

LEGAL REGULATION OF UNFAIR TRADE PRACTICES IN FOOD SUPPLY CHAIN

PRÁVNÁ ÚPRAVA NEKALÝCH OBCHODNÝCH PRAKTÍK V POTRAVINOVÝCH DODÁVATEĽSKÝCH REŤAZCOCH

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I. Introduction

Increased concentration in retailers and processors in many developed countries such as in the EU led to their dominance on the market followed by the imbalances in bargaining power and its abuse. The evidence and understanding of the abuse of bargaining power is still limited ⁽¹⁾, however the EU expressed concerns about the importance of regulation of trade practices to protect weaker parties in food supply chain. Imbalances in bargaining power in business relationships between trading partners play a crucial role and often lead to the occurrence of unfair trade practices (UTPs) ⁽²⁾. The three largest retailers with more than 50% market share are present in almost every EU Member State and in some countries like Finland and the Netherlands their market share may be up to 80% ⁽³⁾. Because of this imbalance, the small and medium-sized enterprises are often exposed to UTPs. There are also other factors that are

often considered to be a cause of UTPs⁽⁴⁾ such as: asymmetric information, switching costs, costs of contract enforcement, transaction costs, and perishability of goods and seasonality of production. When considering UTPs in food supply chains, European Commission also presented⁽⁵⁾ that particularly this supply chains are very sensitive to unfair trade practices. Moreover, UTPs within food supply chains may have important consequences affecting all EU consumers, because their main role is to secure supply of food and drinks.

However, sometimes it is difficult to judge whether some practice is fair or unfair and the same practise can be perceived differently in different situations. The assessment of justice should consider the economic aspect but also sociological factors⁽⁶⁾.

All these concerns led policy makers to prepare a legislative framework that would clearly define the practices considered

⁽¹⁾ Popović, Mihailović, Simonović (2018).

⁽²⁾ Russo (2020).

⁽³⁾ CIAA (2010).

⁽⁴⁾ Renda et al. (2014).

⁽⁵⁾ European Commission (2014).

⁽⁶⁾ Swinnen, Vandeveldel (2019).

Abstract (EN)

Recent changes in concentration in the EU markets affected also the organisation of the food supply chains. These significant changes severely impacted especially small and medium-sized enterprises which are likely to be exposed to unfair trading practices. Imbalances in bargaining power between large and small enterprises lead to competition inequalities and unfair trade practices that need a specific legislation governance. This paper provides an overview of the Slovak and EU legislation regulating unfair trade practices in agro-food sector. The main aim of both the European and Slovak legal acts regulating unfair trading practices is to ensure protection and fair income for businesses and quality and wider choice for consumers. In addition, the article also brings the overview of the EU directive transposition to the legal framework of individual EU member states.

Keywords (EN)

unfair trade practices, food supply chain, legislation, bargaining power

Abstrakt (SK)

Nedávne zmeny koncentrácie na trhoch EÚ ovplyvnili aj organizáciu potravinových dodávateľských reťazcov. Tieto zmeny vážne zasiahli najmä malé a stredné podniky, ktoré budú pravdepodobne vystavené nekalým obchodným praktikám. Nerovnováha vo vyjednávacej sile medzi veľkými a malými podnikmi vedie k nerovnostiam v hospodárskej súťaži a nečestným obchodným praktikám, ktoré si vyžadujú osobitné právne predpisy. Tento príspevok poskytuje prehľad legislatívy SR a EÚ upravujúcej nekalé obchodné praktiky v agropotravinárskom sektore. Hlavným cieľom európskych a slovenských právnych aktov upravujúcich nekalé obchodné praktiky je zabezpečiť ochranu a spravodlivý príjem pre podnikateľov, a tiež kvalitu a širší výber pre spotrebiteľov. Okrem toho článok prináša aj prehľad transpozície smernice EÚ do právneho rámca jednotlivých členských krajín EÚ.

Kľúčové slová (SK)

nekalé obchodné praktiky, potravinový reťazec, legislatíva, vyjednávacia sila

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as unfair, prohibit their use and assist weaker business partners with legal protection. The purpose of this paper is to put unfair trade practices in food supply chain into a legal context. This paper explains the relevant Slovak and EU legislation and duties related to UTPs. The transposition of the EU Directive on UTPs into the legal framework of individual EU member states is also addressed in the paper.

II. Data and Methods

To provide an overview of the EU and Slovak legislative regulations on unfair trade practices we have collected and analysed number of scientific papers and official documents as well as relevant Slovak national and EU legislation. To retrieve the main publications for this study, we hand-searched EU commission and council website for legislative documents on UTPs as well as collection of acts of the Slovak Republic. Moreover, we performed a literature search of Researchgate as well as EU database retrieving articles published from 2005 to January 2022 that focused on legislation of unfair trade practices. Articles reporting information regarding national laws or legislation in the area of UTPs among the European countries as well as on the EU level were considered eligible. Articles were critically evaluated for inclusion. The data taken from the legislative documents were made in the form of a narrative overview and arranged in tables. The paper used analytical-synthetic method during the conclusion's formulation and recommendations. In the study we are providing chronological sequence of legislative documents, categorization of EU countries based on legislation on UTPs, categorisations of UTPs based on EU Directive 2019/633, and a comparison of the Slovak Republic legislation regarding UTPs, Act no. 362/2012 Coll and the currently in force Act no. 91/2019 Coll.

III. Results and Discussion

3.1 Definition of Unfair Trade Practices

The difference in bargaining power between trading partners is common in business relationships, however it can sometimes lead to the abuse bargaining power and to unfair trade practices⁽⁷⁾. Unfair trade practices were defined by⁽⁸⁾ as practices that “grossly deviate from good commercial conduct, are contrary to good faith and fair dealing.” To eliminate UTPs in business relationships it is important to have clear and enforceable contracts. However, trading partners often meet with unfair trade practices already in the process of contract negotiations⁽⁹⁾. Further on, UTPs can occur also after the contract termination. Because of weaker position, producers often have no other choice than accept unfair practices in order to maintain business relations with the buyer⁽¹⁰⁾.

One of the important problems in the past was that there were not many specific rules governing unfair trading practices

and contractual relations between various parties in the supply chain⁽¹¹⁾. The problem of unfair trade practices has been recognized by the European Commission in 2005, and since that time the legislation is gradually changing at both the European and national levels of individual EU member states.

3.2 Legislation on Unfair Trade Practices in the EU

The first regulations concerning UTPs were introduced in 2005 under the title “Unfair Commercial Practices Directive”⁽¹²⁾. UTPs in this directive were recognized as an important problem particularly within individual stages of food supply chain between individual parties of business relationship⁽¹³⁾. However, this regulation focused only on one part of supply chain and that was trade practices between businesses and their consumers (B2C) and did not tackle the problem of trading practices between businesses only (B2B).

In 2009, the European Commission started the communication titled “A better functioning of the food supply chain in Europe”⁽¹⁴⁾ and established a High-Level Forum on the topic. This communication presents the ways and specific policy initiatives of overcoming challenges within EU food supply chain. Two main policy initiatives were presented. First one on promoting sustainable and market-based relationships and the second one on increasing transparency to encourage competition and price volatility within food supply chain.

In 2013 the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs made another step forward, towards more fair conditions for B2B relations⁽¹⁵⁾ and published the Green Paper on Unfair Trading Practices in the B2B Food and Non-Food Supply Chain in Europe⁽¹⁶⁾.

Next steps against UTPs were proposed by the Directorate-General for Agriculture and Rural Development in 2018 when the four main UTPs were restricted in a new directive on UTPs⁽¹⁷⁾. The main aim of this Directive was to protect small and medium-sized enterprises from unfair practices imposed by their larger and stronger trading partners. Practices like late payments, short notice order cancellations for perishable food products, unilateral or retroactive changes to contracts and the forcing of suppliers to pay for wasted products became prohibited.

Current EU Directive 2019/633 on unfair trading practices in business-to-business relationships in the agricultural and food supply chain from 2019 published by the European Commission⁽¹⁸⁾ modified and extended the previous proposal. It did not concern just the protection of small and medium sized enterprises but also large companies. Other than that, it restricted ten so called “black practices” in the EU agri-food supply chains. Additionally, there were introduced six “grey

⁽⁷⁾ European Commission (2016).

⁽⁸⁾ European Commission (2013).

⁽⁹⁾ Di Marcantonio et al. (2018).

⁽¹⁰⁾ European Commission (2019).

⁽¹¹⁾ European Commission (2010).

⁽¹²⁾ UCPD, 2005/29/EC.

⁽¹³⁾ European Commission (2010).

⁽¹⁴⁾ COM (2009) 591.

⁽¹⁵⁾ European Commission (2013).

⁽¹⁶⁾ COM (2013) 37.

⁽¹⁷⁾ European Commission (2018).

⁽¹⁸⁾ European Commission (2019).

Table 1: UTPs in the EU Directive 2019/633

Black UTPs	Grey UTPs
payments later than 30 days for perishable agricultural and food products	return of unsold products
payments later than 60 days for other agri-food products	payment of the supplier for stocking, display and listing
short-notice cancellations of perishable agri-food products	payment of the supplier for promotion
unilateral contract changes by the buyer	payment of the supplier for marketing
payments not related to a specific transaction	payment of the supplier for advertising
risk of loss and deterioration transferred to the supplier	payment of the supplier for staff of the buyer, fitting out premises
refusal of a written confirmation of a supply agreement by the buyer, despite request of the supplier	
misuse of trade secrets by the buyer	
commercial retaliation by the buyer	
transferring the costs of examining customer complaints to the supplier	

Source: European Commission (2019)

practices” which are allowed only when trading partners explicitly agree in advance in writing on their use (Table 1). This directive had to be incorporated into national legislation of the EU member states.

EU directive 2019/633 is not the only way of protection against UTPs. Other than that, different member states created and implemented their own specific legislation against UTPs or other specific measures. Beside specific legal acts, Swinnen, Vandeveld (2019) stress also the importance of the voluntary initiatives against UTPs⁽¹⁹⁾. Before the directive against UTPs came into the effect, many of such initiatives were introduced within individual member states. Example of such an initiative is “Agri Food Chain Consultation” from Belgium. It was introduced in 2009 and its members include representatives from all stages of food supply chain. The main ambition of this initiative is to ensure the relationship fairness between suppliers and purchasers, because distinct economic interest of these parties can rise unhealthy competitiveness. Content of the initiative concerns (Supply chain initiative, 2022) “*the principles of good practices, procedures for dispute settlement, management and monitoring of the code, the tasks and responsibilities of the ‘Committee’*”⁽²⁰⁾.

To combine existing legislation with voluntary initiatives at EU level, the European Commission established the so called “Green Paper”⁽²¹⁾. The Green paper contains different voluntary programs with reliable and effective enforcement. Based on this Green Paper the Supply Chain Initiative (SCI) was also established. The initiative was active in between 2013 and 2019 and its main purpose was to promote fair business practices in the food supply chain using tools and mechanisms that support business respecting contractual freedom and ensuring competitiveness⁽²²⁾.

3.3 Transposition of the UTP Directive into Legislations of Member States

The EU Directive 2019/633 on UTPs had to be incorporated into national legislation of each member state. However, member states can pass on their own stricter measures on UTPs. Member states had to transpose the Directive into national law by May 2021, but had the option of postponing its adoption to November 2021.

As there was only 15 Member States (Bulgaria, Croatia, Denmark, Finland, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Slovakia, and Sweden) that managed to meet the deadline for the transposition of the UTP Directive into their national legislation, and two other countries (France and Estonia) have only partially transposed the directive, the European Commission initiated infringement procedures. Austria, Belgium, Cyprus, Czechia, Estonia, France, Italy, Poland, Portugal, Romania, Slovenia and Spain received a letter from the EC requesting them to implement legislation to ensure compatibility with the Directive⁽²³⁾.

Austria has implemented the UTP Directive with amendments to the national competition and local supply law coming into force on 1 January 2022. The Austrian law protects all producers with an annual turnover of up to EUR 1 billion⁽²⁴⁾. The first point of contact and advisory body is the “Ombudsman”, established at the Federal Ministry of Agriculture, Regions and Tourism. The Austrian Federal Competition Authority (AFCA) serves as the investigator and the Cartel Court is the main authority with the power to prohibit UTPs and levy fines of up to EUR 500 000 on a buyer who has engaged in banned trading practices⁽²⁵⁾.

The Belgian Act on UTPs was published on 15 December 2021 and entered into force on 25 December 2021. It includes wider set of practices than the minimum protection covered in the EU Directive and it is applicable to almost all relationships

⁽¹⁹⁾ Swinnen, Vandeveld (2019).

⁽²⁰⁾ Supply chain initiative (2022).

⁽²¹⁾ European Commission (2014).

⁽²²⁾ The Supply Chain Initiative (2022).

⁽²³⁾ European Commission (2021b).

⁽²⁴⁾ Euractive (2021).

⁽²⁵⁾ Wollmann et al. (2022).

between suppliers and buyers in food and animal feed supply sector. The main body responsible for the enforcement of UTP law is the FOD Economies' Directorate General of Economic Inspection⁽²⁶⁾.

Bulgaria has adhered to the EU deadline, which was May 2021. The EU directive was transposed as an amendment in the existing Bulgarian Protection of Competition Act that was announced in February 2021 and came into force on 1 November 2021. It contains a wider list of unfair practices beside those covered in the original UTP Directive. The main enforcement body is the Commission for Protection of Competition, which can impose fines ranging from BGN 5,000 to BGN 300,000 for breaching any of the banned business practices⁽²⁷⁾.

The Croatian UTPs Act also lists wider set of UTPs originally prohibited by the EU Directive. The revised UTPs Act came into force in September 2021 and after a six-month harmonization period for all the related subjects to adapt to the new rules, the act is fully applied since 1 March 2022. The main enforcement and controlling authority is the Croatian Competition Agency. Breaching the UTPs Act can be fined up to HRK 5 million⁽²⁸⁾.

The Czech Republic regulates UTPs in agricultural and food supply chain by Act No. 395/2009 Coll., on Significant Market Power in the Sale of Agricultural and Food Products and its Misuse. The Act was later amended and finally entered into force on 1 February 2022. The main body responsible for the enforcement mechanism is the Office for the Protection of Competition. The fine imposed for violation of the Act range up to CZK 10 million or 10% of the previous year turnover, whichever is higher⁽²⁹⁾.

The Danish Act restricting the UTPs entered into force in July 2021. The scope of the Act is wider than the minimum protection required by the EU Directive. The enforcement body is the Danish Competition and Consumer Authority, investigating the violation of the Act and imposing fines⁽³⁰⁾.

In Estonia, the EU Directive was transposed into the legal system on 1 November 2021 when the Act on Combating Unfair Trading Practices in the Agricultural and Food Supply came into force. The act prohibits nine UTPs in all cases and additional seven UTPs in case they have not been agreed in writing. The main body ensuring the law enforcement is the Estonian Competition Authority⁽³¹⁾.

In Finland the amended Finnish Food Market Act (1121/2018) entered into force on 1 November 2021. It applies to all cases when the buyer is a larger company than the supplier and his turnover exceeds EUR 2 million. The violation of law, its compliance with the EU Directive and its enforcement is in the responsibility of the Finnish Food Market Ombudsman. The Ombudsman can also propose that the Market Court levy a fine of up to 1% of the firm's turnover⁽³²⁾.

France was not successful to meet the deadline for full trans-

position of the UTP Directive by May 2021 and implemented the Directive only partially. After the letter of formal notice requesting to implement relevant measures, the full implementation of the Directive was adopted. The transposition is partially based on the existing legislation, but it was supplemented notably by the clauses related to UTPs and competition law. The main authority designated as a control and enforcement body is the Directorate-General for Competition, Consumer Affairs and Fraud Control⁽³³⁾.

In Germany the Agricultural Organizations and Supply Chain Act came into effect on 9 June 2021. The Act also opts for a wider range of UTPs, compared to the list of practices in the EU Directive. The German law protects suppliers of up to the maximum annual turnover EUR 4 billion in specific cases, when supplier trades with comparatively larger buyer. The supervisory body is the Federal Office for Agriculture and Food handing fines of up to EUR 750,000⁽³⁴⁾.

Greece has transposed the EU Directive on UTPs by November 2021. The Ministry of Rural Development and Food of Greece and its department, Committee for Combating Unfair Trading Practices warrant the law compliance. The directive aims to strengthen specifically the bargaining power of producers in the food supply chain⁽³⁵⁾.

In Hungary, the Act XCV on the Prohibition of Unfair Distributor Conduct against Suppliers of Agricultural and Food Industry Products was first introduced in 2009 and the Act LVII on the Prohibition of Unfair and Restrictive Market Practices in Hungary entered into in 1996. Both acts were amended for full transposition of the EU Directive with effect as of 1 January 2021. The competent enforcement authority is the National Food Chain Safety Office. The Office is responsible for investigation of infringements and imposition of fines of up to HUF 500 million (but maximum 10% of the previous year net income of the retailer), or in case of repeating infringement up to HUF 2 billion (but not lower than 1.5 times the amount of the previous fine)⁽³⁶⁾.

Ireland transposed the EU Directive to the national law in April 2021, applicable since July 2021. All supply contracts must comply with the new UTPs Regulations no later than by 28 April 2022. Irish enforcement authority is the Minister for Agriculture, Food, and the Marine and the National Food Ombudsman handing fines for violation of the UTPs Regulations of up to EUR 500,000⁽³⁷⁾.

New Italian regulation implementing the EU Directive on UTPs was introduced in the UTP Decree no. 198/2021 that entered into force on 15 December 2021. It applies to all business relationships between agricultural and food suppliers and buyers irrespectively of their annual turnover and prohibits much wider set of UTPs than what was defined in the EU Directive. The enforcement body is the Central Inspectorate for the protection of quality and fraud repression of agri-food products investigating violations of the Decree and handing penalties of up to 10% of the infringer's turnover of the preceding account-

⁽²⁶⁾ Verdonck (2021).

⁽²⁷⁾ Kehayova (2021).

⁽²⁸⁾ Marjančić (2022).

⁽²⁹⁾ Gerrard (2022).

⁽³⁰⁾ KROMAN REUMERT (2021).

⁽³¹⁾ Republic of Estonia Competition Authority (2021).

⁽³²⁾ Segercrantz (2020).

⁽³³⁾ Euractive (2021).

⁽³⁴⁾ Jones Day (2021).

⁽³⁵⁾ Euractive (2021).

⁽³⁶⁾ Petrányi, Boros (2021).

⁽³⁷⁾ Hederman (2022).

ing period⁽³⁸⁾.

In Latvia the Unfair Trading Practices Prohibition Act was passed on 7 April 2021 and entered into force on 1 November 2021. The Act focuses on agri-food buyers with annual turnover above EUR 2 million and suppliers regardless of their size. The set of practices prohibited by this law is broader than the one from the EU Directive. The enforcement body is the Latvian competition authority imposing fines of up to 0.2% of the infringer's annual turnover⁽³⁹⁾.

In Lithuania the UTP Directive was transposed into Lithuanian law on 1 November 2021. The Law on Unfair Trading Practices in the Agricultural and Food Product Supply Chain introduces new restrictions on the relationship between suppliers whose sales revenue does not exceed EUR 350 million in the preceding financial year, worldwide revenue of the entire company group, and buyers of food, drinks and agricultural products and all existing contracts had to be reviewed. The supervisory authority responsible for the enforcement of the Law on Unfair Trading Practices in the Agricultural and Food Product Supply Chain is the Rural Business and Markets Development Agency. In case of violation of the law, fines reaching up to 0.7% of sales revenue over the previous year may be imposed⁽⁴⁰⁾.

Luxembourg implemented the UTP Directive into the national law in the form of the Bill of Law 7646. The Competition Council is appointed to enforce the law, investigate complaints of suppliers or investigate on its own initiative. The Council has also power to carry out on-site inspections and impose sanctions of up to EUR 120 000⁽⁴¹⁾.

In Malta the Unfair Trading Practices in the Food Supply Chain Regulations came into force on 18 June 2021. All the existing contracts were given one-year period to comply with the new regulations. The enforcement body is the Unfair Commercial Practices Council responsible not only for the law enforcement, but also investigation and imposition of fines up to 5 times the profit that the supplier would make using prohibited trade practice⁽⁴²⁾.

The Unfair Commercial Practices in Agriculture and Food Supply Chain Act in Netherland came into force on 1 November 2021. The Act introduced some important changes for small suppliers facing large buyers considering their annual turnover. The main enforcement body is the Netherlands Authority for Consumers & Markets. Administrative fines for violating the law can reach up to EUR 900,000 or 10% of the turnover of the infringer, whichever is higher⁽⁴³⁾.

In Poland, the EU Directive was implemented in the new Act on Counteracting the Unfair Use of Contractual Advantage in Trade in Agricultural and Food Products passed on 17 November 2021. In addition to the EU Directive, the Polish Act protects not only supplier against the buyer but also vice versa. Compared to the list of practices regulated by the EU Directive, the UTP Act in Poland extends the list by one country specific

practice, namely reduction of payment for the delivery of products after they were received by the buyer, because of claiming a discount. The control and enforcement authority is the Office of Competition and Consumer Protection that can also impose penalties reaching up to 3% of the firm's turnover for the previous period⁽⁴⁴⁾.

Romania has still not transposed the EU Directive into their national law. There are different acts (e.g. Law No. 321/2009 regarding the trade of food products, Law No. 21/1996 on competition law, Law No. 11/1991 on unfair competition) including parts of the regulations related to UTPs. A Draft of the law implementing the EU Directive was approved by the Senate in March 2021. Based on the recommendations of the Romanian Competition Council and the Government the Draft was later amended and extended⁽⁴⁵⁾.

To transpose the UTPs Directive, the Agriculture Act in Slovenia has been amended, however the amendments are not adopted yet. The main enforcement body will be the Slovenian Competition Protection Agency handing fines of up to € 10,000⁽⁴⁶⁾.

In Spain the transposition of the EU Directive was achieved by the reform of the Food Chain Act existing since 2013. The modified Act entered into force in December 2021. The Act extends the scope of the protection to Horeca sector, addresses the imbalances in bargaining power among business partners and introduces tougher sanctions. The main body appointed to supervise the Act provisions is the Agencia de Información y Control Alimentarios. Penalties of up to 5% or 10% of the offender's total gross turnover from previous financial period may be imposed in case of serious offense⁽⁴⁷⁾.

The new legislation implementing the UTP Directive in Sweden is a supplement to Competition law and Market practices law entering into force in November 2021. The law gives protection to all suppliers regardless of their annual turnover. The Swedish Competition Authority is the enforcing and supervisory body that may also decide about the administrative fines of up to 1% of the buyer's annual turnover⁽⁴⁸⁾.

3.4 Legislation on Unfair Trading Practices in the Slovak Republic

UTPs represent a topic that has been addressed in Slovakia for a long time mainly in food supply chain⁽⁴⁹⁾. Main legislation regulating UTPs was adopted in 2012, under the Act no. 362/2012 Coll. on unfair terms in trade relations involving foodstuff. However, it was repealed in 2019 and substituted by the Act no. 91/2019 Coll. on unfair terms in the food trade. This new legal act defines unreasonable conditions in business relations, subject of which is food. Various forms of monetary obligations, which are beyond the agreed purchase price, can be considered unreasonable conditions in the food trade. These are, for example, hidden discounts, payments for leaf-

⁽³⁸⁾ Ricciardi (2022).

⁽³⁹⁾ COBALT (2022).

⁽⁴⁰⁾ Mališauskaitė-Vaupšienė et al. (2021).

⁽⁴¹⁾ Elvinger Hoss (2020).

⁽⁴²⁾ Small (2021).

⁽⁴³⁾ Van Traa (2021).

⁽⁴⁴⁾ Urbańska, Starzyńska (2022).

⁽⁴⁵⁾ Capata (2021).

⁽⁴⁶⁾ Kordić et al. (2021).

⁽⁴⁷⁾ Euractive (2021).

⁽⁴⁸⁾ Eklund (2021).

⁽⁴⁹⁾ Vargová (2019).

Table 2: Changes in SR Legislation on Unfair Trading Practices

Matter	Act no. 362/2012 Coll	Act no. 91/2019 Coll.
Payment definition	Payment provided to the party of the business relationship	Payment requested, agreed or provided to the party of the business relationship
The contract under which the food is placed on the market	Described essentials of the contract under which the food is placed on the market	Not listed
Unfair practices	It is prohibited to place agreement on unfair practices.	It is prohibited to require, agree, or enforce an unfair practice. Unfair practices are extended and described more into the details.
Code of ethics	Suppliers and buyers can agree on the adoption of a code of ethics, which is in accordance with this Act and other generally binding legal regulations.	No code of ethics.
Control	Initiation to carry out an inspection must include identification data of the complainant, person against whom the complaint is filled and description of complain. Complainant is known.	Initiation to carry out an inspection must include just identification data of person against whom the complaint is filled and description of complain. Complainant can be anonym. Better structured, extended obligations of control body.
Controller	The duties of the controller as well as his rights are not clearly stated.	the duties of the controller as well as his rights are structured and described.
Controlled subject	the duties of the controlled subject as well as his rights are not clearly stated.	the duties of the controlled subject as well as his rights are structured and described.
A report or record shall be drawn up of the inspection carried out	Not specified.	If, based on the performed inspection, it is found that the inspected entity has or applied an unfair practice specified in § 3, a draft protocol shall be prepared and delivered to the inspected entity.
Disciplinary fine and administrative offenses	Disciplinary fine is up to 500 euros. Fine for administrative offences is up to 300 000 euros.	Disciplinary fine is up to 100 000 euros. Fine for administrative offences is up to 500 000 euros. Detailed description.

Source: own processing based on Acts no. 362/2012 Coll and no. 91/2019 Coll on unfair food trade practices in the Slovak Republic 2022

lets, extended invoice deadlines, etc.⁽⁵⁰⁾

Act No. 91/2019 Coll. on unfair terms in the food trade is the main legal act which regulates the requirements associated with unfair trade practices in Slovak Republic. It provides basic description of who this act is applicable to and what is the subject of this act. Within paragraph 3 it explains unreasonable conditions which are prohibited in business relations:

- Prohibition to require, agree, or enforce an unfair practice;
- Unfair practice is a monetary performance or a non-monetary performance of a party of business relationship for services;
- There is no unfair practice of monetary performance or a non-monetary performance of a party of business relationship for services in accordance with paragraph 3;
- Additional unfair practices;
- Unfair practice for the delivery of the invoice for the purpose of running the deadlines according to paragraph 5.

Act No. 91/2019 Coll., which replaced Act No. 362/2012 Coll. describes specific terms in more details. While for example, the customer was seen just as business operator, in the new act this term also includes a legal entity that is not an entrepreneur

⁽⁵⁰⁾ Ministry of Agriculture and Rural Development of the Slovak Republic (2019).

or businessman. The same applies to the case of supplier, who is not just entrepreneur but the operator of a food business and supplies food to the customer but also a legal entity that is an association. These and other modifications of this act are illustrated in the Table 2.

Not only business practices between firms often suffer with unfair trading practices. Sometimes it is the relationship between suppliers and final consumers that need to be protected. The Act no. 250/2007 Coll. on consumer protection regulates business practices to final consumers. It includes also the rules tackling UTPs such as deceptive conduct and deceptive omissions, aggressive commercial practices.

IV. Conclusion

The food supply chain is particularly sensitive to unfair commercial practices mostly imposed to small or medium size businesses. The first legal acts were established late, in 2005, and did not concern B2B relations. Currently, European and Slovak legal acts related to UTPs are trying to ensure fair income for business and to give consumers more choice. European commission main act concerning unfair trade practices are Directive of the European Parliament and of the Council of 17 April 2019 on unfair trading practices in business-to-busi-

ness relationships in the agricultural and food supply chain, Green paper and Supply Chain Initiative. Slovakia adopted Act. No 91/2019 Coll. on unfair terms in the food trade as the main legal act which regulates the requirements associated with unfair trade practices in Slovak Republic.

References

- Act no. 362/2012 Coll. (n.d.). *Zákon o neprimeraných podmienkach v obchodných vzťahoch, ktorých predmetom sú potraviny*.
- Act no. 91/2019 Coll. (n.d.). *o neprimeraných podmienkach v obchode s potravinami*.
- Cafaggi, F. - Iamiceli, P. (2018). *JRC Technical Reports: Unfair Trading Practices in the Business-to-Business Retail Supply Chain*. Luxembourg: Publications Office of the European Union.
- Capata, L. (2021). *Unfair Trading Practices in the Agricultural and Food Supply Chain in Romania*. CMS. [online]. Retrieved April 1, 2022, from https://cms.law/en/int/expert-guides/unfair-trading-practices-in-the-agri-food-supply-chain-in-cee/romania?fbclid=IwAR3tAWo6H7kMOvY4GZ7liKGUoijo_fAhEEGIOEpkY-NHfggwCZIgyoBWwx0.
- CIAA. (2010). *Supporting the competitiveness of the European food and drink industry*. [online]. Retrieved April 1, 2022, from https://www.fooddrinkeurope.eu/uploads/publications_documents/ciaa-compweb.pdf.
- COBALT. (2022). *New Rules on Unfair Trading Practices Laws in the Baltics*. [online]. Retrieved March 1, 2022, from: <https://cobalt.legal/uploads/news/4842/2021.11.%20New%20rules%20on%20unfair%20trading%20practices%20laws%20in%20the%20Baltics.pdf>.
- Di Marcantonio, F. et al. (2018). *Unfair trading practices in the dairy farm sector: Evidence from selected EU regions*. Publications Office of the European Union.
- Eklund, E. (2021). *The UTP Directive – a new act on unfair trading practices in the food supply chain will enter into force in Sweden on 1 November 2021*. Delphi. Retrieved March 31, 2022, from <https://www.delphi.se/en/publications/publication/the-utp-directive-a-new-act-on-unfair-trading-practices-in-the-food-supply-chain-to-enter-into-force-in-sweden-on-1-november-2021>
- Elvinger Hoss. (2020). *Unfair trading practices in B2B relationships in the agricultural and food supply chain*. Retrieved October 31, 2021, from Elvinger Hoss: <https://www.elvingerhoss.lu/publications/unfair-trading-practices-b2b-relationships-agricultural-and-food-supply-chain>.
- Euractiv. (2021, Januar 7). *Special CAPitals: The laggards and the leaders of the Unfair Trading Practices directive*. Retrieved from Euractiv : <https://www.euractiv.com/section/agriculture-food/news/special-capitals-the-laggards-and-the-leaders-of-the-unfair-trading-practices-directive/>.
- European Commission. (2010). *Retail market monitoring report "Towards more efficient and fairer retail services in the internal market for 2020"*. Brussels: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.
- European Commission. (2013). *Green Paper on Unfair Trading Practices in the Business-to-Business Food and Non-Food Supply Chain in Europe*.
- European Commission. (2014). *Tackling unfair trading practices in the business-to-business food supply chain. Communication From The Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, European Commission*. Strasbourg.
- European Commission. (2016). *Tackling unfair trading practices in the business-to-business food supply chain*. Strasbourg: Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions.
- European Commission. (2018). *Proposal for a Directive of the European Parliament and the of the Council on Unfair Trading Practices in Business-to-Business Relationships in the Food Supply Chain*.
- European Commission. (2019). *European Parliament Legislative Resolution of 12 March 2019 on the Proposal for a Directive of the European Parliament and of the Council on Unfair Trading Practices in Business-to-Business Relationships in the Food Supply Chain (COM(2018)0173 – C8- 0139/)*.
- European Commission. (2019). *of the European Parliament and of the Council of 17 April 2019 on unfair trading practices in business-to-business relationships in the agricultural and food supply chain*. Official Journal of the European Union.
- European Commission. (2021b, December 2). *Commission opens infringement procedures against 12 Member States for not transposing EU rules banning unfair trading practices*. Retrieved from Europa: https://ec.europa.eu/commission/presscorner/detail/en/IP_21_3903
- Falkowski, J. et al. (2017). *Unfair Trading Practices in the Food Supply Chain: A Literature Review on Methodologies, Impacts and Regulatory Aspects*. European Commission. doi:10.2760/800.
- Gerrard, F. (2022). *Unfair Trading Practices in the Agricultural and Food Supply Chain in the Czech Republic*. CMS. Retrieved February 20, 2022, from https://cms.law/en/int/expert-guides/unfair-trading-practices-in-the-agri-food-supply-chain-in-cee/czech-republic?fbclid=IwAR1ndjZCs3JcJAB_t4j_0PnmCcl12Cnlzn1GoO5fFWEWwAksbPFFQ7dJp_A.
- Hederman, W. (2022). *Unfair Trading Practices and Grocery Regulations Update*. Retrieved February 20, 2022, from MHC: <https://www.mhc.ie/latest/insights/unfair-trading-practices-and-grocery-regulations-update>.
- ITC. (2017). *Building Sustainable Supply Chains*. Retrieved from Available online through <https://www.intracen.org/T45D/Publications/> or direct link https://www.intracen.org/uploadedFiles/intracen.org/Content/Exporters/Market_Data_and_Information/Market_Analysis_Tools/Trade_for_Sustainable_Development/3480.pdf.
- Jones Day. (2021). *Germany Adopts EU Unfair Trade Rules for Buyers of Food and Agricultural Products*. Retrieved January 7, 2022, from Jones Day: <https://www.jonesday.com/en/insights/2021/06/germany-adopts-eu-unfair-trade-rules-for-buyers-of-food-and-agricultural-products>.
- Kehayova, A. (2021). *Unfair trading practices in the agricultural and food supply chain – the Bulgarian and CEE perspective*. Retrieved from top 100 seenews : <https://top100.seenews.com/unfair-trading-practices-in-the-agricultural-and-food-supply-chain-the-bulgarian-and-cee-perspective/>.
- Kordić, R. et al. (2021). *Unfair trading practices in the agricultural and food supply chain*. CMS. Retrieved January 7, 2022, from <https://cms.law/en/svn/publication/unfair-trading-practices-in-the-agricultural-and-food-supply-chain>.
- KROMAN REUMERT. (2021). *New act on unfair trading practices in the food supply chain*. KROMAN REUMERT. Retrieved January 7, 2022, from <https://kromannreumert.com/en/news/new-act-on-unfair-trading-practices-in-the-food-supply-chain>.
- Lee, S. (2017). *The Possibility of the Introduction of Business-to-Business Unfair Trading Practices Regulation in EU Law*. Budapest: Eötvös Loránd University. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2985377
- Mališauskaitė-Vaupšienė, M. et al. (2021). *New regulations for companies selling food, drinks or agricultural products*. SORAINEN. Retrieved December 2, 2021, from <https://www.sorainen.com/publications/new-regulations-for-companies-selling-food-drinks-or-agricultural-products>.

29. Marjančić, A. (2022). *Croatia: Revised UTPs Act In Croatia Becomes Fully Applicable In March. Have You Aligned Your Agreements With Suppliers?* mondaq. Retrieved March 1, 2022, from <https://www.mondaq.com/consumer-trading-unfair-trading/1165164/revised-utps-act-in-croatia-becomes-fully-applicable-in-march-have-you-aligned-your-agreements-with-suppliers>.
30. Ministry of Agriculture and Rural Development of the Slovak Republic. (2019). *The new law puts an end to unfair food trade practices*. Retrieved from Ministry of Agriculture and Rural Development of the Slovak Republic: <https://www.mpsr.sk/aktualne/novy-zakon-skoncuje-snekalymi-praktikami-v-obchodovani-s-potravinami/13862>.
31. Petrányi, D. - Boros, M. (2021). *Unfair Trading Practices in the Agricultural and Food Supply Chain in Hungary*. Retrieved April 1, 2022, from CMS: <https://cms.law/en/int/expert-guides/unfair-trading-practices-in-the-agri-food-supply-chain-in-cee/hungary>.
32. Popović, V. - Mihailović, B. - Simonović, Z. (2018). *Modern food retail and unfair trading practices*. Ekonomika poljoprivrede, 65(4), 1499-1511. doi:10.5937/ekoPolj1804499P.
33. Renda, A. et al. (2014). *Study on the Legal Framework Covering Business-to-business Unfair Trading Practices in the Retail Supply Chain*. European commission. doi:10.2780/91447.
34. Republic of Estonia Competition Authority. (2021). *Unfair trade practices*. Republic of Estonia Competition Authority. Retrieved January 10, 2022, from <https://www.konkurentsiamet.ee/en/unfair-trade-practices-insolvency/unfair-trade-practices/overview?fbclid=IwAR2htvQMOlnO6M31NqdD-E-2FFYVvghASqgJ3O-SeH4gplTBcl0x2nhVcxYY>.
35. Ricciardi, C. (2022). *New Italian legislation implementing Directive (EU) 2019/633 on unfair business-to-business trading practices in the agricultural and food supply chain*. Bird&Bird. Retrieved January 20 2022, from https://www.twobirds.com/en/insights/2022/italy/2022_01_17_attuazione-direttiva-ue-2019-633?fbclid=IwAR1Q39_qvDcfBKRvuuEp8ox6qjoaN9jVf5lriOoYnOGL5QABomVWu9oLSi8.
36. Russo, C. (2020). *Pass-Through of Unfair Trading Practices in EU Food Supply Chains: Methodology and Empirical Application*, Publications Office of the European Union, Luxembourg, doi:10.2760/837579.
37. Segercrantz, M. et al. (2020). *Reform of trading practices in the grocery sector: proposed amendments to the Finnish Food Market Act*. ROSCHIER. Retrieved October 21, 2021, from <https://www.roschier.com/newsroom/reform-of-trading-practices-in-the-grocery-sector-proposed-amendments-to-the-finnish-food-market-act>.
38. Sexton, R. J. (2017). *The Unfair Trading Practices in the Food Supply Chain: Types of UTPs*. European Commission, In Paper Presented at the Workshop on "Unfair Trading Practices in the Food Supply Chain", Brussels.
39. Small, L. (2021). *Malta Transposes the Unfair Commercial Practices in The Food Supply Chain Directive*. Retrieved December 2, 2021, from ABDP: <https://www.abdp.org/malta-transposes-the-unfair-commercial-practices-in-the-food-supply-chain-directive>.
40. Supply chain initiative. (2022). *About the initiative*. Retrieved from supplychaininitiative: <https://supplychaininitiative.be/en/about-the-initiative/>.
41. Swinnen, J. O. - Vandeveld, S. A. (2019). *From Unfair Prices to Unfair Trading Practices*. Retrieved from [online]: http://respect.eui.eu/wp-content/uploads/sites/6/2019/12/SWINNEN_paper1_D2.5.pdf.
42. The Supply Chain Initiative. (2022). *The Supply Chain Initiative*. Retrieved from The Supply Chain Initiative: <https://www.supply-chaininitiative.eu/>.
43. Urbańska, M. - Starzyńska, A. (2022). *Unfair Trading Practices in the Agricultural and Food Supply Chain in Poland*. CMS. Retrieved April 1, 2022, from https://cms.law/en/int/expert-guides/unfair-trading-practices-in-the-agri-food-supply-chain-in-cee/poland?fbclid=IwAR3pBHd7kDYT2ukdy0KNDLYqgzwi0iSuDm0-5C5f_o6CauCeRKZXYCgfPxc.
44. Van Traa. (2021). *The Unfair Commercial Practices in Agriculture and Food Supply Chain Act: an Act with important changes for market participants*. Retrieved April 1, 2022, from vantraa: <https://www.vantraa.nl/en/know-how/the-unfair-commercial-practices-in-agriculture-and-food-supply-chain-act-an-act-with-important-changes-for-market-participants>.
45. Vargová, L. (2019). *Úloha súťaže v potravinovom reťazci na trhoch s poľnohospodárskymi komoditami*. dizertačná práca, 144.
46. Verdonck, C. (2021). *New rules prohibiting unfair trading practices in the agricultural and food supply chain are entering into force*. LEX- OLOGY. Retrieved January 10, 2022, from <https://www.lexology.com/library/detail.aspx?g=868250ae-f4f6-4256-ab30-69e60de5df70&fbclid=IwAR2o5Q6KOcUZBoE7Mc3v5arGyCkWyVfOtD3ixGvBkweBFllHt64X1eJfixw>.
47. Wollmann et al. (2022). *Implementation of the UTP Directive in Austria*. Schoenherr. Retrieved February 10, 2022, from Implementation of the UTP Directive in Austria: <https://www.schoenherr.eu/content/implementation-of-the-utp-directive-in-austria>.

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COMMON AGRICULTURAL POLICY
IN THE EU AND THE MINISTRY
OF AGRICULTURE IN THE CZECH REPUBLIC
WITH A FOCUS ON ENVIRONMENTAL
AND CONSUMER PROTECTION AND SUPPORT FOR SMES

SPOLOČNÁ POĽNOHOSPODÁRSKA POLITIKA V EÚ
A MINISTERSTVO POĽNOHOSPODÁRSTVA
V ČESKEJ REPUBLIKE SO ZAMERANÍM
NA OCHRANU ŽIVOTNÉHO PROSTREDIA
A SPOTREBITEĽA A PODPORU MSP

.....
Radek JURČÍK*

I. Introduction

The new Common Agricultural Policy (CAP) was adopted in the European Union on 2 December 2021 and will apply from 2023 to 2027. The rules adopted are in line with the Green Agreement for Europe. Each EU country should now draw up a national strategic plan for the CAP. The rules for the common agricultural policy include general objectives that must be observed when drawing up national plans. The national strategic plans are intended to meet the adopted objectives of the CAP, as well as the "Farm to fork" strategy and the Green Agreement for Europe⁽¹⁾.

II. Material and methods

Based on the method of analysis, the author presented changes in the new Common Agriculture Policy and its effects in the Czech Republic in relation to the promotion of regional foods. The improvement of food quality, environment protection

⁽¹⁾ Ministry of Agriculture of the Czech Republic (2022).

Abstract (EN)

The common agricultural policy and the implementation of this policy represent a relatively high part of the costs in the EU budget. From this point of view, the content of the common agricultural policy is important to meet both the primary objective (production of agricultural products) and the secondary objectives (sustainable development, soil protection, consumer and environmental protection).

Keywords (EN)

Common Agriculture Policy, the Czech Republic, European Union, environmental and consumer protection, Green Agreement

and support of agriculture producers (small, medium and big farms) is very important^{(2), (3)}.

III. Results and Discussion

3.1 New Common Agriculture Policy

The European Commission presented its proposal for the reform of the common agricultural policy in June 2018. The Commission presented three legislative proposals on the future of the CAP:

- Proposal for a regulation on CAP strategic plans
- Proposal for a regulation on a single common market organization
- Proposal for a horizontal regulation on the financing, management and monitoring of the CAP

⁽²⁾ Rayburn et al. (2009).

⁽³⁾ Jordana (2000).

Abstrakt (SK)

Spoločná poľnohospodárska politika a implementácia tejto politiky predstavujú pomerne veľkú časť nákladov rozpočtu EÚ. Z tohto hľadiska je obsah spoločnej poľnohospodárskej politiky dôležitý pre splnenie primárneho cieľa (produkcia poľnohospodárskych produktov), ako aj sekundárnych cieľov (trvalo udržateľný rozvoj, ochrana pôdy, ochrana spotrebiteľa a životného prostredia)

Kľúčové slová (SK)

Spoločná poľnohospodárska politika, Česká republika, Európska únia, ochrana životného prostredia a spotrebiteľa, Zelená dohoda

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The proposed regulations were originally due to apply from 1st January 2021. Due to delays in the negotiations, partly due to the MFF negotiations, the Commission proposed in October 2019 a regulation on transitional provisions, which was later adopted by the Council and the EP.

After two years of operation of the transitional rules, and in particular after extensive negotiations between the European Parliament, the Council of the EU and the European Commission, an agreement has finally been reached. The new CAP was formally adopted on 2nd December 2021 and is due to apply from 1st January 2023 until the end of 2027. The legislation adopted should ensure a “fairer, greener and more efficient CAP”. These are, in particular, the following three regulations^{(4), (5)} :

1. regulation on strategic plans of the CAP,
2. single CMO Regulation,
3. horizontal regulation on the financing, management and monitoring of the CAP.

The common agricultural policy is still one of the EU’s most important policies, with almost a third of the budget. However, the cost of the CAP has historically been declining.

For the period 2023–2027, the CAP will be based on nine key objectives. Their focus is on social, environmental and economic values^{(6), (7)}.

1. Ensure a fair income for farmers – the EU wants to provide farmers with as much income as possible. In 2017, farmers earned only less than half of what could be obtained in other jobs.
2. Increasing competitiveness – increasing competitiveness and agricultural productivity in a sustainable way in order to meet higher demand in a resource-constrained world, all with a view to climate.
3. Improving the position of farmers in value chains – empowering farmers through measures such as enhanced cooperation between farmers, increasing market transparency.
4. Climate change measures – contribute to climate change mitigation and adaptation, as well as to the sustainability of the energy sector.
5. Care for the environment – promoting sustainable development and the proper management of natural resources, such as water, soil and air.
6. Landscape protection and biodiversity – emphasis on the highest possible protection of biodiversity, improvement of ecosystem services and preservation of natural habitats and landscapes.
7. Support of generational exchange – generational change in connection with the development of technology and increasing salary conditions.
8. Rural development – support for employment in the natural environment of rural areas, rural agriculture incl. forestry.
9. Food quality assurance and health protection – develop-

⁽⁴⁾ European Commission (2022).

⁽⁵⁾ Kotovicová (2009).

⁽⁶⁾ European Commission (2022).

⁽⁷⁾ Loopstra et al. (2016).

ing food quality in connection with increasing demand for healthy agricultural products.

Two more main objectives need to be added to these nine objectives, namely the simplification of the administrative burden for all participants in any CAP relationship and the pressure on national knowledge of innovation, i.e. involving new opportunities as much as possible in drawing up country plans^{(8), (9)}.

The above-mentioned objectives are based, among other things, on the objectives of the “Farm to fork” or “From farm to fork” or “From farmer to consumer” strategy^{(10), (11)}. The strategy aims to accelerate our transition to a sustainable food system, in particular by ensuring:

1. neutral or positive impact on the environment,
2. helping to mitigate and adapt to climate change,
3. limiting biodiversity loss,
4. food security, nutrition and public health and to ensure that everyone has access to a sufficient supply of safe, nutritious and sustainable food,
5. maintaining food affordability while generating fairer economic returns, fostering the competitiveness of the EU supply sector and promoting fair trade.

3.2 New rules of CAP

The new CAP is intended to direct support to those who need it the most. The new rules are to stipulate^{(12), (13)}:

- compulsory distribution of support to small and medium-sized farmers: EU countries will have to distribute at least 10% of their direct payments in order to better address the income needs of small and medium-sized agricultural holdings;
- new definition of active farmers: the legislation contains a mandatory but flexible definition of active farmers to be introduced by the EU countries, including the level of activities carried out. Only active farmers can receive some EU support;
- better working conditions: CAP payments will be linked to compliance with certain EU labour standards and beneficiaries will be encouraged to improve working conditions on farms;
- convergence of payments: in the new CAP, the level of income support will converge, both within and between EU countries;
- support for young farmers: the EU countries will have to allocate at least 3% of their budget to support young farmers in the form of income or investment support or start-up support for young farmers;
- improving gender balance: gender equality and increasing women’s participation in agriculture are – for the first time – part of the objectives of the CAP strategic plans. EU countries need to assess and identify with these issues.

⁽⁸⁾ Ministry of Agriculture of the Czech Republic (2022).

⁽⁹⁾ Matusikova (2006).

⁽¹⁰⁾ European Commission (2022).

⁽¹¹⁾ Micovic (2011).

⁽¹²⁾ Ministry of Agriculture of the Czech Republic (2022).

⁽¹³⁾ Widowaty (2018).

The new CAP aims to strengthen the position of farmers in the supply chain and to support the competitiveness of the agri-food sector, in particular through:

- improving bargaining: the new rules will strengthen cooperation between producers, encourage farmers to cooperate and enable them to create a countervailing power in the market;
- market orientation: the new CAP maintains the overall market orientation of previous reforms and encourages the EU farmers to adapt supply to demand in Europe and beyond;
- crisis reserve: to deal with future crises, the reformed CAP includes a new financial reserve of at least EUR 450 million per year. This reserve should address price fluctuations and market fluctuations;
- support for the wine sector: specific rules have been agreed to improve support for the wine sector.

3.3 The Green Agreement for Europe in relation to CAP

Like the previous revision of the CAP, the emphasis is again on the environmental component of agriculture. The individual revisions of the common agricultural policy have gradually shifted from direct support to the greening of the sector. The current reform continues in these trends. The new CAP rules are intended to make a significant contribution to meeting the objectives of the Europe Green Agreement:

- higher environmental ambitions: CAP plans will be in line with environmental and climate legislation. In its CAP Strategic Plan, each EU country will be required to implement higher environmental ambitions and climate action compared to the previous programming period, and will be required to update the plan as climate and environmental legislation changes;
- objectives of the Green Agreement: the national strategic plans for the CAP will contribute to the objectives of the Green Agreement (CAP recommendations set out how this contribution is expected);
- enhanced conditionality: CAP beneficiaries will be subject to a stricter set of mandatory requirements for their payments. For example, in order to obtain a subsidy, minimum limits will be set for arable land to take care of biodiversity;
- environmental schemes: at least 25% of the direct payments budget will be allocated to environmental schemes, which will provide stronger incentives for agricultural practices and climate and environmentally friendly approaches, such as:
 - protection of carbon-rich soils through the conservation of wetlands and peatlands,
 - mandatory use of a nutrient management tool to improve water quality and reduce the volume of ammonia and nitrous oxide,
 - crop rotation instead of diversification;
- rural development: at least 35% of funding will be allo-

ated to measures to promote climate, biodiversity, the environment and animal welfare;

- operational programs: in the fruit and vegetables sector, operational programs will allocate at least 15% of their environmental expenditure (compared to 10% during the current programming period);
- climate and biodiversity: 40% of the CAP budget will have to deal with climate and strongly support the general commitment to devote 10% of the EU budget to biodiversity targets by the end of the EU's Multiannual Financial Framework (MFF) period.

3.4 National CAP plans in the Czech Republic

According to the rules, each Member State determines its own method of implementation through the national strategic plans of the CAP. Individual EU countries are also to carry out an assessment of their needs based on an analysis of the strengths, weaknesses, opportunities and threats (so-called SWOT analysis) of their territory and the agri-food sector. The national plans should be ready and sent to the Commission by 31st December 2021. These national plans should take into account:

1. local conditions and needs,
2. increased ambitions of the European Union in the field of sustainability,
3. nine common EU objectives and a cross-cutting objective in the field of knowledge and innovation.

The individual indicators are to be monitored through the annual performance reports and the biennial performance review of CAP strategic plans in order to assess the progress of EU countries in achieving their objectives and CAP objectives.

The Commission's role in relation to the National CAP Plan is for EU countries to make full use of the new CAP and its instruments to support their farmers in the transition to greater sustainability throughout the process of preparing their strategic CAP plan, and for each national CAP plan to include an intervention strategy explaining which CAP instruments will be used to achieve the objectives of the CAP, in line with the ambitions of the Green Agreement .

IV. Conclusions

The Common Agricultural Policy has major implications for agricultural policy in the Czech Republic. Its target orientation and national plans taking into account specific conditions must be adopted within the framework of the EU's Common Agricultural Policy.

Critically, the Czech Republic prepared several working versions of the strategy paper, prepared as of October 2021 and submitted to the EU Commission for informal consultations. This national plan is very general and does not address how to specifically and in detail achieve the objectives of the EU Commission at the national level in the Czech Republic.

From 1st January 2023, the new Common Agricultural Policy will bring new rules for the redistribution of funds to farm-

ers, with even greater regard for the environment. It is clear from the objectives and individual rules that the improvement of the position of agricultural workers, small and medium-sized farmers as entrepreneurs and biodiversity will also be taken into account. The specific form of the Member States' adjustments is determined by the national CAP plans, which should be drawn up by 31st December 2021. These plans must respect the newly adopted rules and emphasize the objectives set not only in the new CAP but also in the Green Agreement for Europe or the strategy. From farmer to consumer. “

References

1. RAYBURN, A. L. - CRAWFORD, J. - RAYBURN, CH. M. - JUVIK, J. A. (2009). *Genome size of three Miscanthus species*. In *Plant Mol. Biol. Rep.*, Springer, 27, 2009, p. 184-188.
2. JORDANA, J. (2000). *Traditional foods: challenges facing the European food industry*. In *Food Research International*, 33 (3-4), 2000, pp.147-152
3. KOTOVICOVÁ, J. (2009). *Ochrana životního prostředí II*. Brno: Mendelova zemědělská a lesnická univerzita v Brně, 2009, p. 165.
4. EUROPEAN COMMISSION. (2022). *Common Agriculture Policy*. Online. Retrieved at 3rd May 2022 from https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/cap-glance_cs.
5. LOOPSTRA, R. et al. (2016). *Food insecurity and social protection in Europe: Quasi-natural experiment of Europe's great recessions 2004-2012*. In *Preventive Medicine*, 89, 2016, pp.44-50.
6. MATUSIKOVA, L. (2006). *Ochrana zájmů spotřebitele: distanční studijní opora*. Karviná: Slezská univerzita v Opavě, Obchodně podnikatelská fakulta v Karviné, 2006, p. 131.
7. MICOVIC, E. (2011). *Consumer protection and food safety*. In *Revija Za Kriminalistiko In Kriminologijo* 62 (1), 2011, pp.3-11.
8. MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC.

(2022). *National CAP plans in the Czech Republic*. Online. Retrieved at 3rd May 2022 from <https://eagri.cz/public/web/mze/dotace/szp-pro-obdobi-2021-2027/zakladni-informace/strategicky-plan-spolecne-zemedelske.html>.

9. WIDOWATY, Y. - ARTANTO, I.O. (2018). *Protection of Agricultural Land Sustainable Food for The Realization of Food Security in The Special Region of Yogyakarta 4th International Conference on Food, Agriculture and Natural Resources (FANRes)*. In *Proceedings Of The International Conference On Food, Agriculture And Natural Resources (FANRes 2018)* 172, 2018, pp.36-41.

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LEGAL ASPECTS OF THE QUINOA IMPORTS INTO THE EU

PRÁVNE ASPEKTY DOVOZU QUINOY DO EÚ

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I. Introduction

Quinoa (lat. *Chenopodium quinoa*) is a pseudo-cereal which is used as cereals in the countries of its origin such as Peru, Bolivia and Chile. It is one of the oldest crops domesticated thousands of years ago in Andean region of South America⁽¹⁾. At first, it was used to feed livestock five thousand years ago and later also for human consumption in the Lake Titicaca basin of Peru and Bolivia⁽²⁾. With the colonization of Europeans its cultivation was replaced by cereals and quinoa preserved only in remote areas of South America. After centuries of neglect, the potential of quinoa was rediscovered during the second half of the 20th century⁽³⁾. Nowadays, Peru and Bolivia are the biggest producers of quinoa in the world⁽⁴⁾. Quinoa became famous due to its positive healthy effects. It is also included to the super-foods. The United Nations General Assembly has declared 2013 as the “International Year of Quinoa”, in recognition of ancestral practices of the Andean people, who have managed to preserve quinoa in its natural state as food for present and future generations, through ancestral practices of living in harmony with nature⁽⁵⁾. Moreover, quinoa was selected

⁽¹⁾ Fuentes et al. (2008).

⁽²⁾ Kolata (2009).

⁽³⁾ Bazile et al. (2016).

⁽⁴⁾ FAO (2020).

⁽⁵⁾ FAO (2013).

Abstract (EN)

Quinoa is known in the EU as superfood due to the high level of protein, fibre, micronutrients, and amino acids. It is come from South America; however, quinoa is currently grown in various parts of the world. Nevertheless, the domestic continent, especially countries such as Peru and Bolivia, is one of the world's largest producers and exporters of quinoa. One third of Peru's quinoa production is imported to European Union. Despite the conclusion of an agreement with Peru and Bolivia that eliminated quinoa tariffs, there are many legal regulations of the EU that affects import of quinoa into the EU countries including the food safety and quality, food labelling, organic labels and nutrition and health claims, food packaging and shipment. The article deals with the most important EU legal norms of quinoa imports that must be complied with when importing quinoa.

Keywords (EN)

quinoa, European Union law, food safety, food labelling, food packing

by NASA as a preferred food for its astronauts on board space missions due to its nutritional composition⁽⁶⁾. The experiments to cultivate quinoa in other parts of the world were realised on the end of the 20th century in USA, Canada, Africa (Morocco, Kenya, Malawi), Europe (Great Britain, Netherlands, Germany, Spain and France)^{(7), (8), (9), (10)}. During 2013–2015, evaluation of quinoa varieties was conducted in Central and Southern Asia (Kyrgyzstan, Tajikistan, Sri Lanka, and Bhutan); Western Asia (Iraq, Iran, Lebanon, and Yemen); and Africa (Algeria, Egypt, Mauritania, Sudan, Djibouti, Kenya, Somalia, South Sudan, Ethiopia, Uganda, Zambia, Burkina Faso, Cameroon, Chad, Niger, Senegal, Togo, Ghana and Guinea)⁽¹¹⁾. Due to the climate changes the cultivation of quinoa is possible also in the middle Europe including Slovakia⁽¹²⁾. Moreover, its biodiversity and ability to sustain in adverse climatic conditions makes it an ideal crop to cultivate worldwide especially in under devel-

⁽⁶⁾ Schlick, Bubenheim (1993).

⁽⁷⁾ Bazile, Baudron (2015).

⁽⁸⁾ Herencia et al. (1999).

⁽⁹⁾ Maliro, Guwela (2015).

⁽¹⁰⁾ Hirich et al. (2021).

⁽¹¹⁾ Bazile et al. (2016).

⁽¹²⁾ Čičová (2021).

Abstrakt (SK)

Quinoa je v EÚ známa ako superpotravina vďaka vysokému obsahu bielkovín, vlákniny, mikroživín a aminokyselín. Pochádza z Južnej Ameriky, ale v súčasnosti sa quinoa pestuje v rôznych častiach sveta. Napriek tomu je jej domáci kontinent, najmä krajiny ako Peru a Bolívia, jedným z najväčších svetových producentov a exportérov. Jedna tretina produkcie quinoj v Peru sa dováža do Európskej únie. Napriek uzavretiu dohody medzi EU na jednej strane a Peru a Bolívia na strane druhej, ktorá zrušila clá na dovoz tejto plodiny, existuje množstvo právnych predpisov EÚ, ktoré ovplyvňujú jej dovoz do krajín EÚ, ako sú napr. pravidlá bezpečnosti a kvality potravín, označovania potravín, ekologických označení a výživových a zdravotných tvrdení, právne predpisy týkajúce sa balenia a prepravy potravín. Článok sa zaoberá najdôležitejšími právnymi normami EÚ, ktoré je potrebné pri dovoze quinoj z tretích krajín dodržiavať.

Kľúčové slová (SK)

quinoa, právo Európskej únie, bezpečnosť potravín, označovanie potravín, balenie potravín

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oping countries of Asia and Africa, where food production is threatened by global climatic changes⁽¹³⁾. Quinoa has a great potential for producers and consumers in Morocco and can be a judicious solution toward achieving food and nutritional security⁽¹⁴⁾. Jaikishun et al. (2019) recommended that more countries should be encouraged to commence quinoa cultivation, especially those with high vulnerability to climate change and food security because quinoa is a crop that is superior to others in many aspects, such as its extraordinary adaptability to adverse weather conditions⁽¹⁵⁾, ⁽¹⁶⁾ and its adequate nutritional composition. Quinoa contains all amino acids needed for human health and is also gluten-free; moreover, has twice as much protein as maize, barley and wheat⁽¹⁷⁾,⁽¹⁸⁾ and more micronutrients than most staple grains, including wheat, rice and barley⁽¹⁹⁾. Growing quinoa is labour intensive, especially during harvest. However, Quinoa tolerates drought, nutrient-poor soils, and even saline soils. On the other hand, clay soils are not suitable for growing it. In addition, quinoa prefers colder weather, but does not like frost. The weather in Central and Southern Europe is suitable for quinoa, but these parts of the EU have the highest proportion of clay soils unsuitable for quinoa cultivation⁽²⁰⁾. Therefore, the most of quinoa is imported into the EU, mainly from the countries of origin, Peru and Bolivia. However, the EU developed a strict set of legal rules that imported quinoa need to comply with, such as food safety and quality requirements, food labelling, organic labels and nutrition and health claims, food packaging and shipment including waste management, and certifications as an extra guarantee. The article deals with the most important legal norms of quinoa imports, especially those that must be complied with when importing quinoa.

II. Objective and Methodology

The objective of the paper is to identify the legal aspects of quinoa import into the EU from the third states. The paper identifies and summarises the main objectives of these legal rules of the EU.

The paper used the normative EU legal acts, the particular reports, relevant political documents and opinions from the scientific publications.

For the legal and political documents, the methods of jurisprudence such as logical methods and formal legal methods were used, that are necessary for the interpretation of normative legal acts of the EU and sociological methods, especially methods of examining various documents that preceded or accompanied the emergence of normative legal acts as well as documents resulting from application practice in this area.

⁽¹³⁾ Singh et al. (2016).

⁽¹⁴⁾ Rafik et al. (2020).

⁽¹⁵⁾ Ruiz et al. (2014).

⁽¹⁶⁾ Stikić et al. (2015).

⁽¹⁷⁾ Repo-Carrasco et al. (2003).

⁽¹⁸⁾ Stikić et al. (2012).

⁽¹⁹⁾ Mehdi, Abdelaziz (2018).

⁽²⁰⁾ Soil Data Maps (2022).

III. Results

3.1 Basic information about origin of quinoa

Quinoa was originally called the “mother grain.” It was domesticated 3,000–5,000 years ago by the Inca civilization that was situated in the Andean Region of South America. Quinoa is often labelled as a superfood because it is not only gluten-free but also contains more protein, vitamins, minerals, and fibre than the usual grains and seeds. Quinoa is rich in antioxidants that can prevent damage to the heart and other organs, so it is associated with a reduced risk of heart disease. In addition, it lowers cholesterol and blood sugar levels, thereby reducing the risk of diabetes. It has a high content of antioxidants and anti-inflammatory phytonutrients, which can be beneficial in the prevention and treatment of diseases. Quinoa contains all essential amino acids, a small amount of omega-3 fatty acids and, unlike other cereal grasses, has a higher content of mono-unsaturated fats. In addition, this crop is a good source of vitamins and minerals such as calcium and magnesium.

Quinoa come in a variety of colours being the most common colours white, red, and black, but also exists in purple, pink, gray, orange, green, and yellow colours. Nevertheless, the white quinoa is the most known and widespread type of quinoa. This is because it cooks the fastest. Unlike red and black, white quinoa is not crunchy at all.

Quinoa is native to alpine countries such as Bolivia and Peru. Originally, the seeds were used only to feed livestock. Then, after the domestication and adaptation process, people began to use it for their own consumption. In Peru and Bolivia, there are two civilizations that traditionally consume quinoa, the Aymara and the Quechua, who use this crop for nourishment and also as a sacred element during their rituals and religious ceremonies.

Quinoa is the seed from the *Chenopodium quinoa* from the amaranth family which is very robust. Quinoa is used as cereal crop. It is an annual plant. It grows better in cold, dry climates. Higher temperatures affect the number of seeds that can be harvested. Moreover, Quinoa is a facultative halophytic plant species with the most tolerant varieties being able to cope with salinity levels as high as those present in sea water (Adolf et al., 2013). The ripening time of quinoa is six months for the most common variety, which is a limiting factor for farmers who want to rotate crops annually. The process of collecting and purifying quinoa in the Andes is time and labour intensive and is not carried out mechanically, but mainly manually by traditional methods. Today, almost all production in the Andean region is carried out by small farms and associations. Average yields per hectare of land are 1.40 tons of quinoa. However, quinoa cultivation has spread to more than 120 countries of the world. This increase was due to growing interest, market development, research and promotion. According to Jacobsen (2020) this new scenario brings new competitors for the Andean region where quinoa is produced in both traditional and intensive production systems. In this sense, some of the main challenges are volatile yields, low levels of technology, fragile ecosystems and unclear rules on sharing the benefits of conserving Andean genetic resources.

3.2 Legal aspect of quinoa import into the EU

The foreign trade with the third country is regulated by the EU law including not only Common Customs Tariff but also the rules related to the food safety and quality requirements, food labelling, organic labels and nutrition and health claims, food packaging and shipment, and certifications as an extra guarantee.

3.2.1 Food safety and control

The European Union has one of the strictest requirements for food safety. Food safety means a criterion defining the acceptability of a product or a batch of foodstuff applicable to products placed on the market (Art 2c) of Commission regulation 2073/2005. The quinoa importers have to work according to the rules of Hazard Analysis Critical Control Points (called as HACCP) which is valid in the EU since 1997. In Slovakia, the HACCP is included in the Act no. 152/1995 Coll. on foods and in the Codex alimentarius of the Slovak Republic. The HACCP system is based on prevention including continuous inspection of materials, conditions, and processes. The operator of a company carries out regular controls which are focused on achieving hygiene and health safety of food. The HACCP should be applied throughout the food chain from agricultural production to final consumption. The amending of the HACCP is to identify dangerous raw materials and foodstuffs regarding the pathogens and toxic substances; to determine whether raw materials and foodstuffs are able to support the reproduction of microorganisms; to identify possible sources of danger and places of contamination; to determine the likelihood that microorganisms in food will survive or reproduce when food handling; and to assess the health seriousness and risk of dangerous⁽²¹⁾. The food hygiene control system is based on seven principles such as hazard analysis and possible risks analysis at all stages of the food production; identifying the critical control points; determination of critical limits; determination of control systems at critical control points; identifying corrective measures focused on elimination the gaps from critical limits; determination the method of keeping documentation of identified risk data and corrective actions taken; and determination of the system for checking the effectiveness of the system (§ 257 of Codex Alimentarius).

Mainly the content of pesticides, contaminants and microorganisms has to be in the limits stipulated by the EU law. There are about 500 species of residues that have not to exceed maximum level which ranges from 0.001 mg/kg to 50 mg/kg depending on the species of pesticides; on average, maximum level is 0.01 mg/kg⁽²²⁾. However, bio quinoa has not to have any chemical traces of pesticides.

Contaminants are substances not intentionally added to food which are present in such food as a result of the production, manufacture, processing, preparation, treatment, packaging, transport or holding of such food or as a result of environmental contamination (Art 1 of the regulation 315/93/EEC). Food containing a contaminant in an amount which is unacceptable from the public health viewpoint and in particular at

a toxicological level shall not be placed on the market (Art 2 of the regulation 315/93/EEC). The Commission regulation No 1881/2006 setting maximum levels for certain contaminants in foodstuffs are related to the following contaminants: nitrate, mycotoxins (aflatoxins, ochratoxin A, patulin, deoxynivalenol, zearalenone, fumonisins, T2 and HT-2 toxin, citrinin, ergot sclerotia and ergot alkaloids); metals (Pb, Cd, Hg, inorganic Sn, As), 3-monochloropropanediol (3-MCPD), 3-MCPD fatty acid esters and glycidyl fatty acid esters, dioxins and polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons, melamine, inherent plant toxins, and perchlorate. The criteria for cereals stipulated in the annex of this regulation are applicable also for quinoa. There is only one exemption. For quinoa, there is relevant maximum level of Cadmium (0.15 mg/kg) while maximum level of Cadmium for cereals is only 0.10 mg/kg.

There are also Commission regulations for the sampling and analysis of the maximum levels for contaminants: Commission Regulation (EC) No 401/2006 laying down the methods of sampling and analysis for the official control of the levels of mycotoxins in foodstuffs; Commission Regulation (EC) No 333/2007 laying down the methods of sampling and analysis for the official control of the levels of lead, cadmium, mercury, inorganic tin, 3-MCPD and polycyclic aromatic hydrocarbons in foodstuffs; Commission Regulation (EU) 2017/644 laying down methods of sampling and analysis for the control of levels of dioxins, dioxin-like PCBs and non-dioxin-like PCBs in certain foodstuffs and repealing Regulation (EU) No 589/2014; and Commission Regulation (EC) No 1882/2006 laying down methods of sampling and analysis for the official control of the levels of nitrates in certain foodstuffs.

Micro-organisms such as bacteria, viruses, yeasts, moulds, algae, parasitic protozoa, microscopic parasitic helminths, and their toxins and metabolites may present a microbiological risk for consumers of food of animal or plant origin (Art 2a) of Commission regulation 2073/2005). The relevant microbiological criteria are set out in Annex I of the Commission regulation no 2073/2005 on microbiological criteria for foodstuffs. However, there are no special provisions for cereals including quinoa.

3.2.2 Packing and labelling in general

The quinoa is usually packed into 25 kg polypropylene or paper bags; mainly the organic quinoa is packed into the paper. If the quinoa is imported into the EU, the packaging has to be complied with the requirements of the Regulation (EC) No 1935/2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC. The purpose of this Regulation is to ensure the effective functioning of the internal market in relation to the placing on the market in the EU of materials and articles intended to come into contact directly or indirectly with food, whilst providing the basis for securing a high level of protection of human health and the interests of consumers (Art 1(1) of regulation 1935/2004). Materials and articles, including active and intelligent materials and articles, shall be manufactured in compliance with good manufacturing practice so that, under normal or foreseeable conditions of use, they do not transfer their constituents to food in quantities which could

⁽²¹⁾ FAO (2001).

⁽²²⁾ EU pesticide database (2022).

endanger human health; bring about an unacceptable change in the composition of the food; or bring about a deterioration in the organoleptic characteristics thereof (Art 3(1) of regulation 1935/2004).

The regulation 1935/2004 is a general legal act for rules of food packing; however, there are also laying down various types of restrictions and conditions for the use of the materials and articles covered by this regulation and the substances used in their manufacture (Art 5 of the regulation no. 1935/2004). These restrictions and conditions for specific materials for food packing are stipulated in the special legal acts such as Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food; Commission Regulation (EU) 2018/213 on the use of bisphenol A in varnishes and coatings intended to come into contact with food; Commission Regulation (EC) No 450/2009 on active and intelligent materials and articles intended to come into contact with food; Commission Regulation (EC) No 282/2008 on recycled plastic materials and articles intended to come into contact with foods; Commission Directive 2007/42/EC relating to materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs; Commission Regulation (EC) No 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food; Commission Regulation (EC) No 1895/2005 on the restriction of use of certain epoxy derivatives in materials and articles intended to come into contact with food; and Commission Directive 2005/31/EC amending Council Directive 84/500/EEC as regards a declaration of compliance and performance criteria of the analytical method for ceramic articles intended to come into contact with foodstuffs.

The food products including the quinoa are relatively often repacked. It increases the requirements for waste management (e.g. Marišová, Valenčíková 2021). In such cases, the regulation (EU) no 1169/2011 of the European parliament and of the Council on the provision of food information to consumers should be applied. Moreover, the requirements for food labelling in the EU are very strict. On the other hand, a food label is a medium to reduce the information gap between producers and consumers⁽²³⁾. Moreover, food label information should support consumers in building a well-balanced diet and in avoiding risks that may be connected with consumption of foods containing allergens⁽²⁴⁾. Labelling laws follow the main objective to prevent fraud and misleading information which should protect consumers⁽²⁵⁾.

In the EU, there were adopted a number of secondary legislation since 1979. Nowadays, there are valid two important regulations. The first one was adopted in 2002 as the regulation (EC) No 178/2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety was adopted. The regulation includes a key legal definition of the food law that is important also for the food labelling regulation which was adopted in 2011 (as the regulation (EU) no 1169/2011 of the European parliament and of

the Council on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004). The regulation includes mandatory food information that are required to be provided to the final consumer by Union provisions and voluntary food information provided on a voluntary basis.

According to the current EU legislation there are twelve mandatory pieces of information that must be present on all European Union (EU) food labels. There are product names, list of ingredients, allergens, quantitative ingredient declaration, net quantity, durability dates, storage, and instructions for use, business name and address, country of origin, nutritional declaration, and alcoholic strength (article 9 of the regulation (EU) no. 1169/2011). In addition, the mandatory information must be presented in a minimum font size⁽²⁶⁾. The mandatory particulars shall be printed on the package or on the label in such a way as to ensure clear legibility, in characters using a font size where the x-height, as defined in Annex IV, is equal to or greater than 1.2 mm. In case of packaging or containers the largest surface of which has an area of less than 80 cm², the x-height of the font size shall be equal to or greater than 0.9 mm (article 13 of the regulation no. 1169/2011). In addition, mandatory food information shall appear in a language easily understood by the consumers of the Member States where a food is marketed (article 15 of the regulation 1169/2011).

Food information provided on a voluntary basis shall meet cumulative the following requirements: (1) it shall not mislead the consumer, as referred to in Article 7; (2) it shall not be ambiguous or confusing for the consumer; and (3) it shall, where appropriate, be based on the relevant scientific data (article 36 of the regulation no. 1169/2011).

In order to clarify the rules including in the regulation no 1169/2011, the European Commission adopted some notices, such as a Commission Notice on questions and answers on the application of the Regulation (EU) No 1169/2011 (2018/C 196/01); a Commission Notice on the application of the principle of quantitative ingredients declaration (QUID) (2017/C 393/05); a Commission Notice on the provision of information on substances or products causing allergies or intolerances (2017/C 428/01); and a Commission Notice on the application of the provisions of Article 26(3) of Regulation (EU) No 1169/2011 (2020/C 32/01).

Further food information is regulated by the special legislative acts as follows:

- health claims regulated by the regulation (EC) No 1924/2006 on nutrition and health claims made on foods;
- labelling of GM foods regulated by the regulation (EC) No. 1829/2003 concerns labelling of foods which contain or consist of GMOs or are produced from or contain ingredients produced from GMOs and regulation (EC) No 1829/2003 of the European Parliament and of the Council on genetically modified food and feed;

⁽²³⁾ Dudeja, Gupta (2017).

⁽²⁴⁾ Halagarda, Popperk (2018).

⁽²⁵⁾ FAO (2016).

⁽²⁶⁾ Roche (2016)

- labelling of organic products regulated by regulation (EU) 2018/848 of the European parliament and of the Council on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007;
- food supplements regulated by directive 2002/46/EC on the approximation of the laws of the Member States relating to food supplements concerns information to consumer requirements about food supplements;
- food for specific groups regulated by regulation (EU) No 609/2013 on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control;
- gluten information regulated by the Commission implementing regulation (EU) No 828/2014 on the requirements for the provision of information to consumers on the absence or reduced presence of gluten in food;
- country of origin regulated by Commission implementing regulation (EU) 2018/775 laying down rules for the application of Article 26(3) of Regulation (EU) No 1169/2011 of the European Parliament and of the Council on the provision of food information to consumers, as regards the rules for indicating the country of origin or place of provenance of the primary ingredient of a food; Commission implementing regulation (EU) No 1337/2013 laying down rules for the application of Regulation (EU) No 1169/2011 of the European Parliament and of the Council as regards the indication of the country of origin or place of provenance for fresh, chilled and frozen meat of swine, sheep, goats and poultry;
- food additives, food enzymes and food flavourings regulated by regulation (EC) no 1331/2008 of the European parliament and of the Council establishing a common authorisation procedure for food additives, food enzymes and food flavourings; regulation (EC) no 1332/2008 of the European parliament and of the Council on food enzymes; regulation (EC) no 1333/2008 of the European parliament and of the Council on food additives; and regulation (EC) no 1334/2008 of the European parliament and of the Council on flavourings and certain food ingredients with flavouring properties for use in and on foods;
- novel food regulated by regulation (EU) 2015/2283 of the European parliament and of the Council on novel foods; Commission implementing regulation (EU) 2017/2470 establishing the Union list of novel foods in accordance with Regulation (EU) 2015/2283 of the European Parliament and of the Council on novel foods;
- other food information such as regulation (EC) No 1925/2006 on the addition of vitamins and minerals and of certain other substances to foods; regulation (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products; regulation (EU) no 1151/2012 of the European parliament and of the Council on quality schemes for agricultural products and foodstuffs; and directive 2011/91/EU of the European Parliament and of the Council on indications or marks identifying the lot to which a foodstuff belongs.

3.2.3 Labelling in specific cases

The nutrition and health claims regulation is based on voluntarily principle; however, claims are very favourite marketing tool of food producers⁽²⁷⁾, ⁽²⁸⁾, ⁽²⁹⁾. Claims are usually based on scientific evidence, but in Europe specifically, nutrition and health claims need to be authorised prior to their usage on the market⁽³⁰⁾.

The nutrition and health claims are regulated by the Regulation (EC) No 1924/2006 of the European Parliament and of the Council on nutrition and health claims made on foods. Regulation 1924/2006 should be read in the context of the other relevant EU legislative acts and implementing and delegated acts issued by the EU Commission. It was created a complicated network of various EU legal acts regardless on the national legal regulations of the EU member states.

The regulation 1924/2006 applies to nutrition and health claims made in commercial communications, whether in the labelling, presentation or advertising of foods to be delivered as such to the final consumer; however, this regulation applies also in respect of foods intended for supply to restaurants, hospitals, schools, canteens and similar mass caterers. A claim means any message or representation, which is not mandatory under EU law or national legislation, including pictorial, graphic or symbolic representation, in any form, which states, suggests or implies that a food has particular characteristics (Art 2 (2) of the regulation 1924/2006). There are two main categories: nutrition and health claims.

Nutrition claims

Nutrition claim is any claim which states, suggests or implies that a food has particular beneficial nutritional properties due to (a) the energy (calorific value) it provides; provides at a reduced or increased rate; or does not provide; and/or (b) the nutrients or other substances it contains; contains in reduced or increased proportions; or does not contain (Art 2(2) of the regulation 1924/2006). Nutrition claims shall only be permitted if they are listed in the Annex of the regulation 1924/2006 and are in conformity with the conditions set out in this regulation. In the original text of the regulation there were only 24 nutrition claims. Nowadays, there are other 6 more nutrition claims related to omega-3 fatty acids, unsaturated fat, and no addition of sodium/salt. Moreover, the general principles of Art 3, conditions for the use of nutrition and health claims of Art 4 and general conditions of Art 5 of the regulation 1924/2006 have to be applied. A special category of the nutrition claims is a comparative nutrition claim, which shall compare the composition of the food in question with a range of foods of the same category, which do not have a composition which allows them to bear a claim, including foods of other brands (Art 9 of the regulation 1924/2006). The comparative nutrition claims may only be made between foods of the same category, taking into consideration a range of foods of that category. Moreover, the difference in the quantity of a nutrient and/or the energy value shall be stated and the comparison shall relate to the

⁽²⁷⁾ Tarabella et al. (2021).

⁽²⁸⁾ Wansink (2003).

⁽²⁹⁾ Kozup et al. (2003).

⁽³⁰⁾ De Boer, Bast (2015).

same quantity of food⁽³¹⁾. For quinoa, there are relevant some nutrition claims because quinoa is a source of protein, fibre, some minerals (Mg, Fe, Zn, Mn, Se) and vitamins (E, B1, B2, B6). The potential nutrition claims that can be used for quinoa are as follows:

- *SOURCE OF PROTEIN* (A claim that a food is a source of protein, and any claim likely to have the same meaning for the consumer, may only be made where at least 12 % of the energy value of the food is provided by protein).
- *HIGH PROTEIN* (A claim that a food is high in protein, and any claim likely to have the same meaning for the consumer, may only be made where at least 20 % of the energy value of the food is provided by protein).
- *SOURCE OF FIBRE* (A claim that a food is a source of fibre, and any claim likely to have the same meaning for the consumer, may only be made where the product contains at least 3 g of fibre per 100 g or at least 1,5 g of fibre per 100 kcal).
- *HIGH FIBRE* (A claim that a food is high in fibre, and any claim likely to have the same meaning for the consumer, may only be made where the product contains at least 6 g of fibre per 100 g or at least 3 g of fibre per 100 kcal).
- *HIGH POLYUNSATURATED FAT* (A claim that a food is high in polyunsaturated fat, and any claim likely to have the same meaning for the consumer, may only be made where at least 45 % of the fatty acids present in the product derive from polyunsaturated fat under the condition that polyunsaturated fat provides more than 20 % of energy of the product).
- *HIGH UNSATURATED FAT* (A claim that a food is high in unsaturated fat, and any claim likely to have the same meaning for the consumer may only be made where at least 70 % of the fatty acids present in the product derive from unsaturated fat under the condition that unsaturated fat provides more than 20 % of energy of the product).
- *SOURCE OF [NAME OF VITAMIN/S] AND/OR [NAME OF MINERAL/S]* (A claim that a food is a source of vitamins and/or minerals, and any claim likely to have the same meaning for the consumer, may only be made where the product contains at least a significant amount as defined in the Annex to Directive 90/496/EEC or an amount provided for by derogations granted according to Article 6 of Regulation (EC) No 1925/2006 of the European Parliament and of the Council of 20 December 2006 on the addition of vitamins and minerals and of certain other substances to foods). However, the above mentioned directive 90/496/EEC was replaced by the regulation (EU) No 1169/2011 on the provision of food information to consumers, where Annex 13 includes the requirements necessary for the application of these nutrition claims.

Health claims

Health claim is any claim that states, suggests or implies that a relationship exists between a food category, a food or one of its constituents and health (Art 2(2) of the regulation 1924/2006). In comparison to the nutrition claims, there is no special legal definition in the regulation 1924/2006 for health claims. The health claims have to meet the general principles of Art 3, conditions for the use of nutrition and health

claims of Art 4 and general conditions of Art 5 of the regulation 1924/2006 and moreover, the special conditions of health claims stipulated in the chapter IV of this regulation. According to the article 10(1) of the regulation 1924/2006 only health claims included in the lists of authorised claims are permitted (https://ec.europa.eu/food/safety/labelling_nutrition/claims/register/public/?event=search).

There are two main categories of health claims. The first one is related to the reduction of disease risk and children's development and health and the second one is related to the function claims.

The first category of health claims is related to the health claims made on foods referring to the reduction of disease risk (article 14(1)(a) of the regulation 1924/2006) and claims referring to children's development and health (article 14(1)(b) of the regulation 1924/2006). The Commission Regulation (EC) No 983/2009 on the authorisation and refusal of authorisation of certain health claims made on food and referring to the reduction of disease risk and to children's development and health includes a list of the permitted health claims made on foods and all necessary conditions for the use of those claims as well as rejected health claims. Currently, there are 14 permitted health claims by the article 14(1)(a) and 13 permitted health claims by the Article 14 (1)(b). However, there is not consolidated text of this regulation, so the individual claims should be looked for in its separate amendments.

The second category of health claims is function claims made on foods, other than those referring to the reduction of disease risk and to children's development and health. The border line between function claims and the previous ones consists in the reduction of disease risk. The claims mentioned above consist in stating, suggesting or implying reduction of a disease.

There are also two subcategories. The first one is based on article 13(1) of the regulation 1924/2006 called function claims based on generally accepted scientific evidence. The second one is based on article 13(5) of the regulation 1924/2006 called function claims based on newly developed scientific evidence. Currently, there are 229 permitted health claims by the article 13(1) and 13 permitted health claims by the Article 13(5). The Commission received more than 2000 application of health claims according to the article 13(1) of regulation 1924/2006, and only more than 160 applications according to the article 13(5) of regulation 1924/2006⁽³²⁾. The Commission rejected most of applications and only some of them were authorised. One of the rejected claims is related also "Quinoa - Stimulation of the hair bulb, favouring the growth of the hair." It was evaluated as non-compliance with the regulation 1924/2006 because on the basis of the scientific evidence assessed. The claimed effect for this food has not been substantiated. The list of permitted health claims is issued in the Commission Regulation (EU) No 432/2012 establishing a list of permitted health claims made on foods, other than those referring to the reduction of disease risk and to children's development and health. The food producers have to use only the permitted health claims allowed by this Commission regulation. Any additions of claims to the list of health claims based on newly developed scientific evidence shall be adopted following the

⁽³¹⁾ Art 9 of the regulation 1924/2006.

⁽³²⁾ European Commission (2021).

procedure laid down in Article 18 of the regulation 1924/2006 described below.

Organic labelling

The quinoa is considered as superfood with high content of proteins, vitamins, minerals and fibre. Therefore, the requirements of organic production are usually asked by purchasers and consumers. If the quinoa is imported into the EU, the requirements of organic production according to the regulation no 2018/848 needs to be fulfilled.

The regulation (EU) 2018/848 on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007 shall apply since 2021. The regulations define general principles of organic production (Art 5), specific principles applicable to agricultural activities (Art 6) and processing of organic food (Art 7), general production rules (Art 9), plant production rules (Art 12), production rules for processed food (Art 16) and collection, packing, transport and storage (Art 23). Terms, such as 'bio' and 'eco' and their derivatives may be used throughout the Union for the labelling and advertising of products which comply with the regulation 2018/848. On the other hand, no terms, including terms used in trademarks or company names, or practices shall be used in labelling or advertising if they are liable to mislead the consumer or user by suggesting that a product or its ingredients comply with this regulation. Where products bear terms the code number of the control authority or control body to which the operator that carried out the last production or preparation operation is subject shall also appear in the labelling. Where the organic production logo of the EU is used, an indication of the place where the agricultural raw materials of which the product is composed have been farmed shall appear in the same visual field as the logo and shall take one of the following forms, as appropriate: (a) 'EU Agriculture', where the agricultural raw material has been farmed in the Union; (b) 'non-EU Agriculture', where the agricultural raw material has been farmed in third countries; or (c) 'EU/non-EU Agriculture', where a part of the agricultural raw materials has been farmed in the Union and a part of it has been farmed in a third country. The words 'EU' or 'non-EU' shall not appear in a colour, size and style of lettering that is more prominent than the name of the product. Moreover, the producers may apply logo of the organic production according to the figures defined in the Annex V of this regulation. The organic production logo of the European Union may be used in the labelling, presentation and advertising of products which comply with this regulation. The use of the organic production logo of the European Union shall be optional for products imported from third countries.

The organic product may also be asked for other certifications as quality guarantee, such as GLOBALG.A.P. - a Trade-mark and Set of Standards for Good Agricultural Practices (https://www.globalgap.org/uk_en/), Food Safety System Certification 22000 (FSSC 22000) which offers a complete certification Scheme for the auditing and certification of Food Safety Management Systems (<https://www.fssc22000.com/scheme/>) or EU Ecolabel regulated by the regulation (EC) No 66/2010 on the EU Ecolabel. However, the organic labelling of the food is for the European consumer sufficient guarantee of quality and food safety. Therefore, there are not usually any other cer-

tificates displaying on the packages of the quinoa sold in the EU countries.

Standard for quinoa quality

In 2019, FAO has adopted the Standard for Quinoa CXS 333-2019 included in the Codex Alimentarius. The standard applies to quinoa suitable for human consumption. It does not apply to quinoa used as seeds for propagation, products derived from quinoa, e.g. flour or flakes.

The general quality factors are as follows: quinoa shall be safe and suitable for human consumption, be free from abnormal flavours and odours, and be free from living insects and mites.

The specific quality factors are:

- moisture content (maximum 13%),
- extraneous matter of organic max 0,1% (husks, stem parts, impurities of animal origin, other seed species and leaves) and inorganic origin (such as stones - max 0,1%),
- defect such as broken grains - max 3%, damaged grains - max 2,5%, germinated grains - 0,5%, coated grains - 0,3%, immature grains - 0,9%,
- protein content - minimum 10% on a dry matter basis;
- saponin content - maximum 0,12%.

The use of food additives is not permitted. The Standard regulates also the issues such as labelling, packing, hygiene and contaminants; however, the special rules of the EU mentioned above should be fulfilled if the quinoa should be market on the EU internal market.

IV. Conclusion

Quinoa is a pseudo-cereal crop that loves lower temperatures but survives also in arid areas and soils with a high salt content. Quinoa is usually called as superfood because of high level of protein, fibre, micronutrients, and amino acids and is also gluten-free. This has caused an increased interest in quinoa and its cultivation in worldwide. Nevertheless, the domestic continent, South America, especially countries such as Peru and Bolivia, is one of the world's largest producers and exporters of quinoa. The EU is one of the biggest importers of quinoa. However, there is much EU legislation that quinoa importers in the EU must comply with, mainly the legislative related to the food safety and quality, food labelling, organic labels and nutrition and health claims, food packaging and shipment, and various certifications declaring extra guarantee. It is very difficult for importers to be familiar with a number of different EU legal regulations and their amendments. If it is not possible to simplify this legislation, the importers would certainly appreciate at least a manual where all legal acts related to the import of Quinoa to the EU would be summarized.

References

1. ADOLF, Verena Isabelle - JACOBSEN, Sven-Erik - SHABALA, Sergey. 2013. *Salt tolerance mechanisms in quinoa (Chenopodium quinoa Willd.)*. In: Environmental and Experimental Botany, vol. 92, August 2013, pp. 43-54. <https://doi.org/10.1016/j.envexpbot.2012.07.004>
2. BAZILE, Didier - BAUDRON, Flora. 2015. *The Dynamics of the*

- global expansion of quinoa growing in view of its high biodiversity.* Chapter 1.4 In State of the Art Report of Quinoa in the World in 2013. Rome : FAO & CIRAD, p. 42-55. ISBN 978-92-5-108558-5.
3. BAZILE, Didier - JACOBSEN, Steven Eric - VERNIAU, Alexis. 2016. *The Global Expansion of Quinoa: Trends and Limits.* In *Frontiers in Plant Science* [online], vol. 7, n.622 [cit. 2022-01-25]. ISSN 1664-462X. Available at: <doi: 10.3389/fpls.2016.00622>.
 4. ČIČOVÁ, Iveta. 2021. *Agrotechnika pestovania menej známych pseudocereálií.* In *Naše pole* [Online], vol. 6, pp. 30-33 [cit. 2021-02-02]. ISSN 1335-2466. Available at: <http://www.agroporadenstvo.sk/index.php?pl=84&article=2284&star>.
 5. DE BOER, Alie - BAST, Aalt. 2015. *International legislation on nutrition and health claims.* In *Food Policy*, vol. 55, pp. 61-70. ISSN 0306-9192.
 6. DUDEJA, Puja - GUPTA, Rajul Kumal. 2016. *Nutritional labeling.* In *Dudeja, Puja - Gupta, Rajul Kumal - Minhas, Singh Amarjeet. Food Safety in the 21st Century.* Amsterdam : Elsevier, pp. 481-489. ISBN 978-0-12-801773-9.
 7. EU. 2022. *EU Pesticides database* [online database]. [cit. 2022-02-01] Available at: <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/products/?event=search.pr>.
 8. EUROPEAN COMMISSION. 2021. *EU Register of nutrition and health claims* [online]. [cit. 2022-03-31]. Available at: <https://ec.europa.eu/food/safety/labelling_nutrition/claims/register/public/?event=register.home>.
 9. FAO. 2001. *Codex Alimentarius - Food Hygiene - Basic Texts* [online]. 2 ed. Rome : FAO. ISBN 92-5-104619-0. Available at: <https://www.fao.org/3/y1579e/y1579e00.htm#Contents>.
 10. FAO. 2013. *Quinoa - a future sown thousands of years ago* [Online]. © 2013 [cit. 2022-01-02]. Available at: <https://www.fao.org/quinoa-2013/mobile/home/en/>.
 11. FAO. 2016. *Handbook On Food Labelling To Protect Consumers.* Rome : FAO. 60 p. ISBN 978-92-5-109547-8.
 12. FAOSTAT. 2022. *Quinoa production in 2019, Crops/Regions/World list/Production Quantity* [online database]. [cit. 2021-01-14]. Available at: <https://www.fao.org/faostat/en/#search/Quinoa>.
 13. FUENTES, Fabian Francisco - MARTÍNEZ, Enrique A. - HINRISCHEN, V. Pablo - JELLEN, Rick - MAUGHAN, P. Jeff. 2008. *Assessment of genetic diversity patterns in Chilean quinoa (Chenopodium quinoa Willd.) germplasm using multiplex fluorescent microsatellite.* In *Conservation Genetics* [online], vol. 10, no.2, pp. 369-377 [cit. 2021-02-02]. Available at: <doi:10.1007/s10592-008-9604-3>.
 14. HALAGARDA, Michal - POPEK, Stanislaw. 2018. *Consumer Response to Genetically Modified Foods.* In *Reference Module in Food Science.* Amsterdam : Elsevier, pp.104-112. ISBN 978-0-08-100596-5.
 15. HERENCIA, L. Irene - ALIA, M. J. - URBANO, Paolo - GONZALEZ, Juan Antonio. 1999. *Cultivo de la quinoa (Chenopodium quinoa Willd.) en la región Centro.* (The culture of quinoa in the central region). In *Vida Rural*, vol. VI, no. 87, pp. 28-33.
 16. HIRICH, Abdelaziz - RAFIK, Sifferdine - RAHMANI, Mohamed - FETOUAB, Amira - AZAYKOU, Fatima - FILALI, Kaoutar - AHMADZAI, Hayatullah - JNAOUI, Younes - SOULAIMANI, Aziz - MOUSSAFIR, Mariam et al. 2021. *Development of Quinoa Value Chain to Improve Food and Nutritional Security in Rural Communities in Rehamna, Morocco: Lessons Learned and Perspectives.* In *Plants* 2021 [online], vol. 10, no. 301, pp. 2-27 [cit. 2022-01-26]. ISSN 2223-7747. Available at: <https://doi.org/10.3390/plants10020301>.
 17. JACOBSEN, Sven Eric - ALANDIA Gabriela - RODRIGUEZ, Juan Pablo - BAZILE, Didiere - CONDORI, Bruno. 2020. *Global expansion of quinoa and challenges for the Andean Región.* In *Global Food Security* [online], vol. 26, 100429 [cit. 2022-02-14]. ISSN 2211-9124. Available at: <DOI: 10.1016/j.gfs.2020.100429>.
 18. JAİKISHUN, Sirpaul - LI, Wenqiang - YANG, Zhenbiao - SONG, Shikui. 2019. *Quinoa: In Perspective of Global Challenges.* In *Agronomy* [online], vol. 9, no.4, pp. 176; [cit. 2021-03-14]. Available at: <doi:10.3390/agronomy9040176>.
 19. KOLATA, Alan L. 2009. *Quinoa: Production, Consumption and Social Value in Historical Context : Research report.* Chicago: The University of Chicago. 78p.
 20. KOZUP, C. John et al. 2003. *Making healthful food choices: the influence of health claims and nutrition information on consumers' evaluations of packaged food products and restaurant menu items.* In *Journal of Marketing*, vol. 67, no. 5, pp. 19-34. ISSN 0022-2429.
 21. MAERTENS, Miet - GAMBOA, Cindybell - SCHUSTER, Monica - SCHREVEENS, Eddie. 2020. *Price volatility and quinoa consumption among smallholder producers in the Andes.* In *Scientia Agropecuaria* [online], vol. 11, no.1, pp. 113 - 125 [cit. 2022-01-31]. ISSN: 2306-6741. Available at: <DOI: 10.17268/sci.agropecu.2020.01.13>.
 22. MALIRO, Moses - GUWELA, Veronica. 2015. *Quinoa Breeding In Africa: History, Goals and Progress.* In *Quinoa Sustainable production, variety improvement and nutritive value in agroecological systems* [online], vol. 10, no. 301, pp. 2-27 [cit. 2022-01-27]. ISSN 978-1-118-602805-5. Available at: <DOI: 10.1002/9781118628041.ch9>.
 23. MARIŠOVÁ, Eleonóra - VALEŇČIKOVÁ, Marina. 2021. *EU legislative support in the waste sector.* In: *EU Agrarian law*, vol. X, no. 2, pp. 21-27. ISSN 1338-6891
 24. MEHDI, Chergui - ABDELAZIZ, Hirich. 2018. *Analysis of International Market of Quinoa based products.* In *International Conference: Managing Water Scarcity in River Basins: Innovation and Sustainable Development 4-6 October 2018* [online]. Morocco : Agadir, Available at: <https://cupdf.com/document/analysis-of-international-market-of-quinoa-based-a-uaesouqcom-a-walmartcom.html#tabSectionPart>.
 25. RAFIK, Sifeddine - CHAOUI, Meriem - ASSABBAN, Yassin - JAZI, Salima - CHOUKR-ALLAH, Redouane - EL GHAROUSS, Mohamed - HIRICH, Abdelaziz. 2020. *Quinoa value chain, adoption, and market assessment in Morocco* In: *Environmental Science and Pollution Research* [online], vol. 28, pp.46692-46703 [cit. 2021-02-23]. Available at: <https://doi.org/10.1007/s11356-020-11375-x>.
 26. REPO-CARRASCO, Ritva - ESPINOZA, C. José - JACOBSEN, Sven Eric. 2003. *Nutritional Value and Use of the Andean Crops Quinoa (Chenopodium quinoa) and Kañiwa (Chenopodium pallidicaule).* In *Food Reviews International* [online], vol. 19, no. 1 - 2, pp. 179-189 [cit. 2021-03-14]. ISSN: 1525-6103. Available at: <http://dx.doi.org/10.1081/FRI-120018884>.
 27. ROCHE, Karen. 2016. *Food Labelling: Applications.* In *Caballero, Benjamin - Finglas, Paul M. - Toldrá, Fidel. Encyclopaedia of Food and Health,* Amsterdam : Elsevier, p. 49-55. ISBN: 978-0-12-384953-3.
 28. RUIZ, Karina B. - BIONDI, Stefania - Oses, Rómulo - ACUÑA-RODRÍGUEZ, Ian S. - ANTOGNONI, Fabiana - MARTINEZ-MOSQUEIRA, Enrique A. et al. 2014. *Quinoa biodiversity and sustainability for food security under climate change.* A review. In *Agronomy for Sustainable Development* [online], vol. 34, pp. 349-359 [cit. 2022-01-26]. ISSN 1773-0155. Available at: doi:10.1007/s13593-013-0195-0.
 29. SINGH, Shilpi - SINGH, Rashmi - SINGH, Kunwar Vikash. 2016. *Quinoa (Chenopodium quinoa Willd), functional superfood for today's world: A Review.* In: *World Scientific News* [online], vol. 58, pp. 84-96 [cit. 2021-03-10]. EISSN: 2392-2192. Available at: <http://www.worldscientificnews.com/wp-content/uploads/2016/06/WSN-58-2016-84-96.pdf>.
 30. SCHLICK, Greg - BUBENHEIM, David L. 1993. *Quinoa: An Emerging „New“ Crop with Potential for CELSS* [online] : Report TP-3422. Washington : NASA. [cit. 2020-11-14]. Available at: <https://ntrs.

- nasa.gov/api/citations/19940015664/downloads/19940015664.pdf>.
31. JOINT RESEARCH CENTRE EUROPEAN SOIL DATA CENTRE (ESDAC). 2022. *Soils data maps*. [online], Brussels: European Commission [cit. 2022-05-05]. Available at: <<https://esdac.jrc.ec.europa.eu/resource-type/soil-data-maps>>
32. STIKIĆ, Radmila - GLAMOČLIJA, Djordie - DEMIN, Mirjana - VUČELIĆ-RADOVIĆ, Biljana - JOVANOVIĆ, Zorica - MILOJKOVIĆ-OPSENICA, Dusanka - JACOBSEN, Sven Eric - MILOVANOVIĆ, Mirjana. 2012. *Agronomical and nutritional evaluation of quinoa seeds (Chenopodium quinoa Willd.) as an ingredient in bread formulations*. In *Journal of Cereal Science* [online], vol. 55, no. 2, pp. 132-138. [cit. 2021-03-15]. ISSN 0733-5210. Available at: <[doi:10.1016/j.jcs.2011.10.010](https://doi.org/10.1016/j.jcs.2011.10.010)>.
33. STIKIĆ, Radmila - JOVANOVIĆ, Zorica - MARJANOVIĆ, Milena - DORDEVIĆ, Slaviša. 2015. *The Effect of Drought on Water Regime and Growth of Quinoa (Chenopodium quinoa Willd.)* In: *Ratarstvo i povrtarstvo* [online], vol. 52, n. 2 [cit. 2021-11-20]. ISSN 2217-8392. Available at: <https://www.academia.edu/25011028/The_effect_of_drought_on_water_regime_and_growth_of_quinoa_Chenopodium_quinoa_willd._>.
34. TARABELLA, Angela et al. 2021. *The effects of advertisements on consumer choices and health: A content analysis of health claims in Italian magazines*. In: *British Food Journal* [online], vol. 123, no.8, pp. 2785-2804 [cit. 2022-01-31]. ISSN: 0007-070X. Available at: <<https://doi.org/10.1108/BJFJ-08-2020-0682>>.
35. WANSINK, Brian. 2003. *Using laddering to understand and leverage a brand's equity*. In: *Qualitative Market Research: An International Journal*, vol. 6, no. 2, pp. 111-118. ISSN 1352-2752.

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AN OVERVIEW OF SELECTED TOOLS AND STRATEGIES FOR AGRICULTURAL LAND PROTECTION IN SLOVAKIA AND THE EUROPEAN UNION

PREHĽAD VYBRANÝCH NÁSTROJOV A STRATÉGIÍ NA OCHRANU POĽNOHOSPODÁRSKEJ PÔDY NA SLOVENSKU A V EURÓPSKEJ ÚNII

Zina MACHNIČOVÁ *

I. Introduction

In the field of environmental protection, we recognize the most common legislative, economic and voluntary tools, which should, in direct relation, lead to the protection of agricultural land as a natural resource. Legislative tools for the protection of agricultural land are implemented through the application of laws, regulations, or other legal acts of a national or transnational nature. The most common in connection with soil protection are:

- emission standards used to determine the maximum acceptable amount of pollutants discharged into the soil,
- the very specification of the specific hazardous substances, the exceedance of which in the soil leads to its irreversible degradation,
- technological standards specifying sustainable agricultural practices or production techniques which the producer is obliged to use in connection with land use and management,

- the standardization of agricultural products, specifying the qualitative and quantitative characteristics of the products in the context of production which is consistent with the protection and sustainability of agricultural land^{(1), (2)}.

Laws, regulations, etc. as part of the legislative tools also regulate to some extent other tools related to the protection of agricultural land. In particular, it is a legislative regulation of the implementation of economic tools, which are understood as one of the options supporting positive changes in the field of environmental protection and management of natural resources, which also include agricultural land. They aim to support the reduction of negative effects on the environment and soil, through:

- compensation, i.e. reparation for the damaged environment and soil,
- fiscal function, where these economic tools represent the

⁽¹⁾ Jađuďová et al. (2015).

⁽²⁾ Slovak Environment Agency (a) (2020).

Abstract (EN)

Agricultural land, as a component of the environment, is one of the irreplaceable natural resources and, at the same time, through its functions, is an integral part of the quality of human lives. Several international institutions or scientists point to problems with land loss or decline in quality and, ultimately, to the increased need for soil protection, based on which governments implement various tools. The aim of the paper is therefore to compile a general overview of existing tools for the protection of agricultural land in Slovakia and to analyse selected strategies for land protection in the EU. The main source of information was represented by literary sources of publications by scientific researchers, Slovak and European bodies or institutions, and, last but not least, legal acts. The paper points to a wide range of existing tools and innovative strategies for the protection of agricultural land in Slovakia and the EU.

Keywords (EN)

agricultural land protection, tools for agricultural land protection, European strategies

Abstrakt (SK)

Poľnohospodárska pôda, ako zložka životného prostredia, patrí k nenahraditeľným prírodným zdrojom a zároveň prostredníctvom svojich funkcií predstavuje neoddeliteľnú súčasť v oblasti kvality ľudských životov. Viaceré medzinárodné inštitúcie či vedeckí pracovníci poukazujú na problémy v súvislosti s úbytkami pôdy či poklesom jej kvality a v konečnom dôsledku na zvýšenú potrebu ochrany pôdy, na základe čoho vládne orgány prijímajú rôzne opatrenia. Cieľom príspevku je preto zostaviť všeobecný prehľad existujúcich nástrojov na ochranu poľnohospodárskej pôdy na Slovensku a analyzovať vybrané stratégie na ochranu poľnohospodárskej pôdy v EÚ. Hlavný zdroj informácií predstavovali literárne zdroje publikácií vedeckých výskumníkov, slovenských a európskych orgánov či inštitúcií a v neposlednom rade právnych aktov. Príspevok poukazuje na širokú škálu existujúcich nástrojov a inovatívnych stratégií na ochranu poľnohospodárskej pôdy na Slovensku a v EÚ.

Kľúčové slová (SK)

ochrana poľnohospodárskej pôdy, nástroje na ochranu poľnohospodárskej pôdy, európske stratégie

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income of the state budget used to finance activities ensuring the protection of the environment and soil,

- stimulatory function to support the realization of a certain goal through certain activities.

This includes the so-called sanctioning economic tools, the aim of which is to impose a fine/sanction fee on the owner or user of agricultural land, for unsustainable land management, which leads to a reduction in its quality or overall degradation.

These tools include in particular:

- charges for pollution of agricultural land as a component of the environment, which include e.g. fees for landfilling, for discharging pollutants into the soil, for contamination of the soil with hazardous substances, etc.
- charges for the use of agricultural land, in particular for non-agricultural purposes, where in several countries there is a legal obligation to pay a levy on the agricultural land occupation or withdrawal,
- user fees for the use and consumption of specific fertilizers or pesticides, the presence of which in the soil reduces its quality and endangers not only its condition but also other components of the environment,
- taxes,
- sanction fees and fines for violation of the provisions of the law, regulations, etc.

The second group of economic tools in connection with the protection of agricultural land consists of the so-called stimulating economic tools, the aim of which is to provide the owner or user of land with state aid and support such as the so-called reward or relief for managing the land in accordance with the law, its protection and the preservation of its quality. This group includes, for example:

- tax relief for farmers after meeting certain conditions, e.g. on income tax, real estate, excise taxes, etc.,
- financial support for persons cultivating the agricultural land, again after certain conditions relating to ensuring soil protection. These include subsidies, grants, support from European and state funds, preferential forms of loans, etc.,
- financial concessions include full or partial exemptions for farmers from certain compulsory payments, e.g. relief on penalties for late payment of contributions to the Social Insurance Agency, etc.,
- deposit refund fees, including refundable fees for backed-up packaging or bottles or other recycling fees,
- environmental insurance, which may be compulsory for some farmers as it covers environmental insurance, of which land is also a component^{(3),(4)}.

Voluntary tools for the protection of the environment and agricultural land as a natural resource aim, in particular, to promote environmental awareness and strengthen environmental responsibility within the awareness of individuals and the decision-making processes of managing authorities. They operate on a voluntary basis, i.e. they are used by landowners, land

users, or the general public without direct coercion. Voluntary tools include:

- voluntary agreements between the Member States, managing authorities, etc. with a commitment to sustainable land management, maintaining soil quality and protecting it from degradation,
- environmental education at primary, secondary, and tertiary schools,
- information strategies that inform and educate the general public through the various platforms available,
- green public procurement, through which farmers will give priority to sustainable, environmentally friendly technologies, or another procured product,
- eco-labelling of products, through nationally/transnationally recognized labels, to inform consumers about environmentally and resource-friendly products,
- public participation⁽⁵⁾.

The most effective way to protect agricultural land as a natural resource is to combine the above tools. The tools are applied in individual countries by various administrative procedures through various public authorities in the field of soil protection.

As for specific examples, most countries of the European Union apply legislative and economic tools in the case of agricultural land protection, such as, in particular, decisions of the relevant soil protection authorities and the associated fees in the case of land withdrawals. In addition, in some countries, the spatial planning documentation of the protected area plays an important role in the case of land withdrawal. Some countries (for example Austria), based on the natural conditions and background of the country, are primarily focused on the protection of forests or other kinds of land, others on the protection of agricultural land, especially soils of the highest quality, which is the case in Slovakia, but for example also in Poland⁽⁶⁾.

II. Objective and Methodology

Based on the increased need to protect the agricultural land and its functions, the paper aims to identify and compile an overview of existing tools in Slovakia and analyse selected European strategies in the related field. Secondary sources consisting of scientific publications of researchers, Slovak or European legal acts, and publications of Slovak and European bodies and institutions in the field of agricultural land protection were used to examine the issue. Two current European strategies were analysed separately:

- European Green Deal,
- European soil strategy for 2030.

The strategies were processed by the European Commission. Based on the method of content analysis of the mentioned secondary sources, the results were interpreted in the form of an overview.

⁽³⁾ Jaďudová et al. (2015).

⁽⁴⁾ Slovak Environment Agency (a) (2020).

⁽⁵⁾ Slovak Environment Agency (b), (2020).

⁽⁶⁾ CEDR (2017).

Table 1: General overview of the existing tools for agricultural land protection in Slovakia

Legislative tools (legal acts regulating)	emission standards
	technological standards
	standardization of agricultural products
	sanctions and fines
Economic tools	
Stimulating economic tools	compensation of the damaged environment and agricultural land
	financing of environmental and soil protection activities
	tax relief
	financial support
	financial relief
	deposit refund fees
	environmental insurance
Sanctioning economic tools	agricultural land pollution charges
	fees for the use/withdrawal of agricultural land
	user fees (e.g. for harmful pesticides)
	taxes
	sanctions and fines
Voluntary tools	voluntary agreements of Member States, managing authorities, etc.
	environmental education and training
	information strategies for public education
	green public procurement
	eco-labelling of products
	public participation

Source: own processing, 2022 based on Jaďudova (2015), Slovak Environment Agency, (a), (b) (2020)

III. Results and Discussion

3.1 Tools for agricultural land protection in Slovakia

Legislative tools

In the conditions of the Slovak Republic, agricultural land is an amendment to the Constitutional Act no. 422/2020 Coll. with effect from 1 January 2021, protected directly in the Constitution of the Slovak Republic, according to which it belongs under special protection by the state and society. Agricultural land is protected mainly by Act No. 220/2014 Coll. on the protection and use of agricultural land, which regulates the protection of its character and functions, sustainable use, environmental functions, acreage against unauthorized use, procedures for changing the type of land or its withdrawal for non-agricultural purposes and sanctions for violation of the law. This Act is implemented by the Regulation of the Government of the Slovak Republic no. 58/2013 Coll. on levies for seizure and unauthorized occupation of agricultural land, which regulates the basic rate of levy, list of the agricultural land in the highest quality in the cadastral area according to the BPEJ code, method and due of payment, and certain exemption from levy. Further, the act is also implemented by the Decree of the Ministry of Agriculture of the Slovak Republic no. 508/2004 Coll., which implements § 27 of the Soil Protec-

tion Act, which lays down details on the processing of the soil organic matter balance, the processing of the agricultural land reclamation project, and the evaluation of the consequences of construction plans or others.

However, in the area of agricultural land protection, we recognize several legislative tools that are related to its protection, either directly or indirectly. This is, for example, Act no. 330/1991 Coll. on Land Adjustment, Land Ownership Arrangement, Land Offices, Land Fund, and Land Communities, regulating the definition of basic provisions in the field of land readjustment, land readjustment proceedings, the implementation of land readjustment projects and related costs or the establishment of the Slovak Land Fund.

Legislative tools for agricultural land protection also include Act no. 229/1991 Coll. on the regulation of ownership relations to land and other agricultural properties, regulating the rights and obligations of owners, original landowners, users, and tenants of land, and the competence of the state in the regulation of ownership and users' rights to land. And Act no. 140/2014 Coll. on the acquisition of ownership of agricultural land and the amendment of certain laws, regulating the procedure for acquiring land ownership by transfer and the competences of state administration bodies in this area.

Tools also include Act no. 543/2002 Coll. on nature and landscape protection, regulating the competence of state administration bodies and municipalities, rights and obligations of individuals and legal persons within nature and landscape

protection with the goals of long-term preservation of natural balance, protection of the diversity of conditions and life forms or natural values and heritages, sustainable use of natural resources and the provision of ecosystem services, taking into account economic, social, cultural needs and regional and local conditions.

Furthermore, we can also include Act no. 24/2006 Coll. on Environmental Impact Assessment and amendments of certain laws, regulating the procedure of professional and public assessment of anticipated environmental impacts, rights and obligations of participants in the impact assessment, and the competence of state administration bodies and municipalities in this given area.

Also, Act no. 136/2000 Coll. on fertilizers as part of legislative tools for agricultural land protection, regulates conditions for the circulation of fertilizers, growing substrates or soil auxiliaries, certification of fertilizers, conditions of their storage and use, conditions of agrochemical testing of agricultural soils, conditions of land cultivation in vulnerable areas, the competence of state administration bodies in this area.^{(7), (8)}

Economic tools

Various economic tools are used in Slovakia to protect agricultural land, in terms of sanctioning economic tools, in particular, levies for the seizure and unauthorized occupation of agricultural land, fines for violations in the field of soil protection, land taxes, and agricultural land prices. In the case of economic stimulating tools, there are mainly payments and subsidies which are supposed to motivate the applicant for the payment to protect the agricultural land.

Levies for agricultural land withdrawals and unauthorized occupation

According to Act No. 220/2014 Coll. on the protection and use of agricultural land, agricultural land may also be used for housing or other non-agricultural purposes, but this should only be in necessary cases with no other solution and to the extent that is justified. The agricultural land protection authority ensures the protection of the highest quality agricultural land in the given cadastral area, competent in quality groups 1–4 according to the BPEJ code, and the protection of vineyards. The levy for the permanent or temporary withdrawal of the agricultural land of the highest quality must be paid by the person who is obliged to propose its non-agricultural use. This obligation also applies in the case of the unauthorized occupation of agricultural land, which is made without a decision by the agricultural land protection authority. If the levy is not paid on time, an additional penalty arises for each day of late payment of 0.05% of the outstanding amount, starting on the day following the due date. The basic levy rate ranges are from € 20/m² to € 0,5/m² for permanent withdrawal and from € 0,20/m² to € 0,005/m² for temporary withdrawal from the first to the ninth group of the land quality. Information on the basic rates of the levy, the method of payment of the levy, exemptions from the payment of levies, and a list of the agricultural land of the highest quality in the relevant cadastral area according to

the BPEJ code are regulated in the Government Regulation no. 58/2013 Coll. on levies for agricultural land withdrawals and unauthorized occupation^{(9), (10)}.

Fines for infringements in the field of agricultural land protection

The Land Protection Act defines offenses and other administrative violations in the area of agricultural land protection. It allows the agricultural land protection authority to impose a fine of up to € 330, € 660, or € 995 for an individual. For other administrative offenses, it allows that individual/entrepreneur or legal entity to be fined from € 166 to € 33,200 for each hectare of agricultural land. However, if that person commits an unauthorized occupation of agricultural land for non-agricultural purposes or causes damage to agricultural land by risk substances, a fine of between € 1 660 and € 166 000 per hectare of agricultural land may be imposed. In the process of determining the amount of the fine, the agricultural protection authority takes into account in particular the gravity of the infringement, the manner and duration of the infringement, and the extent of the threatened or already caused damage⁽¹¹⁾.

Land taxes and agricultural land prices

According to Act no. 582/2004 Coll. on local taxes and local fees for municipal waste and small construction waste, the type of local taxes that can be imposed by the municipality is also a real estate tax, which includes land tax. The subject of the land tax is, besides other, arable land, hop gardens, vineyards, orchards, and permanent grassland. The tax base, in this case, is the value of land without coppices determined by multiplying the area in m² and the value of land per 1 m², which is given in €/m² in Annex 1 of the Act: Value of arable land and permanent grassland in a table according to the territory, code and the name of the cadastral district.

According to the purpose for which the price of agricultural land is determined, we distinguish the market price and the official price. The market price is regulated mainly by the land market, i.e. supply and demand. Furthermore, its amount may be affected by the type and quality of land according to the BPEJ, district, land acreage, existing tenancy relations, or the distance of land from the district town. The official price of land is defined by legislative tools; the current legislation uses the term land value. It is used, for example, to determine the amount of real estate tax or payment for the expropriation of land in the public interest. The basis for the determination of land value is BPEJ. The official price reflects also the qualitative parameters of the soil, such as soil type, slope, or grain size^{(12), (13)}.

⁽⁹⁾ Act No. 220/2014 Coll. on the protection and use of agricultural land.

⁽¹⁰⁾ Regulation No. 58/2013 Coll. on levies for agricultural land withdrawals and unauthorized occupation.

⁽¹¹⁾ Act No. 220/2014 Coll. on the protection and use of agricultural land.

⁽¹²⁾ Act no. 582/2004 Coll. on local taxes and local fees for municipal waste and small construction waste.

⁽¹³⁾ Laziková (2010).

⁽⁷⁾ Machničová (2021).

⁽⁸⁾ Slov-lex

Payments and subsidies for agricultural land protection

In the area of agricultural land, payments and subsidies from national or European sources also act as economic tools for agricultural land protection. They are considered a stimulating tools leading to the fulfilment of political goals, which are regulated in the Concept of Agricultural Development 2013–20120 with the main goal of sustainable agricultural development or in the Rural Development Program of the Slovak Republic for the programming period 2021–2027 with the main goal to support agricultural competitiveness in accordance to environmental sustainability and rural development, based on the objectives of the Common Agricultural Policy (CAP), which are viable e.g. food production, balanced territorial development or sustainable management of natural resources, as well as measures to combat climate change^{(14), (15), (16)}.

Voluntary tools

Environmental education

In Slovakia, there are several entities that formally or informally participate in Environmental Education, Training, and Awareness (hereinafter as EETA) in the field of the environment. Within the Ministry of the Environment of the Slovak Republic, 6 sections and 8 departmental organizations deal with the issue of EETA as a supporting activity. Formal EETE in Slovakia is concentrated in school-type facilities. It is covered by the State Education Program within the category of pre-primary education and secondary vocational education.

Non-formal EETA is implemented in Slovakia by the departmental organizations of the Ministry of the Environment of the Slovak Republic for the public and specific target groups in accordance with their statutes. Individual departmental organizations are preparing many events that focus on information in the field of environmental protection and its components, as well as the field of EETA itself. These educational are using interactive elements, which include, for example, one or multi-day educational events, discussions for all categories of schools (kindergartens, primary schools, high schools, universities), events for marginalized groups, exhibitions, excursions, film festivals, etc.

Business entities in Slovakia are also involved in EETA, directly or through their foundations set up to raise awareness in the field of environmental protection and sustainability. They direct their activities to all levels of schools as well.

However, as stated by the Ministry of the Environment itself, the problem in this area is that in Slovakia there is a Concept of Environmental Education since 1997 still valid, which causes the data do not reflect the current situation⁽¹⁷⁾.

Green public procurement

In order to ensure uniform and transparent implementation of green public procurement and uniform monitoring of the level achieved in the Member States, uniform environmental characteristics recommended for selected product groups are created and regularly updated at the EU level to simplify a green

contract creation.

From these product groups, the Slovak Republic chose 12 priorities, which became the basis for the “National Action Plan for Green Public Procurement in the Slovak Republic for 2016–2020” adopted by the Slovak Government in 2016. Environmental Policy Strategy of the Slovak Republic until 2030 (Greener Slovakia) also sets the goal that Slovakia will provide at least 70% of the total value of public procurement by green public procurement by 2030.

Legislatively, green public procurement in Slovakia is regulated in Act no. 343/2015 Coll. on Public Procurement and amendments to certain acts, as amended (hereinafter referred to as the “Public Procurement Act”) and Government Resolution no. 590 of 14 December 2016 on the draft National Action Plan for Green Public Procurement in the Slovak Republic for the years 2016 – 2020, which enable the application of environmental aspects in all stages of public procurement.

For example, in the case of the procurement of goods, works, or services with specific environmental, social, or other characteristics, the contracting authority may require in the contract description a specifically recognized eco-label (e.g. European Eco-label) as one of the criteria to evaluate relevant offers and a proof that goods, works or services meet specific characteristics^{(18), (19)}.

3.2 Selected strategies for agricultural land protection in European Union

In the context of combating climate change and protecting the environment, the European Union has currently adopted several key documents presenting strategies or agreements that will have a direct impact on agricultural land protection.

These include, in particular, the *European Green Deal* which represents the EU’s efforts to become the first climate-neutral continent on Earth. It aims to become a modern and competitive economy with zero net greenhouse gas emissions by 2050, which will grow economically and at the same time will not depend on the use of resources.

In connection with the protection of agricultural land, the measures entitled Agriculture and the Environment and Oceans are key in the framework of the European Green Deal. The aim of the measure *Agriculture* is primarily to create a safe, balanced and, above all, sustainable and self-sufficient food system within the sub-measure *Reform of the Common Agricultural Policy*. As a direct follow-up to the protection of agricultural land, this measure is mainly affected by the reform of the Common Agricultural Policy in line with the objectives of the Europe Green Deal. As a result, the Common Agricultural Policy will focus on promoting natural resource management, sustainable farming practices, and strengthening biodiversity across the EU. This will support the implementation of organic production systems, such as agroecology, agroforestry, and organic farming. As a sustainable food system is the heart of the European Green Deal, its measures place an overall emphasis on the production of high-quality food with a low environmental impact, as a result of which organic farming is a key

⁽¹⁴⁾ Ministry of Agriculture and Rural Development (2013).

⁽¹⁵⁾ European Commission (2022).

⁽¹⁶⁾ Government Office of SR (2020).

⁽¹⁷⁾ Ministry of Environment (2015).

⁽¹⁸⁾ Public Procurement Office of SR (2017).

⁽¹⁹⁾ Ministry of Environment (2022).

factor. Therefore, the development of an action plan for organic farming is a separate sub-measure under the Agriculture measure. The priority is to achieve that at least 25% of the total EU land area will be managed by organic farming by 2030 (currently 8.5% of the EU's agricultural area is organic). Support for the conversion of conventional farming to organic is supposed to take place through the above-mentioned action plan based on 3 axes:

- support demand and motivate consumers to prefer products from organic farming,
- stimulation of the conversion process itself and support farmers in the process of transition to organic farming,
- promote organic matter and other positive examples such as the contribution of organic farming to environmental sustainability.

The application of these three axes will be supported mainly through the reform of the Common Agricultural Policy, in particular from rural development commitments, additionally through ecological schemes. The EU plans to strengthen agricultural advisory and technical services, including in particular the exchange of knowledge on best practices in organic farming and innovations in organic matter. As organic farming itself is knowledge-intensive, the Commission plans to allocate at least 30% of its budget to research and innovation activities in this area.

Another important sub-measure, which is one of the EU's long-term goals and includes agriculture and agricultural protection, is the Sustainable Use of Pesticides. The purpose of the sub-measure is to support the so-called integrated pest management and alternative approaches or techniques (e.g. non-chemical pesticide alternatives). The main tools of this sub-measure are training of users, producers, or distributors of pesticides, inspections of the soil fund on harmful components of pesticides, banning aerial spraying, restricting the use of pesticides in risk areas, and, last but not least, raising awareness about the risks and harmful consequences of certain pesticides. The sub-measure is directly supported and implemented by Directive 2009/128/EC of the European Parliament and of the Council which regulates a framework for Community action to achieve sustainable use of pesticides. To implement this Directive, the Member States have drawn up separate action plans.

The second measure, entitled Environment and Oceans, which partly covers the protection of agricultural land, aims, in particular, to protect our biodiversity and ecosystems, reduce pollution of all natural resources, including soil, and improve waste management. Concerning the protection of agricultural land, the following measures are key:

- *The 2030 Biodiversity Strategy* as a long-term plan to protect nature and reverse the degradation of ecosystems, which will include e.g. extension of Natura 2000 protected areas with high biodiversity and climate value. The strategy also aims to restore currently degraded ecosystems and manage them sustainably,
- *The Organic Farming Action Plan*, already mentioned under the Agriculture measure, to ensure that at least 25% of the EU's agricultural area is managed organically by 2030,
- *Action plan for zero air, water, and soil pollution* as natural

resources. The aim is to reduce pollution of these resources to levels that are not considered harmful to health, and ecosystems to a level that the planet can cope with, which will create an environment free of toxic substances. In the context of the protection and restoration of agricultural land, the specific objective is to ensure a 50% improvement of its current condition,

- *The fork-to-fork strategy* also has a partial impact on the protection of agricultural land by supporting consumer demand for organically produced food with many benefits for individual health and the overall sustainability of the planet. The Common Agricultural Policy and the Fisheries Policy are the key tools for implementing this strategy.

One-third of the €1.8 trillion investments from the NextGenerationEU recovery plan has been earmarked for the European Green Deal which will also be financed from the seven-year budget of the EU. Several legislative frameworks are currently being prepared under the various measures of the European Green Deal⁽²⁰⁾.

The adoption of a new European Soil Strategy 2030, reflecting the demands of the public, the European Parliament, and the Member States, is also considered a breakthrough in soil protection. The strategy identifies at the outset that, even though "land hosts more than 25% of all biodiversity on the planet and is the basis of food chains that feed humanity and above-ground biodiversity", up to 70% of the total land area is not healthy. It is one of the reasons, the EU wants to pay urgent attention to protecting and improving the overall condition of the soil. *The main vision of the strategy is to achieve healthy soil by 2050*, when "land protection, sustainable use, and restoration would become the norm". EU strategy for soil by 2030 defines medium-term and long-term goals that will directly contribute to the goals of the Europe Green Deal.

The medium-term goals until 2030 represent:

- combating desertification,
- restoration of degraded and carbon-rich ecosystems,
- greenhouse gas removal of 310 million tonnes of CO₂ equivalent per year for the land use, land-use change, and forestry sector (LULUCF),
- until 2027 to achieve a good ecological and chemical status of surface waters and good chemical and quantitative status of groundwater,
- until 2030 to reduce nutrient losses by at least 50%, reduce the overall use and risk of chemical pesticides by 50% as well as the use of more dangerous pesticides by 50%,
- to achieve significant progress in the remediation of contaminated areas.

The long-term goals until 2050 represent:

- zero clear soil coverage,
- reduction of soil pollution to a level that is not considered harmful to human health and natural ecosystems and which respects the natural boundaries of our planet, therefore to create an environment that will be free of toxic substances,

⁽²⁰⁾ European Commission (a) (2021).

- to achieve a climate-neutral Europe, achieve terrestrial climate neutrality in the EU by 2035,
- until 2050 to achieve a climate-change resilient society within the EU.

The most important framework of the strategy from the point of view of Slovakia as an EU Member State will be the legislation on soil health, the so-called Act of *The Soil Health*, which the European Commission plans to present in 2023 and will be drafted in consultation with the Member States to ensure the principle of subsidiarity and national competences. The consultation will also include an assessment of the possibility of reducing nutrient losses by at least 50%, which will directly reduce fertilizers use by at least 20%.

As part of the Soil Strategy 2030, the European Commission also came up with a proposal for a “*test your land for free*” initiative. The initiative aims to provide users with the necessary data on soil composition (pH, organic matter, etc.), as a result of which it will be easier to select and implement appropriate soil management practices in relation to its sustainability. European Commission recommends to the Member States implement this initiative at the national level. Regarding the funding of individual activities, the Commission states that “the current EU budget provides funding sources to support the sustainable use and restoration of degraded land, such as the CAP, program LIFE, Horizon Europe, Cohesion policy”.

In order to facilitate cooperation and consultation between all stakeholders, a new governance model based on a “*network of networks*” called the *EU Coalition4HealthySoils (C4HS)* will also be designed and developed. The soil expert group will also be extended to ensure a balanced representation of stakeholders.

Regarding the next steps resulting from the Soil Strategy 2030 for Slovakia as one of the EU Member States, it will be necessary to evaluate the strategy in detail, harmonize positions and competences between the Ministry of Agriculture and Rural Development of the Slovak Republic and the Ministry of the Environment, to promote the importance of the legislative framework for soil protection and health and also to provide co-operation in shaping the legislative framework in the presented Strategy⁽²¹⁾.

IV. Conclusion

In Slovakia, there is currently a wide range of legislative, economic, and voluntary tools that are implemented in the field of agricultural land protection.

As far as legislative tools are concerned, Act No. 220/2014 Coll. on the protection and use of agricultural land implemented by the Regulation of the Government of the Slovak Republic no. 58/2013 Coll. on levies for seizure and unauthorized occupation of agricultural land, which regulates the basic rate of levy on agricultural land withdrawal for non-agricultural purpose is considered the most important and effective. Other important legislative tools are also Act no. 330/1991 Coll. on Land Adjustment, Land Ownership Arrangement, Land Offices, Land Fund, and Land Communities and Act no. 140/2014

⁽²¹⁾ European Commission (b) (2021).

Coll. on the acquisition of ownership of agricultural land and the amendment of certain laws.

Important economic tools for the protection of agricultural land are in particular levies for agricultural land withdrawals and unauthorized occupation, within the category of sanctioning economic tools and payments and subsidies for agricultural land protection, within the category of stimulating economic tools.

Environmental education in particular has great potential in the field of voluntary tools, but as mentioned in the document of the Ministry of Environment of the Slovak Republic, the concept of this type of education in Slovakia is not yet sufficiently updated and finalized.

In the context of the protection and sustainability of agricultural land, raising awareness or implementing more effective goals, new European Union strategies, in particular, the European Green Deal or the European Soil Strategy 2030 appear, which, among other things, commit themselves to:

- ensure that at least 25% of the land is organically cultivated by 2030,
- ensure at least a 50% improvement in the current soil condition,
- reduce the use of harmful pesticides and other substances in soil by 50% by 2030,
- prepare a legislative framework for soil protection, the so-called Soil health law, etc.

Despite the existence of all described tools in Slovakia, the total area, but also the quality of agricultural land has been declining for a long period of time^{(22), (23)}. Therefore, future research needs to examine in particular the effectiveness of the tools as such, for example, levies for agricultural land withdrawal for non-agricultural purposes, as they do not appear to be high enough to act as a barrier for land acquirers. It is also necessary to examine the effectiveness of the authorities in terms of the implementation of specific tools. A more detailed analysis of tools or land management strategies applied in other countries with similar predispositions and conditions as Slovakia and their effectiveness may also be a suitable solution for the implementation of the right tools for soil protection.

References

1. CEDR. 2017. *Journal of Rural Law*. [online]. [cit. 2022.06.20]. Available online: <<https://www.cedr.org/wp-content/uploads/2019/12/CEDR-JRL-2017-1.pdf>><https://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
2. EUROPEAN COMMISSION (a). 2021. *European Green Deal*. [online]. [cit. 2022.04.05]. Available online:<https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_enhttps://www.mdpi.com/2073-445X/10/8/873/htm - B46-land-10-00873>.
3. EUROPEAN COMMISSION (b). 2021. *EU Soil Strategy for 2030*. Reaping the benefits of healthy soils for people, food, nature and climate [online]. [cit. 2022.14.05]. Available online:< https://ec.europa.eu/environment/publications/eu-soil-strategy-2030_enhttps://www.mdpi.com/2073-445X/10/8/873/htm - B46-land-10-00873>.

⁽²²⁾ Palšová, Melichová, Melišková (2019).

⁽²³⁾ Machničová, Palšová (2020).

4. EUROPEAN COMMISSION, 2022. *Factsheet on 2014–2022 Rural Development Programme for Slovakia*. [online]. [cit. 2022.04.21]. Available online: <https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/rural-development/country/slovakia_skhttps://www.mdpi.com/2073-445X/10/8/873/htm - B46-land-10-00873>.
5. GOVERNMENT OFFICE OF SR, 2020. *Partnerská dohoda Slovenskej republiky na roky 2021–2027*. [online]. [cit. 2022.04.24]. Available online: <<https://www.partnerskadohoda.gov.sk/programove-obdobie-2021-2027/https://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
6. JAĎUŠOVÁ, J. et al. 2015. *Ekonomické a legislatívne nástroje životného prostredia*. Banská Bystrica : Belianum, 174 p. ISBN 978-80-557-1027-3.
7. LAZÍKOVÁ, J. 2010. *Cena a hodnota poľnohospodárskej pôdy*. Variable value of agricultural land. Nitra: SPU. [online]. [cit. 2022.04.21]. Available online: <<http://www.slpk.sk/eldo/2011/zborniky/03-11/lazikova2.pdfhttps://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
8. MACHNIČOVÁ, Z., PALŠOVÁ, L. 2020. *Vplyv vnútornej migrácie obyvateľov na kvalitu poľnohospodárskej pôdy v rámci vybraných regiónov Slovenska*. Education, 2020. [online]. [cit. 2022.04.28]. Available online: <https://www.researchgate.net/profile/Zina-Machnicova-2/publication/350277862_vplyv_vnutornej_migracie_obyvateľov_na_kvalitu_poľnohospodárskej_pody_v_rámci_vybraných_regionov_slovenska/links/60587119299bf173675ca6e5/vplyv-vnutornej-migracie-obyvateľov-na-kvalitu-poľnohospodárskej-pody-v-rámci-vybraných-regionov-slovenska.pdfhttps://www.mdpi.com/2073-445X/10/8/873/htm - B46-land-10-00873>.
9. MACHNIČOVÁ, Z. 2021. *Evaluation of Selected Indicators Pointing at the Current Condition and Importance of Agricultural Land Protection in Slovakia*. EU agrarian Law, 10(1), 20–26. [online]. [cit. 2022.04.03]. Available online: <<https://www.sciendo.com/article/10.2478/eual-2021-0004https://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
10. MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT, 2013. *Koncepcia rozvoja pôdohospodárstva na roky 2013–2020*. [online]. [cit. 2022.04.21]. Available online: <<http://www.mpsr.sk/download.php?fid=7015https://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
11. MINISTRY OF ENVIRONMENT, 2015. *Rezortná koncepcia environmentálnej výchovy, vzdelávania a osvetu do roku 2025*. [online]. [cit. 2022.04.25]. Available online: <<https://www.minzp.sk/files/dokumenty/strategicke-dokumenty/rezortna-koncepcia-ewva.pdf>>.
12. MINISTRY OF ENVIRONMENT. 2022. *Zelené verejné obstarávanie*. [online]. [cit. 2022.04.24]. Available online: <<https://www.minzp.sk/obehove-hospodarstvo/environmentalne-manazerstvo/zelene-verejne-obstaravanie/https://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
13. PALŠOVÁ, L. - MELICHOVÁ, K. - MELIŠKOVÁ, I. 2019. *Modelling Development, Territorial and Legislative Factors Impacting the Changes in Use of Agricultural Land in Slovakia*. Sustainability, 11(14), 3893. [online]. [cit. 2022.04.24]. Available online: <<https://www.mdpi.com/2071-1050/11/14/3893https://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
14. PUBLIC PROCUREMENT OFFICE OF SR, 2017. *Zelené verejné obstarávanie*. [online]. [cit. 2022.04.24]. Available online: <https://www.google.com/url?sa=t&trct=j&q=&resrc=s&source=web&cd=&ved=2ahUKEwjDt4K03Lb3AhXoQ_EDHdrmApUQFnoECAGQAQ&url=https%3A%2F%2Fwww.uvo.gov.sk%2Fextdoc%2F1675%2FZ_VO&usg=AOvVaw3RntDeBS1NIS6Fc5gJLQjhttps://www.mdpi.com/2073-445X/10/8/873/htm - B46-land-10-00873>.
15. SLOVAK ENVIRONMENT AGENCY a). 2020. *Ekonomické nástroje*. In Enviroportál. [online]. [cit. 2021.12.03]. Available online: <<https://www.enviroportal.sk/environmentalne-temy/starostlivost-o-zp/ekonomicke-nastroje?view=print> <https://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
16. SLOVAK ENVIRONMENT AGENCY b). 2020. *Dobrovoľné nástroje environmentálnej politiky*. In Enviroportál. [online]. [cit. 2021.12.03]. Available online: <<https://www.enviroportal.sk/environmentalne-temy/starostlivost-o-zp/dobrovolne-nastroje-environmentalnej-politikyhttps://www.mdpi.com/2073-445X/10/8/873/htm> - B46-land-10-00873>.
17. Act No. 220/2014 Coll. on the protection and use of agricultural land.
18. Act no. 582/2004 Coll. on local taxes and local fees for municipal waste and small construction waste.
19. Regulation no. 58/2013 Coll. on levies for agricultural land withdrawals and unauthorized occupation.

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IMPLEMENTATION OF WASTE MANAGEMENT PROGRAM: CASE STUDY OF SELF-GOVERNMENT UNIT OF BAČKI PETROVAC IN SERBIA

IMPLEMENTÁCIA PROGRAMU ODPADOVÉHO HOSPODÁRSTVA: PRÍPADOVÁ ŠTÚDIA SAMOSPRÁVNEJ JEDNOTKY BAČKI PETROVAC V SRBSKU

Marina VALENČIKOVÁ*

I. Introduction

Waste Management Program of the Republic of Serbia (hereinafter WMP; Serbia) for the years 2022–2031 has been accepted by the Government of Serbia at a session which took place on 28th of January 2022⁽¹⁾. Forerunner of the WMP was

⁽¹⁾ Program upravljanja otpadom u Republici Srbiji za period 2022 – 2031 (2022).

Abstract (EN)

As part of the negotiations for EU accession, the Republic of Serbia through Chapter 27 (Poglavlje 27 u Srbiji: Napredak pod ključem⁽¹⁾), has begun the process of establishing a waste management system and adapting it to the goals and *acquis communautaire*⁽²⁾. The key document in Serbia that aims for environmental awareness is called the Waste Management Program of the Republic of Serbia. Followed by the Waste Management Program of the Republic of Serbia, the Regional Waste Management Plan for 2019–2028 has been created and is addressing waste management and establishing a Regional Centre in the city of Novi Sad for Waste Management. Furthermore, the Local Waste Management Plan for the self-government unit of Bački Petrovac has been adopted in May 2021.

⁽¹⁾ Alternativa za bezbednije hemikalije, Beogradska otvorena škola, Centar za unapređenje životne sredine, Društvo za zaštitu i proučavanje ptica Srbije, Inženjeri zaštite životne sredine, Jedan stepen Srbija, Mladi istraživači Srbije, Mreža za klimatske akcije Evrope (CAN Europe) i Svetska organizacija za prirodu Adria – Srbija (WWF Adria – Serbia). 2021. Koalicija 27 Poglavlje 27 u Srbiji: „Napredak pod ključem“.

⁽²⁾ Set of laws and all juridical procedures which constitute the body of European Union Law.

Keywords (EN)

waste management program, regional waste management plan, local waste management plan, Serbia, Bački Petrovac

the Waste Management Strategy (hereinafter Strategy) for the years 2010–2019 and was implemented based on the conditions for the establishment and development of an integrated WM system in Serbia⁽²⁾. If we compare the process of adoption and content of Serbian WMP with the Slovak one, we can state as follows: Slovakia (SR) as an EU member state has enacted not only WMP SR 2021 – 2025, also the Waste Prevention Program SR 2019 – 2025, and the Environmental Strategy until 2030. The overarching goal of these strategic documents is to achieve a higher level of environmental quality and waste recycling.

The reasons why the new document in Serbia was not adopted on time are unknown, as well as why the name was changed from the Strategy to the WMP. Based on the WMP, Waste Management Act (hereinafter WMA): 36 / 2009–115, 88 / 2010–

⁽²⁾ Strategija upravljanja otpadom za period 2010–2019 (2010).

Abstrakt (SK)

V rámci rokovaní o vstupe do EÚ, Srbská republika prostredníctvom kapitoly 27 (Poglavlje 27 u Srbiji: Napredak pod ključem) začala proces zriaďovania odpadového hospodárstva, jeho prispôsobenia cieľom a *acquis communautaire*. Kľúčový dokument v Srbsku, ktorý sa zameriava na environmentálne povedomie, sa nazýva Program odpadového hospodárstva Srbskej republiky. V nadväznosti na Program odpadového hospodárstva Srbskej republiky bol vytvorený Regionálny plán odpadového hospodárstva na roky 2019 – 2028, ktorý rieši odpadové hospodárstvo a zriaďuje Regionálne centrum odpadového hospodárstva v meste Nový Sad. Okrem toho bol v máji 2021 prijatý Miestny plán odpadového hospodárstva pre samosprávny celok Bački Petrovac.

Kľúčové slová (SK)

program odpadového hospodárstva, regionálny plán odpadového hospodárstva, miestny plán odpadového hospodárstva, Srbsko, Báčsky Petrovec

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170, 14 / 2016–17, 95 / 2018–267 has been implemented in the practice. Following WMA, regional waste management plan of city of Novi Sad and local waste management plan for the self-government unit of Bački Petrovac (hereinafter BP) has been executed.

II. Objective and Methodology

The paper's theoretical foundation is based mostly on an interpretation of Serbia's amended WMP legislation and strategic documents.

The research study includes information on Serbia's WMP, the city of Novi Sad's regional waste management plan, and the self-government unit of BP's local waste management plan. The local waste management strategy for the BP public utility business Komunalac and Gloakvalis self-government unit has been discussed. Data from Eurostat (assessed period 2011–2019) were utilized in the study paper, including data on municipal waste by waste management operations and the recycling rate of municipal garbage in Serbia, as well as data for Komunalac and Gloakvalis for the year 2021. Only data up to 2019 was available from Eurostat for Serbia, based on the most recent local document for 2021. The goal of this research study is to provide a critical assessment of the Serbian Waste Management Program's adoption process and content.

III. Results and Discussion

3.1 Waste Management Program of Republic of Serbia

As stated in WMP, progress in the previous period has been made in harmonizing waste management (hereinafter WM) regulations with European Union (hereinafter EU) regulations, in institutional strengthening and reaching regional agreements for the establishment of joint waste management, as well as in the construction of a number of sanitary landfills. In the EU, legislation and waste recovery strategies aim to reduce landfill waste by separating its components in the recycling process⁽³⁾. However, differences in terms of waste handling among the EU member states are immense. Slovakia belongs to the lowest quartile of EU states in terms of waste volumes disposed of by landfilling⁽⁴⁾.

The goals set by the Serbian Strategy have not been fully achieved, particularly in the scope of organized waste collection, the degree of primary waste separation and recycling, infrastructure construction of waste disposal at unsanitary landfills and dumps, application of economic instruments and establishment of sustainable WM financing system. Accordingly, the Ministry of Environmental Protection (hereinafter: The Ministry) coordinated the development of the WMP in order to achieve continuity in the implementation of WM policy and its harmonization with EU regulations and standards. Despite the fact that the Serbia has a primary separation law that requires the separation of plastic, paper, glass, and

metal in specially marked containers, separate collection does not work in practice (with the exception of some local governments). One of the principles that will be applied in order to ensure a financially sustainable WM activity is the “polluter pays” (Zagađivač plaća – Plati koliko zagađuješ) principle. Polluters must bear the full cost of their activities' consequences, and waste collection, treatment, and disposal costs must be included in the product's price. The full cost recovery principle should be applied to waste collection and disposal services, as well as the introduction of financial incentives for waste reuse and recycling. Another innovation is the “Pay as much as you throw away” (Plati koliko baciš) principle, which allows households and legal entities to have a say in how much they pay for municipal waste collection services. They may require a lower amount of waste fees if they separate waste at the point of origin, or those who compost.

As it can be seen in Fig. 1, generated, treated and disposed waste by incineration and other (D1–D7, D12) has been used. However, disposal – incineration (D10) and energy recovery (R1) it is not implemented yet.

In Fig. 2, recycling rate of municipal waste in Serbia is described. Based on the figure, recycling rate is decreasing because awareness of the benefits of recycling exists, but the conditions for this process are not fully implemented. No data is available after the year 2018.

Further as it is written in the WMP, a component of “home composting” will be included in a package of support for local governments and citizens dealing with biodegradable waste at home. This measure focuses on rural areas, where home composting space is more readily available and where the benefits of reducing separate collection and transportation costs are greatest. In rural areas, all households will be given home composters and will make their own compost.

3.2 Regional Waste Management Plan of city of Novi Sad

In accordance with the WMP, the self-government unit (municipality) of BP agrees that it needs to be part of the Regional Waste Management Centre for the City of Novi Sad and the municipalities of Bačka Palanka, Bački Petrovac, Beočin, Žabalj, Srbobran, Temerin and Vrbas for the period 2019–2028⁽⁵⁾ (Fig. 3).

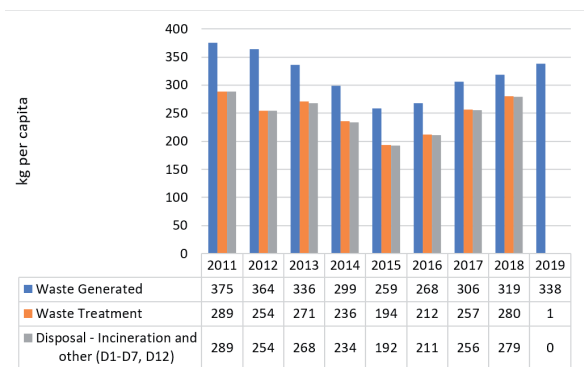
Currently, underground containers have been installed in the City of Novi Sad, and a system of primary separation of waste into two streams (mixed recyclable and residual waste) has been introduced. The Regional Waste Management Plan for the Waste Management Region proposes the construction of two transfer stations (in Bačka Palanka and Vrbas), while waste collected from other municipalities in the Region would be transported directly to the Regional Centre in Novi Sad. Calculations show that the construction of the transfer station in Bačka Palanka is economically justified, while the transfer of the station in Vrbas is economically viable if waste collected from the neighbouring municipality – Srbobran – is transported to Vrbas.

⁽³⁾ Marišová, Valenčíková (2021).

⁽⁴⁾ Mariš–Marišová (2021).

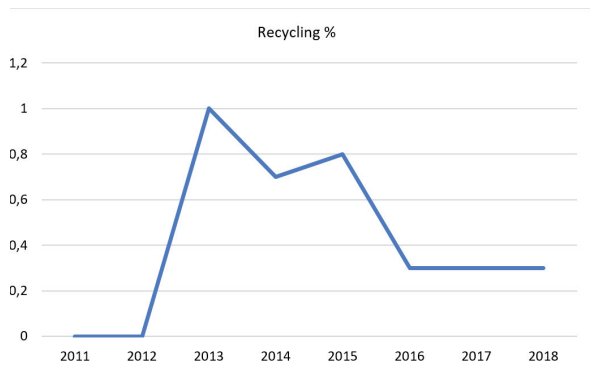
⁽⁵⁾ Grad Novi Sad (2020).

Figure 1: Municipal waste by WM operations



Source: own processing based on Eurostat, 2022

Figure 2: Recycling rate of municipal waste in Serbia



Source: own processing based on Eurostat, 2022

3.3. Local Waste Management Plan of municipality of Bački Petrovac

The local WM plan is a document that organizes the WM process at the municipal / city level. The local plan is adopted for a period of 10 years, and is reviewed every five years.⁽⁶⁾ The Law on Waste Management “ No. 36/09, 88/10, 14/16 and 95/18 – other law) defines the obligation to develop local and regional WM plans that should be mutually harmonized with the WMP of Serbia⁽⁷⁾.

The municipality of BP a municipality located in AP Vojvodina and belongs to the South Bačka district. In 2020, according to the Statistical Office of the Republic of Serbia, 12 605 inhabitants lived in municipality of BP⁽⁸⁾. In Fig. 4, location of self-government unit has been located.

In the Tab. 1., competences of Serbia, Autonomous Province (hereinafter AP) of Vojvodina as well as local self-government unit of BP has been identified.

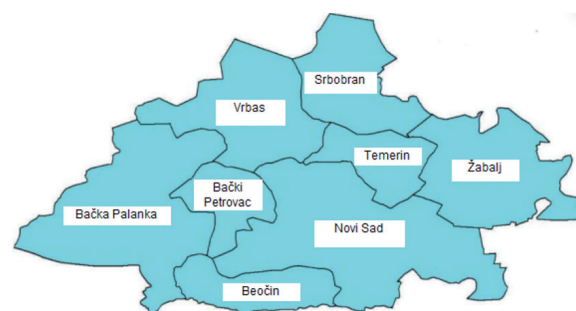
Only a company that is constantly working to improve its procedures and processes and participates in developing new products and services that can bring innovations to custom-

⁽⁶⁾ Lokalni plan upravljanja otpadom za opštinu Bački Petrovac (2011).

⁽⁷⁾ Zakon o upravljanju otpadom: 36/2009-115, 88/2010-170, 14/2016-17, 95/2018-267.

⁽⁸⁾ Statistical Office of the Republic of Serbia (2021).

Figure 3: Regional Spatial Plan of City of Novi Sad

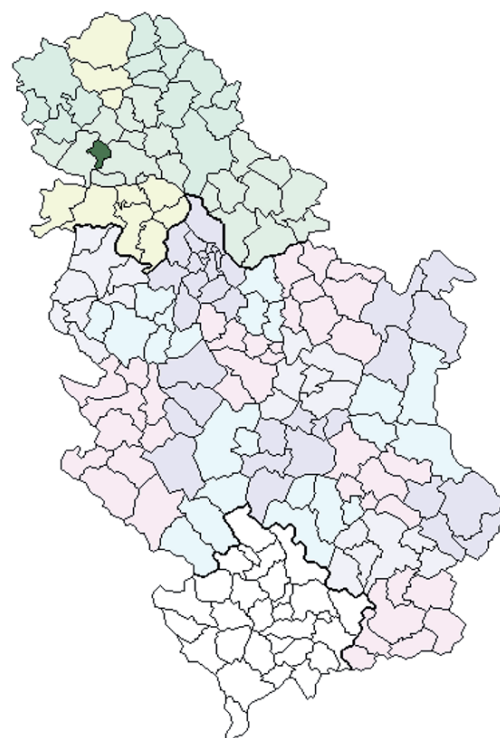


Source: Official gazette of the city Novi Sad^{(1), (2)}

⁽¹⁾ Službeni list grada Novog Sada (2012).

⁽²⁾ Službeni list opštine Beočin (2020).

Figure 4: Self-government unit of BP in Serbia



Source: Self-government unit (municipality) of BP, 2022⁽¹⁾

⁽¹⁾ Opština Bački Petrovac (2022).

ers can be successful on the market⁽⁹⁾. Communal activities in the municipality of BP, for the settlements of Bački Petrovac, Kulpin and Maglič are performed by the public communal company “Komunalac” from Maglič, while Gloakvalis I.L.c collects waste in Gložan. In “Komunalac”, 7 workers are employed for an indefinite period, while 1 worker is employed under a contract. Komunalac is responsible of waste collection

⁽⁹⁾ Mura (2021).

Table 1 Competences of state, AP and local self-government unit

Ministry	AP of Vojvodina	Local self-government unit - BP
develops national policy and national WMP	participates in the development of the Strategy and individual national WM plans	adopts a local WM plan, provides conditions and takes care of its implementation; defines local policy
prepares draft legislation harmonized with EU legislation	adopts the WMP of protection and development of the environment on the territory of the AP and determines the measures for its implementation in accordance with the basic goals determined at the republic level	regulates, provides, organizes and implements the management of municipal, ie inert and non-hazardous waste on its territory
coordinates WM activities of importance to the Republic and monitors the situation	coordinates WM activities of importance for the AP and monitors all environmental factors and authorizes professional organizations to perform these activities in the territory of AP Vojvodina	determines the prices of communal services
adopts regional WM plans other than those in the territory of the AP	adopts regional WM plans on its territory	performs communal inspection supervision and supervision in the field of environmental protection
performs functions in accordance with international treaties and agreements	issues permit, consents, certificates and other acts in accordance with the Law on WM as well as other laws, keeps records and submits data to the Ministry	establishes fees and penalties
issues permit for import, export and transit of waste, i.e. manages chemicals, hazardous and noxious substances and waste, including the production and trade of poisons and transboundary movements of waste in accordance with the Basel Convention	forms an information subsystem on environmental protection and improvement and on waste, as part of a single information system of the Serbia	provides financing for the performance of activities within its competence, determines the collection procedure and collects local utility fees, including the collection of services in the field of municipal, i.e. inert and non-hazardous WM
manages or coordinates the implementation of large investment projects in the field of waste financed from international or domestic sources	performs administrative supervision in all areas of environmental protection and WM, except in the areas of hazardous substances and biodiversity conservation, and takes measures for effective elimination of illegalities	issues permits for the collection and treatment of municipal and construction waste, approvals and other acts in accordance with the Law on WM as well as other laws, keeps records and submits data to the Ministry
determines authorized organizations regarding WM		controls the activities of the company with which it has contracted the services of collection, transport and disposal of municipal waste
establishes and develops information system on waste on the territory of the Republic		supervises and controls WM measures
performs inspection supervision and control of the application of WM measures		

Source: local WM plan, 2021 (not yet published publicly)

of 4193 households. "Gloakvalis" deals with the management of municipal waste from the territory of the village as well as arranging and maintaining green areas and the environment. Gloakvalis has 10 employees. Waste collection is done 1 working day, according to the plan and WMP. Gloakvalis collects waste from 747 households in Gložan. Based on that, in Tab. 2, and Tab. 3, data from the public utility company of Komunalac and Gloakvalis has been described. When it comes to data, there are no records for separated municipal, green, construction, or separated waste from the Komunalac public utility company, making it difficult to track the recycling process. These data have been provided by Gloakvalis, making the recycling process in the BP area more transparent.

The following Tables 4 and 5 show the monthly prices of

municipal waste cooperated by public utility companies such as Komunalac and Gloakvalis.

As for 2021 year, 35 inhabitants of municipality of BP received composters from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) donation and remaining 65 composters were supported by municipality of BP⁽¹⁰⁾. The only form of composting in the municipality of BP is home composting. This type of treatment of biodegradable waste is mainly represented in households, mostly from rural areas, using the most basic techniques of biodegradation of waste. As part of the future Regional Waste Management Concept, a green waste composting plant will be built within the JKP "Gradsko

⁽¹⁰⁾ Opština Bački Petrovac (2021).

Table 2: Data from the public utility company “Komunalac” on the amount of waste

Type of waste collected	Quantity (t / year)
Mixed municipal waste - total	1300
From households (* estimate)	800
From enterprises and public sector (institutions) (* estimate)	500
Separated municipal waste	no records
Green waste (garden and waste from green areas)	no records
Construction waste	no records

Source: data from local WM plan, 2021

Table 3: Data from the public utility company “Gloakvalis” on the amount of waste

Type (stream) of waste collected	Quantity (t / year)
Mixed municipal waste - total	636
From households (* estimate)	476
From enterprises and public sector (institutions) (* estimate)	160
Separated municipal waste	
Plastic	5t- PET 4t-plastics
Paper and cardboard	3
Glass	2.1
Green waste (garden and waste from green areas)	600
Construction waste	490
Other	septic tanks sludges 1220

Source: data from local WM plan, 2021

Table 4: Current monthly price of waste disposal on the territory of the municipality (“Komunalac”, Maglič)⁽¹⁾

Users	Unit of measure	Waste disposal (RSD) Without delivery for added value
Population - households	per household member	79,20 RSD
Business sector		457,87 RSD

Source: data from local WM plan, 2021

Table 5: Current monthly price of waste disposal on the territory of the municipality (“Gloakvalis”, Gložan)

Users	Unit of measure	Waste disposal (RSD) Without delivery for added value
Population - households	per household	232,35 RSD

Source: data from local WM plan, 2021

⁽¹⁾ RSD - Serbian dinar (official currency of Serbia); Medium exchange of dinars 1€ = 1117.5781 RSD. Available at: <https://www.kursna-lista.com/konvertor-valuta-EUR-RSD>.

zelenilo” in the City of Novi Sad. Green waste from the municipality of BP will also be treated at this plant. The capacity of the composting plant of JKP “Gradsko zelenilo” will be about 5,000 tons of green biomass annually, which is about 17 tons of compost material per day. Incineration and anaerobic digestion are not present in the municipality of BP.

IV. Conclusion

Legislation and WMP in Serbia aims to reduce landfill waste by separating its components during the recycling process. Separation of bio-waste is essential, especially because it makes up a large portion of communal waste. However, a vital issue

for Serbia is that there is a lack of staff (experts in the WM sector, public utility companies and local governments) and equipment such as bins for separating communal waste. This study is unusual in that it is the first to compare the WMP of the Republic of Serbia, the Regional WM Plan of the city of Novi Sad, and the Local WM Plan of the municipality of BP. There is awareness about the benefits of recycling, but not about the conditions for it to be completely implemented. Additionally, no recycling rate goal has been set in the WMP of the Republic of Serbia. Although, there are waste management strategies accessible, no universal waste management system for all countries has yet been devised. This may be evident in policymakers’ decisions, as the national WMP follows the ideas

and norms of the regional and local WM plans; self-reflection might be seen in the areas of data collection, which is clearly lacking, more transparent and efficient communication between policymakers and stakeholders, and obtaining feedback from waste management research. To summarize, the future of waste management in Serbia should begin with data gathering, effective communication between policymakers and stakeholders, and establishing defined objectives.

References

1. *Alternativa za bezbednije hemikalije*, Beogradska otvorena škola, Centar za unapređenje životne sredine, Društvo za zaštitu i proučavanje ptica Srbije, Inženjeri zaštite životne sredine, Jedan stepen Srbija, Mladi istraživači Srbije, Mreža za klimatske akcije Evrope (CAN Europe) i Svetska organizacija za prirodu Adria - Srbija (WWF Adria - Serbia). 2021. Koalicija 27 Poglavlje 27 u Srbiji: „Napredak pod ključem“. [online] [cit. 2022-04-09] Available at: <https://www.koalicija27.org/wp-content/uploads/2021/10/K27-izvestaj-2021-web.pdf>
2. Grad Novi Sad. 2020. *Potpisan regionalni plan upravljanja otpadom*. [online] [cit. 2022-04-07] Available at: <http://www.novisad.rs/lat/potpisan-regionalni-plan-upravljanja-otpadom-0>.
3. *Lokalni plan upravljanja otpadom za opštinu Bački Petrovac*. 2011. [online] [cit. 2022-04-10] Available at: <http://www.sepa.gov.rs/download/UpravOtpad/BackiPetrovacLPUO.pdf>.
4. MARIŠOVÁ, E. - VALENČIKOVÁ, M. 2021. *EU legislative support in the waste sector: Podpora legislativy EÚ v odpadovom sektore*. In EU agrarian Law, vol. 10, no. 2, pp. 21-27. ISSN 1339-9276.
5. MARIŠ, M. - MARIŠOVÁ, E. 2021. *Innovations in waste enterprising: the approaches to waste recovery*. In Innovative businesses and start-ups in current business environment. Bratislava Paneurópska vysoká škola, 2021: (2021), pp. 16-7. ISBN 978-80-89453-93-1.
6. MURA, L. 2021. *Regional aspect in entrepreneurship of innovative small, medium-sized and start-up enterprises*. In Innovative businesses and start-ups in current business environment. Bratislava Paneurópska vysoká škola, 2021: (2021), pp. 23-25. ISBN 978-80-89453-93-1.
7. Opština Bački Petrovac. 2021. *Spisak prijavljenih građana za kompostiranje koji će dobiti kompostere iz donacije GIZ*. [online] [cit. 2022-04-09] Available at: <https://www.backipetrovac.rs/rs/zivotna-sredina/oglasna-tabla/spisak-prijavljenih-gradana-za-kompostiranje-koji-ce-dobiti-kompostere-iz-donacije-giz>.
8. Opština Bački Petrovac. 2022. *Location*. [online] [cit. 2022-04-10] Available at: <http://www.backipetrovac.rs/opstina/polozaj.php>.
9. *Program upravljanja otpadom u Republici Srbiji za period 2022 - 2031*. 2022. [online] [cit. 2022-04-10] Available at: https://www.ekologija.gov.rs/sites/default/files/2022-02/program_upravljanja_otpadom_u_rs_za_period_2022-2031_god_0_2.pdf.
10. *Službeni list grada Novog Sada*. 2012. [online] [cit. 2022-04-08] Available at: <https://skupstina.novisad.rs/wp-content/uploads/2016/12/Sl-26-2.pdf>.
11. *Službeni list opštine Beočin*. 2020. [online] [cit. 2022-04-25] Available at: https://www.paragraf.rs/opstinska-glasila/beocin/beocin_pdf/beocin-19-2020.pdf.
12. *Statistical Office of the Republic of Serbia*. 2021. Population. [online] [cit. 2022-04-10] Available at: <https://www.stat.gov.rs/sr-Latn/oblasti/stanovnistvo>.
13. *Strategija upravljanja otpadom za period 2010-2019*. 2010. [online] [cit. 2022-04-11] Available at: <https://www.pravno-informacioni-sistem.rs/SlGlasnikPortal/reg/viewAct/011043b3-7cee-4488-ba2c-e95f95271713>.
14. *Zakon o upravljanju otpadom: 36/2009-115, 88/2010-170, 14/2016-17, 95/2018-267 (dr. zakon)* [online] [cit. 2022-04-07] Available at: <http://www.pravno-informacioni-sistem.rs/SlGlasnikPortal/eli/rep/sgrs/skupstina/zakon/2009/36/14/reg>.

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