

THE MANAGEMENT OF PUBLIC PROCUREMENT FOR SUSTAINABLE AGRICULTURAL PRODUCTS

Ecaterina Milica DOBROTA¹, Victor BUFTEAC², Silviu STANCIU³

¹The Bucharest University of Economic Studies, Bucharest, Romania, 6 Piața Romană, District 1, Bucharest, Romania, E-mail: milicadobrota@yahoo.com

²University of Political and Economic Studies "C. Stere", 200 Stefan cel Mare si Sfânt Blvd, Chisinau, Republic of Moldova

³"Dunarea de Jos" University of Galati, 47 Domnească, Galati, Romania, E-mail: sstanciu@ugal.ro

Corresponding author: milicadobrota@yahoo.com

Abstract

The purpose of this paper is to present the procedure of managing public procurement contracts for sustainable agricultural products from the public entities perspective (with reference to setting criteria for selecting the suppliers, contract management, etc), but also from the perspective of the selling companies (from drafting the tender to products being delivered). The research is based on data processed by Eurostat (2012-2021), but also on information taken from the Romanian Electronic Public Procurement System (2018-2022). The analyses in the paper concern indicators such as: the procurement of agricultural products from Romania, and at European level the organic production of animal products, the number of processors of sustainable agricultural products, etc. In conclusion, since the public institutions buy large quantities of agricultural products, but the market for sustainable agricultural products is restricted, a global strategy for rethinking the public procurement in this area is clearly required. The work is relevant both for the contracting authorities with respect to the management of public procurement for agricultural products, but also for the companies with respect to the business management of public contracts.

Key words: public procurement, management, agriculture, sustainability

INTRODUCTION

The continuous demand for agricultural products in public institutions (hospitals, military units, school/student cafeterias, social insurance centres, etc.) is a driving force for the development of farms, processing companies and those working in the food industry. The development of the economy in accordance with the Green Deal policies and the Farm to Fork strategy puts pressure on the entire food chain [16]. Public authorities, with the large volumes of agricultural products in the procurement process, can be a good example in the implementation of sustainability regulations [2]. Purchasing organic products requires that they are provided from sustainable agriculture and be part of a sustainable food chain [17].

The management of public contracts for the supply of organic agricultural products requires thorough knowledge on the part of

the purchaser, so that he is able to draw up tender documentation in line with the applicant's requirements and sustainability conditions. Establishing technical specifications for agricultural products, growing conditions, identifying qualification criteria, evaluation factors, verifying that products are produced in an environmentally friendly way - all these may represent significant challenges for the contracting authorities. In Romania, the value of food products purchased by public institutions, based on the tendering procedures established by Law No. 98/2016 [14], can be determined by querying the platform of the Electronic Public Procurement System (EPPS) [3].

The originality of the research carried out in this paper is achieved by presenting and discussing the management stages of sustainable food supply contracts awarded under public procurement legislation.

This paper includes a section on the research method and materials used; a chapter on results and discussion, presenting analyses on organic production based on information provided by the European statistical system EUROSTAT and the EPPS platform regarding the public procurement of food products in Romania for the period 2018-2022. The last section of the paper is dedicated to the conclusions, where the authors' observations and potential topics for future research development are presented.

The aim of the research is to demonstrate the role of public institutions in the development of sustainable agriculture, organic food production and the possibility for economic operators to increase their business through public procurement contracts.

MATERIALS AND METHODS

The paper is based on information from EPPS on contracts awarded in the area of "Agriculture and Food" during the period 2018-2022.

The data have been centralised and presented graphically using tables, according to the type of procurement procedures.

Based on this information, the value evolution of food supply contracts was determined. Information from the EUROSTAT database on statistical data on organic processors, meat and milk production from 32 countries was used.

The documentation was carried out using the Web of Science, Scopus, Google Scholars databases and papers that researched organic food, European agricultural policies such as the Green Deal [5] and public procurement of organic food were selected. The European Union recommendations, the European Commission directives, as well as those of the national legislation on organic and conventional public procurement have been taken into account in the elaboration of this article.

RESULTS AND DISCUSSIONS

The Communication COM 400 (2008) of the European Commission defines the Green

Public Procurement (GPP) as the process by which public entities can purchase various works, services and products with a reduced environmental impact over their lifetime, as opposed to purchases other than GPP for the same. Among the priority sectors listed in this Commission Communication are food and catering services. The food industry has the capacity to address environmental sustainability and human health [21]. Public procurement can be considered "green" if it is provided by a public contract that complies with the criteria of good green production practices [4].

1.Organic Food Processors Market by EUROSTAT

The increased demand for sustainable food is driving more and more farmers into organic farming. Implicitly, the processors of food raw materials are forced to change the way they work, so that the final products are labelled as organic (organic or biological, the terms being equivalent). The role of organic farming is to provide clean, sustainable food that is appropriate for the human metabolism [19, 20]. The conservation agriculture practices have been promoted by the Food and Agriculture Organization of the United Nations (FAO) as an alternative to intensive farming methods [12]. The three key objectives of conservation agriculture (crop diversification, reducing soil pollution, continuous cultivation of agricultural area) should be reflected in the activity of every farm [1]. Such practices are suitable for the development of organic farms with the reduction of climate change impacts on agriculture (Alwin and Ashok, 2018). The transition from conventional to organic farming is a difficult process that requires both a change of mentality and a substantial financial effort.

From data provided by EUROSTAT, based on the information obtained from 32 countries (including Romania), for the period 2012-2021, it can be seen that, in most countries, the trend has been for a continuous increase in the number of processors of organic products, with Romania ranking the 25th at the European level (Table 1).

Table 1. Processors of organic products

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
France	614	599	616	1,181	1,231	1,468	:	:	:	:	5,709
Italy	423	525	515	470	513	695	822	819	686	:	5,468
Spain	365	361	356	351	395	454	464	540	578	610	4,474
United Kingdom	317	348	384	260	258	494	455	292	:	:	2,808
Netherlands	202	172	206	204	200	200	:	208	209	207	1,808
Sweden	113	105	143	157	176	184	196	183	175	145	1,577
Denmark	134	141	141	182	192	192	156	163	162	:	1,463
Czechia	76	87	104	131	146	124	143	174	182	217	1,384
Norway	81	75	77	93	122	99	152	125	128	:	952
Belgium	99	71	76	90	93	95	117	119	:	:	760
Finland	53	90	96	81	104	84	:	87	80	74	749
Greece	35	39	49	42	44	39	47	46	46	:	387
Portugal	21	21	30	35	34	35	36	40	47	44	343
Ireland	:	:	28	39	27	46	:	29	28	46	243
Poland	23	11	25	29	29	27	29	35	35	:	243
Hungary	24	26	28	20	15	13	16	22	12	12	188
North Macedonia	:	0	0	0	1	0	0	0	0	0	1
Slovenia	16	16	15	14	22	:	21	23	21	:	148
Latvia	13	14	17	16	22	27	:	24	:	:	133
Estonia	6	8	12	14	14	13	12	14	18	19	130
Türkiye	:	13	20	18	10	7	6	7	8	:	89
Slovakia	6	6	8	10	12	11	:	13	12	:	78
Lithuania	3	3	3	7	5	7	5	8	8	11	60
Luxembourg	:	:	6	7	7	8	9	7	6	7	57
Romania	1	1	0	3	5	5	:	4	8	8	35
Croatia	1	2	2	1	3	4	5	7	0	0	25
Bulgaria	0	1	1	5	0	1	1	1	:	2	12
Serbia	:	0	2	1	1	0	3	3	2	:	12
Cyprus	1	1	0	0	1	1	1	1	1	1	8
Iceland	:	:	:	:	:	:	1	1	2	:	4
Malta	:	0	0	:	:	0	0	0	0	0	0
Montenegro	:	:	:	:	:	:	:	:	:	:	0

Source: Authors, by using Eurostat (2022) [7].

Between 2012 and 2017, the number of organic processors was relatively constant, the peak being recorded in 2017. The decrease in their number during 2020-2021, below the 2018 level, was also influenced by the COVID 19 pandemic which slowed down the development of all industries globally and nationally (Figure 1).

The transition from conventional to sustainable agriculture requires both a change of mentality and a substantial financial effort. The dynamics in organic food production are relatively slow, although countries with advanced mechanised agriculture are being able to adapt more easily to this requirement (Figure 2).

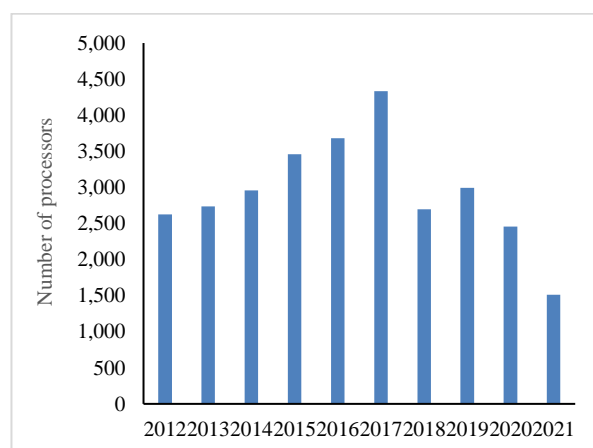


Fig. 1. Number of processors of organic products
 Source: Authors, by using Eurostat (2022) [7].

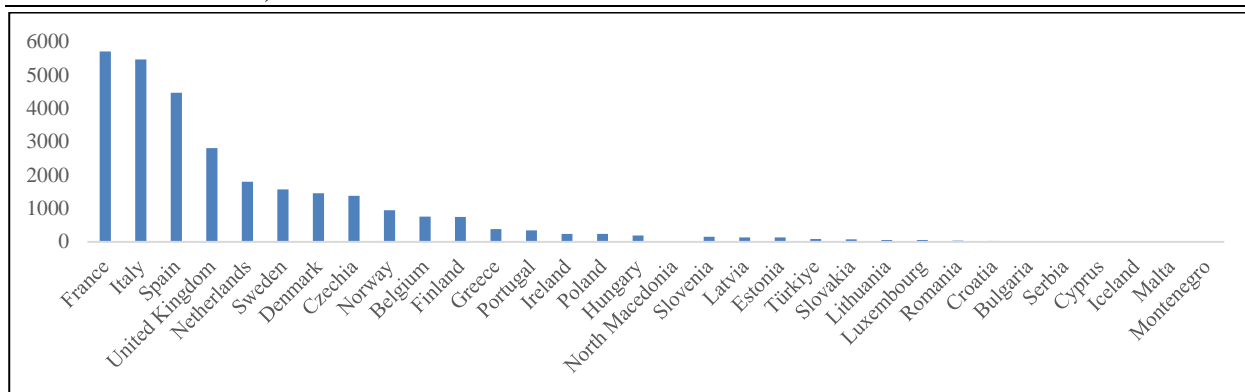


Fig. 2. Processors of organic products
Source: Authors, by using Eurostat (2022) [8].

The sustainable agriculture has developed mainly on livestock farming. Eurostat statistics include several organic animal products, with high values for beef and milk.

The sustainable agriculture has developed mainly on livestock farming. Eurostat statistics include several organic animal products, with high values for beef and milk.

Table 2. Beef and veal (tons)

Beef and veal	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
32 countries	77,831	95,720	150,275	135,109	106,968	116,710	133,508	132,942	115,045	88,064
Romania	no data	no data	no data	no data	no data	no data	no data	no data	no data	14
%										0.016

Source: Authors, by using Eurostat (2022) [8].

As far as milk production is concerned, Eurostat centralizations show increasing quantities in the period 2012-2020. In 2021, due to the pandemic, milk production fell below the level of previous years, with

Romania accounting for about 1.19% of the total reported by the 32 European countries included in the analysis (Table 3 and Figure 3).

Table 3. Raw milk products (tons)

Raw milk	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
32 countries	2,791,737	3,486,346	4,255,395	4,162,054	4,575,863	5,060,846	5,386,254	5,716,372	6,051,474	33,59,682
Romania	no data	no data	35,945	38,478	34,995	no data	28,062	42,443	36,140	39,820
%			0.844692	0.924495	0.764774		0.520993	0.742481	0.59721	1.185231

Source: Authors, by using Eurostat (2022) [8].

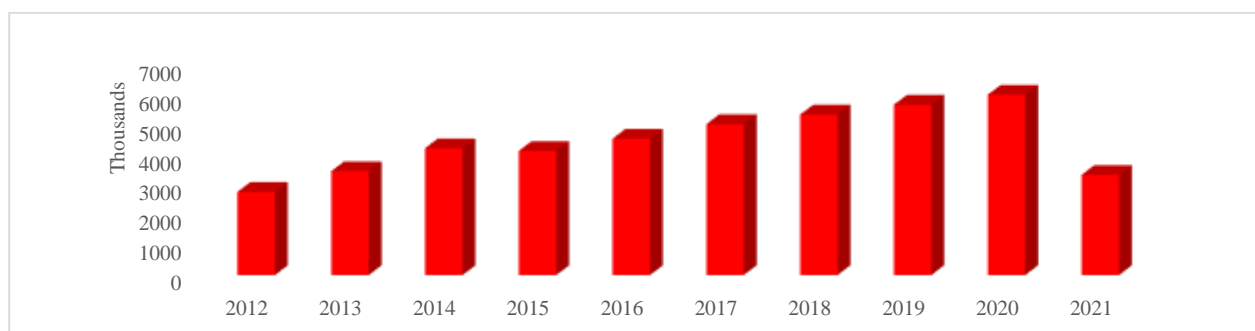


Fig. 3. Raw milk products (tons)
Source: Authors, by using Eurostat (2022) [8].

The slow development of organic agriculture in Romania, but also in other countries, is caused by the low level of interest in the market, contrary to European policies encouraging the use of domestic resources in this direction [11].

However, more and more companies operating in this field are orienting their activity towards integrating the concept of sustainability into the circular economy, from the production of raw materials to the supply of the finished food product, and the disposal of waste, be it by-products or (un)usable residues.

2. Public Procurement of the Food Product in Romania

The contracting authorities purchase significant quantities of food on a yearly basis

to feed their own staff (such as military units' employees) or those in their care (educational establishments, social welfare centres, hospitals, etc.). For public procurement contracts above a certain value threshold, award procedures in Romania are carried out via the EPPS platform, where contract award notices concluded as a result of the negotiated procedure without prior publication (NWPP), open procedure, restricted procedure or simplified procedure are also registered.

Based on the compilation of the existing EPPS information, in the section "Agriculture and Food", between 2018 - 2022, the system generated 5,952 notices of award of food supply contracts, amounting to RON 3,766,225,506 (Table 4).

Table 4. Contract value (RON)

Award procedure type	2018	2019	2020	2021	2022	Total general
NWPP	33,093,142	44,099,737	44,246,424	69,916,858	186,192,896	377,549,057
Open procedure	37,512,184	363,876,887	323,711,957	432,837,916	1,881,262,792	3,039,201,735
Restricted procedure		-	-	-	7,488,912	7,488,912
Simplified procedure	22,623,300	70,656,537	80,001,425	72,733,340	95,971,200	341,985,803
Total general	93,228,626	478,633,161	447,959,806	575,488,114	2,170,915,799	3,766,225,506

Source: Authors, by using EPPS [3].

The procurements from the EPPS relate only to food produced in a conventional food chain, none of the contracts had as their object the supply of organic products.

As the products purchased were diverse (dairy products, bakery products, butchery products, vegetables, fruit, oil, eggs, etc., including prepared food) and of high value, contracts were awarded mainly through open procedures (Figure 4).

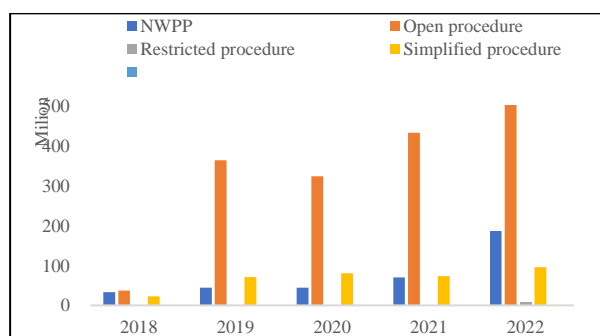


Fig. 4. Award procedure type
 Source: Authors, by using EPPS [3].

The end of the pandemic in 2022 has made it possible for pre-school children, pupils and students to be physically present in educational establishments, which has led to an increase in food purchases for canteens, for the "milk-corn and apples" programme and for other hot meal programmes.

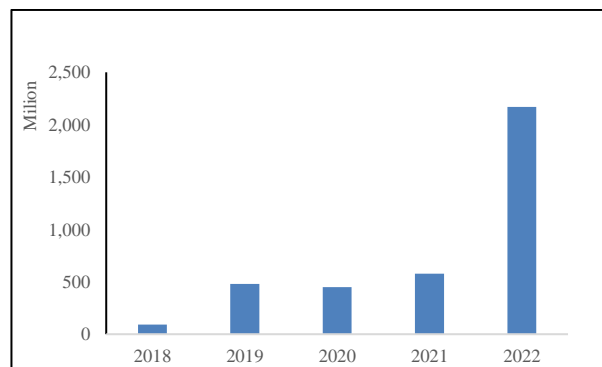


Fig. 5. Contract value (RON)
 Source: Authors, by using EPPS [3].

The social care centres have also started to provide meals for people in care again. The

increase in the value of purchases in 2022, compared to previous years, is also due to the fact that contracting authorities have resorted to concluding framework agreements over a period of two to four years instead of contracts for a period of only one year (Figure 5).

Thus, the framework agreements values, recorded in the EPPS for 2022 and taken into account in this paper, do not represent the value of the food products delivered in 2022, the actual supply of which will take place in 2023-2025, depending on the duration of the framework agreement.

All this information shows the importance of public institutions in the development of the food industry, in all its aspects: obtaining raw materials, in agriculture, processing raw materials, obtaining finished products, packaging, transporting them and waste recovery/disposal.

The public procurement contracts are an opportunity for economic operators to develop, but they must have the courage to take part in the award procedures. Therefore, companies need to identify the public procurement procedures to which they can bid, adapt their business strategies to the requirements of public entities, and determine the partners with whom they can carry out such contracts, how to adapt their production of agricultural products to the constant demand of the largest and most solvent customer - the state.

With the inevitable introduction of the "farm to fork" principle by the public institutions as well, all participants in the food chain need to rethink their business strategy, with a shift towards organic food.

3.Public Procurement for Organic Products

The procurement of environmentally friendly products (EPP) is a challenge for contracting authorities as they do not have sufficient information about them which leads to the difficulty of drafting proper tender documentation [13].

At the same time, it is a challenge for producers/suppliers as well to take part in the public procurement procedures for organic agricultural products. Given the fact that such

products are produced by small farms/enterprises, many of them are not sufficiently familiar with the techniques of tendering to public institutions and the rigours of these types of contracts. Furthermore, the high demand for agricultural products represents a barrier for small companies to engage in large contracts such as public procurement.

In terms of EPPS implementation, the current public procurement legislation (Directive 24/2016, EU) [6] covers all the steps that need to be taken. The provisions of the Directive are transposed in Romania under Law no. 98/2016 on public procurement, with its implementing rules, GD no. 395/2016 [10]. The EPPS process, as any other public procurement, requires a rigorous planning, including the stages of: (i) planning, (ii) organising the procurement procedure, (iii) contract execution.

I. The planning of the procurement

The first step in initiating any acquisition is to establish the need, such as the type of food, the quantity, but also the technical specifications of the products. In the case of entities preparing food, they must, based on recipes, determine the raw material, the ingredients required and their characteristics.

Drawing up the Necessity Report

All this information is included in a Necessity Report, which is the primary document for any procurement. If the public institution manages to define its needs as precisely as possible, both quantitatively and qualitatively, the award procedure and the contract execution will run without a problem. Thorough planning of the procurement consists of a detailed knowledge of the need and information on what the market can provide. For example, if 500 kg of organic flour is to be acquired, the public purchaser must first establish the technical specifications of the product, which are set out in a specification/technical file annexed to the Necessity Report. In the specification, the public entity introduces the conditions for fulfilling the contract, the technical characteristics of the product (e.g. to have been obtained from a sustainable farming), the certificates that the supplier must present when delivering the product, the conditions

under which the wheat was processed, the conditions for storing the flour, the packaging and delivery method, delivery time, nutrition criteria [18].

Where authority's own canteens, the purchaser must make thorough enquiries as to the availability of the relevant market to supply all the necessary products for the preparation of menus/recipes with organic ingredients. It is not sufficient to identify the producers of organic raw materials, but their ability to deliver the required quantities within the required deadlines must also be checked/analysed. At the same time, the buyer must know/check the price of the product. Due to the limited number of organic products suppliers, it is difficult to establish the estimated contract value, a study of market being required. In the absence of all this information (appropriate technical specifications, necessary certificates, marketing conditions, products price, etc.), purchasers cannot draw up an accurate and complete tender documentation.

Market consultation

The identification of organic producers and processors, the determination of the necessary information for the tender documentation can be carried out either by any classical means of market research (such as analysis of specialized catalogues, websites of the economic operators, visits to sellers) or by applying a market consultation process regulated by Directive No 24/2014 (by Law No. 98/2016) [14].

Through this process, the contracting authorities are allowed to invite economic operators, independent experts, and professional organisations in order to obtain opinions, recommendations, technical, financial, contractual solutions necessary for drafting the contract award documentation. The method of establishing the products price, the qualification criteria appropriate to the procurement procedure are elements that can be clarified within this process.

In this respect, the contracting authority must publish a notice for consulting services in EPPS informing economic operators of its intention to purchase certain products for

which purpose it submits some issues for consultation.

The consulting services notice must specify at least the following:

- the identification details of the purchasing public entity;
- the Internet address where information on the market consultation process can be found;
- the subject matter and description of the consultation;
- issues subject to the consultation;
- the period of time during which economic operators may communicate their proposals and suggestions;
- how the contracting authority shall interact with the companies interested in participating in the consultation process?

Conducting a market consultation process is beneficial to the purchaser, being able thus to objectively define a tender documentation through which the necessary products to be purchased. Since the number of organic raw materials producers is limited, it would be advisable to organise market consultations for any procurement procedure relating to such products in order to have a correct identification of the contracting conditions.

At the same time, the process is also beneficial to the economic operators, because at the meetings organised by the future buyer, their presence on the agro-industrial market is made known, they have the opportunity to get to know the potential competitors, and on the other hand, they find out, in advance, the intention of the public entity to purchase certain products that they can supply, as well as the contracting conditions.

Filtering the EPPS platform, for the period 01.01.2018-31.12.2022, by using the search engines "food", "vegetables", "fruit", "meat", "bread", "eggs", 282 market consultations for the purchase of various foods were generated. The contracting authorities were mainly interested in knowing the prices of the products in order to establish the estimated value of the contract, but also in the possibility of supplying large quantities of products. In some cases, economic operators were asked to submit proposals for product datasheets. In the case of organic food

procurement, due to the novelty of the contracting conditions, market consultation should become a mandatory part of the procurement process. At the end of the market consultation, the contracting authority should publish in the EPPS the outcome of the meetings with economic operators and the opinions received from them.

Drafting the contracting strategy

During the planning stage, the contracting authority shall also draw up the procurement strategy for any award procedure whose value is above the thresholds laid down in Art. 7(7). (5) of Law No. 98/2016.

In this document, decisions on procurement planning are recorded / finalised, such as:

(a) the estimated contract value

Given that there are few 'green' producers on the market, only in a few areas of the country, shipping costs shall be a price element that shall significantly influence the final value of the product. In establishing the estimated value of the contract, the contracting authority must also take into account other categories of expenditure, such as taxes, the cost of eco-friendly packaging, the cost of return, collection, recycling of packaging, waste generated by the supply/processing of products.

(b) qualification criteria for tenderers

These criteria are designed to "filter" economic operators so that only those who can supply products to the purchaser's required standards are allowed to compete.

The qualification criteria may refer to:

-the registration of economic operators in a professional register, such as organic farming registration;

-the ownership of environmentally friendly production capacity/equipment, use of renewable energy sources in the production of products, ownership of electric vehicles;

-the implementation of quality management standards in the production of sustainable products;

(c) the award criterion, with evaluation factors and scoring algorithm

The evaluation factors, together with the scoring algorithm, should reflect the actual advantage that the public entity shall derive

from each tenderer's technical proposal and financial proposal.

The evaluation factors may include:

the position occupied by the economic operator in the supply chain [9];

- the use of recyclable/smart packaging;
- the products delivery with electric vehicles;
- the degree of collecting recyclable materials;

the packaging reduction [15].

(d) the possibility of subdividing the contract award procedure

The organic products are produced by small companies that cannot meet the high demand of the contracting authority. At the same time, the contracting authority shall find itself in the position of not having any tenderer who can supply the full quantity required. The division of the contract into lots is the solution to satisfy the need of the public authority but also for small companies to participate in the procurement procedure.

II. Organization of the contract award procedure

At this stage, the contracting authority publishes the tender documentation in EPPS, evaluates the tenders received and awards the contract. For the tenders' assessment, the head of the entity appoints an evaluation committee. It is very important that this committee includes people who are able to assess the conformity of the tenders, have knowledge of agri-food and organic products, so that they can assess the accuracy of the documents/information in the tenders.

Based on the qualification criteria, the tenderers who have the organisational, technical and financial capacity to execute the contract and deliver the required products are selected. After the technical and financial proposals have been assessed, the evaluation committee award points and selects the winning tender.

III. Contract execution

The products delivery is the final part of the procurement process. In order to monitor the fulfilment of the contract, the contracting authority appoints a contract officer who must have a thorough knowledge of the products characteristics so that he can determine

compliance with the technical specifications from the contract documents and tender.

The proper documentation and the fulfilment of the contract require trained personnel on the part of the purchaser. Both contracting authorities and economic operators must ensure that all those involved in the contracting sustainable products, from the manager to the supplier, are well trained.

CONCLUSIONS

The demand for sustainable food is an opportunity for farmers to grow their own businesses. Public authorities, through their purchasing power and the large volumes of products they acquire, are providing incentives for economic operators to get involved in this area. At the same time, public institutions have a significant contribution to the development of sustainable agriculture and to the sustainable development objectives being implemented in the food sector.

The behaviour of contracting authorities in providing organic food is a role model, influencing people's actions in terms of nutrition and environmental protection. The state, through its policies and incentives for producers, must encourage the production of high-performance sustainable products. Contracting authorities and suppliers of sustainable products must pay attention to training the employees involved in such contracts.

The results of this article have the potential to generate future research topics such as:

- (i) the challenges and obstacles for contracting authorities in drafting tender documents and managing contracts for the supply of sustainable products;
- (ii) the barriers for economic operators in the supply of sustainable agricultural products;
- (iii) the recycling/collection of by-products and waste from the public procurement contracts for sustainable agricultural products.

REFERENCES

[1]D'Souza, A., Mishra, A.K., 2018, Adoption and Abandonment of Partial Conservation Technologies in Developing Economies: The Case of South Asia, Land

Use Policy, Vol. 70, pp. 212-223. <https://doi.org/10.1016/j.landusepol.2017.10.015>, Accessed on 28 February 2023.

[2]Dobrotă, E.M., Săracu A.F., 2022, Public Food Procurement - A Tool For A Sustainable Economy development in rural areas. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol. 22(2), 301-309. http://managementjournal.usamv.ro/pdf/vol.22_2/Art37.pdf, Accessed on 02 March 2023.

[3]Electronic Public Procurement System (EPPS), www.e-licitatie.ro, Accessed on 20 January 2023.

[4]European Commission, 2008, Communication From The Commission to the European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions Public Procurement for a Better Environment - COM/2008/0400 final. <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52008DC0400>, Accessed on 25 February 2023.

[5]European Commission, 2019, Communication From The Commission to The European Parliament, The European Council, The Council, The European Economic And Social Committee and The Committee of The Regions - The European Green Deal. Official Journal C 640 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52019DC0640>, Accessed on 28 January 2022.

[6]European Union Directive 2014/24/EU on public procurement and repealing Directive 2004/18/EC, 2014. Official Journal L 94, 28.3.2014, p. 65-242. <http://data.europa.eu/eli/dir/2014/24/oj>, Accessed on 25 January 2023.

[7]Eurostat, 2023, Processors of organic products. Last update: 12-01-2023, https://ec.europa.eu/eurostat/databrowser/view/org_cpr_exact/settings_2/table?lang=en, Accessed on 28 January, 2023.

[8]Eurostat, 2023, Organic production of animal products, last update: 17-02-2023 https://ec.europa.eu/eurostat/databrowser/view/ORG_A_PROD/default/table?lang=en&category=agr.org, Accessed on 08 March, 2023.

[9]Goosens, Y., Wegner, A., Schmidt, T., 2019, Sustainability assessment of food waste prevention measures: Review of existing evaluation practices. *Frontiers in Sustainable Food Systems*, 3, 90. <https://doi.org/10.3389/fsufs.2019.00090>, Accessed on 09 March, 2023.

[10]Government Decision no. 395/2016 for The Approval of The Secondary Norms For The Implementation of The Provisions Regarding The Awarding of The Public Procurement Contract/Framework Agreement As Regulated by Law no. 98/2016 regarding public procurement. *Official Journal of Romania*, no. 423 from June 6, 2016.

[11]Jităreanu, A.F., Mihăilă, M., Robu, A.-D., Lipşa, F.-D., Costuleanu, C.L., 2022, Dynamic of Ecological Agriculture Certification in Romania Facing the EU Organic Action Plan. *Sustainability* 2022, 14, 11105.

<https://doi.org/10.3390/su141711105>, Accessed on 25 February, 2023.

[12]Kassam A., Friedrich T., Derpsch R., 2018, Global spread of conservation agriculture. *International Journal of Environmental Studies*. 76, 29–51, DOI: 10.1080/00207233.2018.1494927, Accessed on 04 February, 2023.

[13]Krivasonoka, I., Zvirbule, A., 2017, Challenges and possible solutions in different stages of public food procurement. *Economic and Social Development: Book of Proceedings*; Varazdin, <https://www.proquest.com/openview/9e5e5ea05c9d671e0dc3728155f132d1/1?pq-origsite=gscholar&cbl=2033472>, Accessed on 12 January, 2023.

[14]Law no. 98/2016 on Public Procurement. *Official Journal of Romania*, no. 390/2016.

[15]Neto, B., 2020, Analysis of sustainability criteria from European public procurement schemes for food services. *Science of The Total Environment*, Vol. 704, DOI10.1016/j.scitotenv.2019.135300, Accessed on 02 February, 2023.

[16]Popescu, D.V., Dima, A., Radu, E., Dobrotă, E.M., Dumitrache, V.M., 2022. Bibliometric Analysis of the Green Deal Policies in the Food Chain. *Amfiteatru Economic*, 24(60), pp. 410-428. DOI: 10.24818/EA/2022/60/410, Accessed on 02 February, 2023.

[17]Roehrich, J. K., Hoejmose, S., Overland, V., 2017, Driving green supply chain management performance through supplier selection and value internalization: A self-determination theory perspective. *International Journal of Operations & Production Management.*, 37, pp.489–509. <https://doi.org/10.1108/IJOPM-09-2015-0566>, Accessed on 01 March, 2021.

[18]Smith, J., Andersson, G., Gourlay, R., Karner, S., Mikkelsen, B., E., Sonnino, R., Barling, D., 2016, Balancing competing policy demands: the case of sustainable public sector food procurement. *Journal of Cleaner Production*. 112 (1), 249–256, <https://doi.org/10.1016/j.jclepro.2015.07.065>, Accessed on 07 March, 2023.

[19]Stanciu, S., 2022, Organic Production And Food Market In Romania - Characteristics And Trends. *Economic and Social Development- 85th International Scientific Conference on Economic and Social Development*, https://www.esd-conference.com/upload/book_of_proceedings/Book_of_Proceedings_esdPorto2022_Online.pdf, Accessed on 01 March, 2023.

[20]Stanciu, S., Virlanuta, Dinu, V., Zungun, D., Ionescu, R.V., Antohi, V.M., 2019, The Perception of the Social Economy by Agricultural Producers in The North-East Development Region of Romania, *Transformations in Business & Economics*, 18 (2B), pp. 879-899.

[21]Willett,W.J., Rockström, B., Loken, M., Springmann, T., Lang, S., Vermeulen, T., Garnett, D., Tilman, F., DeClerck, A., Wood, M. et al. Food in the

Anthropocene: The EAT–Lancet Commission on healthy diets from sustainable food systems. *The Lancet* 2019, 393, 447–492. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4), Accessed on 07 March. 2023.