declaration of goods in retail trade. However, it is still unclear whether this obligation applies to the labelling of food, considering that the Food Safety Law (lex specialis) and the Regulation on the Declaration, Labelling, and Advertising of Food are in force. The Regulation requires mandatory indication of the country of origin only for certain categories of food, while in the case of voluntary indication, it also imposes an additional obligation to indicate the country of origin of the main ingredient. Additionally, there is inconsistency in the interpretation of regulations by inspections and food business operators, leading to conflicts of jurisdiction, as well as uncertainty in business and difficulties in foreign trade with the EU and neighbouring countries. The responsibilities for harmonizing the regulations from Chapter XII are unclear, as different ministries have different approaches to the same area.



POSITIVE DEVELOPMENTS

In previous years, certain regulations have been amended to expand the list of categories based on the needs of food business operators. However, despite these individual amendments, a systemic solution has not been achieved, leading to the conclusion that significant improvements in this area have not been observed.

REMAINING ISSUES

The current legal framework does not clearly define the authority for interpreting regulations in the field of food safety, while over time, a practice has emerged in the market where laboratories interpret the regulations:

- a. Regardless of the fact that the legal assessment or determination of certain illegalities in business operations is exclusively within the jurisdiction of inspectors, according to Article 37 of the Law on Inspection Supervision, inspectors, as the competent authority, exclusively rely on the conclusion of the laboratory, which is not always aligned with the official position of the Ministry that enacted the regulation. This situation is particularly noticeable when interpreting regulations on food labeling, where there are different approaches and interpretations, despite the existence of a Guide.
- b. The official position of the competent Ministry is not a binding act for inspection services.
- This practice creates difficulties in the functioning of economic entities in the food business and limits their ability for long-term planning.
- d. A bylaw has not yet been adopted in which ministers, in accordance with the division of responsibilities from Article 12 of the Law, specify the conditions and methods of production and placing on the market of food for which quality conditions are not prescribed, as envisaged by Article 55 of the Law.

Non harmonised regulations prescribing product quality with EU regulations:

 a. Most national regulations that prescribe the quality of certain food categories date back to the 1980s and 1990s. Some of these regulations, such as the Regulation on the Quality of Fruit and Vegetable Products and the Regulation on the Quality of Raw Coffee, Coffee Products, Coffee Substitutes, and Related Products, although more recent, are exclusively of national character and not aligned with EU legislation. There are no EU-level requirements for these products, except for instant coffee and instant coffee substitutes. The latest amendment to the Regulation on the Quality of Fruit and Vegetable Products, from the end of 2021, did not make any progress in harmonization. By enacting national regulations, the quality group of the Ministry of Agriculture shows a sense of the needs of domestic producers to define quality parameters for certain product categories, as well as traditional products, in order to reduce the possibility of misuse. However, these regulations can limit food business operators, especially in cases where products cannot be classified into any of the categories of the newly enacted regulation, particularly with related products where there is room for different interpretations. These situations can be overcome through amendments and supplements to the regulations, but such solutions require a longer time and do not contribute to efficiency.

- b. The Regulation on Fruit Juices, although harmonized with Regulation EC 2012/12, still has additional requirements regarding the quality of fruit juices, which are taken from the standards of the European Association of Fruit Juice Producers. However, these standards have voluntary, rather than legally binding, application in EU countries. This puts domestic food business operators at a disadvantage compared to entities operating outside of Serbia.
- c. The Regulation on Dietary Supplements retains the process of registering products in the Ministry's database, similar to the process that existed in the Regulation on the Health Safety of Dietary Products. Unlike the notification process in EU countries, this process involves obtaining certificates from multiple institutions before registration in the Ministry of Health's database.

The misalignment of the requirements of the Trade Law, which obligates the indication of the country of origin, and the Regulation on Labeling, which prescribes the obligation to indicate the country of origin of the main ingredient when voluntarily indicating the country of origin on product labels, creates a framework for additional problems in practice.





FIC RECOMMENDATIONS

- Identify the competent institution for interpreting regulations in the field of food safety and ensure that the
 official positions of the Ministry are mandatory for all participants in the chain. Additionally, establish a competent
 Ministry for the area of food labeling to ensure consistent interpretation and implementation of regulations,
 guides, and instructions issued by the relevant ministry.
- Adopt a regulation that will regulate the conditions and methods of production and placing on the market of food for which quality conditions are not prescribed.
- Adopt executive regulations derived from the Food Safety Law and align them with EU regulations.
- Amend Article 34 of the Trade Law to clearly define that the provisions of that article do not apply to products subject to the provisions of the Food Safety Law and subordinate regulations governing the labeling and marking of food.

4. REGENERATIVE AGRICULTURE: BENEFITS AND IMPLEMENTATION CHALLENGES

CURRENT SITUATION

With the increasing global population, the demand for food is also growing. At the same time, food producers are facing increasing pressure to adopt more sustainable business strategies and practices, given the significant role of agriculture and the food industry in combating climate change. The main challenge for the food industry is how to ensure an adequate food supply for the growing population while dealing with the threats of climate change and general soil degradation caused by intensive farming practices. This problem is also present in Serbia, where research shows that humus content is declining at a faster rate than in the mid-20th century.

Agriculture is one of the main pillars of economic activity and growth in the Republic of Serbia. Agricultural land covers nearly half of the country's territory, and agriculture contributes to almost 7% of Serbia's GDP. The agricultural sector employs 547,000 people, with 78.7% working in primary agriculture, accounting for almost 20% of total employment in Serbia. Agriculture also accounts for 17.8% of Serbia's total export of goods, with a total export value of 4.8 billion euros and a trade surplus in agricultural and food products of 1.6

billion euros. Primary agricultural products make up 69% of total exports, while processed agricultural products account for 30.7%. Agriculture is recognized as a sector with significant impacts and risks related to ESG (Environment, Social, Governance) factors worldwide. Serbia has a unique opportunity to develop and implement detailed ESG regulations in the agricultural sector, which will impact both large enterprises and small-scale farmers, enabling economic growth and the development of sustainable business practices.

Agricultural production contributes to 66% of total emissions in the supply chain from farm to fork. Proposed measures to reduce the carbon footprint in agricultural production include two key steps:

Increasing the capacity of land to retain carbon through the adoption of regenerative agricultural practices. Increasing carbon content in the soil is mainly achieved through the implementation of regenerative agricultural practices, as mentioned in section 6.4.3 "CO₂ Emissions in Serbian Agriculture." When these practices are successfully applied, they act as the main compensation for emissions arising from field work and natural processes. The implementa-

tion of regenerative agricultural practices is best combined with targeted measures to reduce CO₂ emissions, contributing to achieving a cumulative positive effect.

Reducing greenhouse gas emissions from all sources, both natural and human.

POSITIVE DEVELOPMENTS

There are currently no improvements as the topic is new in the White Book.

REMAINING ISSUES

Legislation in Serbia shows a strong tendency towards harmonization with EU regulations, particularly in the field of agriculture. However, certain deficiencies and inconsistencies have been identified regarding general ESG regulations. While there is room for improvement, achieving full harmonization with the EU does not require a complete change of the regulatory framework but rather the adaptation of existing regulations.

The identified deficiencies include:

- Lack of an ESG regulatory framework that defines the rights and obligations of economic entities regarding non-financial reporting at the level currently in force in the EU. This is important to ensure transparency and accountability regarding ESG factors.
- Failure to recognize regenerative agricultural practices in strategic planning documents and laws, despite their crucial role in sustainable land management and reducing negative environmental impacts.
- Absence of systemic and financial support for the transition to regenerative land management systems. Farmers need support in the form of training, technological solutions, and financial incentives to adopt sustainable practices and reduce their environmental impact.
- Limited awareness among farmers about the existing systems and opportunities for financial support.

- Within national strategic and programmatic documents and laws governing agriculture and rural development, it is necessary to recognize and incorporate regenerative agricultural practices. These documents include the Strategy for Agriculture and Rural Development, National Agricultural Program, National Rural Development Program, Law on Agriculture and Rural Development, and Law on Incentives in Agriculture and Rural Development.
- Provide financial support through subsidies and other available tools to support the transition of agricultural producers from conventional to regenerative agricultural practices. These support measures would include subsidies within rural development support programs, as well as direct payments.
- Consider the possibility of additional subsidies for producers implementing regenerative agricultural practices within direct payments in primary crop production, following a similar principle to the subsidies provided for organic farming compared to conventional production.
- Invest in farmer education programs and capacity building focused on sustainable agricultural practices, providing farmers with the knowledge and skills necessary to adopt environmentally friendly methods.





5. SYNERGY OF SCIENCE AND BUSINESS FOR THE WELL-BEING OF CUSTOMERS AND A HEALTHIER DIET

(ZERO RESIDUE CONCEPT: FRUIT AND VEGETABLES WITHOUT PESTICIDE RESIDUE)

CURRENT SITUATION

In the modern world, health standards and food safety are key for consumers. The "Zero Residue" or "Pesticide Residue-Free" concept represents one of the latest trends in agriculture, the goal of which is to eliminate pesticide residue on fruit and vegetables offered on the market. Not only does this approach secure healthier products for customers, but it also contributes significantly to sustainable development of agriculture and preservation of the environment.

Agriculture plays a crucial role in the economy of the Republic of Serbia. With almost 50% of the country's territory engaged in agricultural production, this sector contributes approximately 7% of the country's GDP and employs a large number of people. However, traditional agricultural practices often include pesticides in order to protect crops from pests and diseases. While pesticides help increase yield, their misuse can negatively impact the environment and human health.

The strategy for sustainability and food safety recognizes the importance of reducing pesticide residue in products. In cooperation with the Faculty of Agriculture at the University of Belgrade, a new food safety management concept was developed in 2022. With the aim of producing fruits and vegetables free from pesticide residues through good agricultural practices, standards in the food supply chain are significantly raised, and this benefits primary producers, and particularly consumers and society, as well as companies that implement and promote a responsible approach to food safety. In the summer of 2022, the first "Zero Residue" crops were produced in Serbia, and they included cantaloupes and watermelons marked with the official guarantee stamp. In 2023, the concept was upgraded and expanded to include new fruit and vegetable crops, including cherries, raspberries, pumpkins, and packaged lettuce. This innovative approach includes the application of advanced technologies in production, strict control of good agricultural practices and laboratory analyses that prove the absence of pesticides in products.

This type of innovation is exactly how synergy between science and business is achieved. Through this kind of coop-

eration, retailers make sure that the products offered at the retail chain comply with the highest quality and safety standards. Moreover, the Faculty of Agriculture of University of Belgrade, as Serbia's leading scientific institution in food production, plays a key role in validating good agricultural practices among primary producers and conducting laboratory analyses. This process involves strict control of every step during the production, from planting to harvesting and distribution.

The partnership between retailers and local producers is one of the key elements of the success of this concept. Expanding the concept to include new fruit and vegetable crops ensures that consumers have access to a wider selection of healthier and safer products. During 2023, the number of products with the "Zero Pesticide Residue" label increased from seven to 16, whereas the volume of these products on the market increased by 138 percent. These results clearly indicate the success of the concept and the market's readiness to accept and support such initiatives.

Retailers will continue to work on expanding this concept, aiming to include even more types of fruit and vegetables. Analyses are already underway to extend it to new varieties of apples and vegetable crops. This process not only contributes to a healthier diet but also sets new standards in agricultural production in Serbia, promoting sustainability and responsible resource use.

POSITIVE DEVELOPMENTS

Currently, there are no improvements as the topic is new in the White Book 2024.

REMAINING ISSUES

Although the concept "Pesticide Residue Free" is a step forward toward healthier and safer food, there are several challenges in Serbia:

 Lack of clear regulations: Currently, there is no comprehensive legal framework governing pesticide residue-free products at the national level. This complicates the standardization and certification of these products.

- Financial challenges for producers: Transition to pesticide residue-free production requires additional financial investments in new technologies and training, which poses a significant challenge for many agricultural producers.
- Insufficient consumer awareness: Many consumers are not adequately informed about this innovative production concept, affecting demand.
- Lack of support for small producers: Small agricultural producers often lack access to the resources needed to transition to pesticide residue-free production, which can reduce their competitiveness.
- Maintaining quality: Continuously upholding high production standards and quality control requires ongoing investments and supervision, which can be challenging for producers.

- Development and implementation of a national regulatory framework: It is proposed to adopt comprehensive regulations that will define standards and procedures for the production and certification of pesticide residuefree products. This will provide clear guidelines for producers and increase consumer trust.
- Financial support and subsidies: Financial assistance should be provided through subsidies and other tools to help producers transition to the Zero Residue concept. This includes subsidies for acquiring new technologies, training, and educating farmers.
- Raising consumer awareness: Campaigns to inform and educate consumers about the benefits of pesticide residue-free products are essential. This will increase demand for these products and encourage producers to adopt this concept.
- Support for small producers: Special support programs for small agricultural producers, including access to technology and training.
- Continuous quality improvement: Establishing a system for ongoing monitoring and quality improvement through collaboration with scientific institutions such as the Faculty of Agriculture at the University of Belgrade. This will ensure that products remain compliant with high standards and that issues are addressed promptly.