

## PUBLIC FOOD PROCUREMENT - A TOOL FOR A SUSTAINABLE ECONOMY DEVELOPMENT IN RURAL AREAS

Ecaterina Milica DOBROTĂ<sup>1</sup>, Alina-Florentina SĂRACU<sup>2</sup>

<sup>1</sup>Bucharest University of Economic Studies, 6 Piata Romana, 010374, Bucharest, Romania, Email: milicadobrota@yahoo.com

<sup>2</sup>"Dunarea de Jos" University of Galati, Domneasca Street, 800008, Galati, Romania, Email: Alina.saracu@ugal.ro

**Corresponding author:** milicadobrota@yahoo.com

### Abstract

*Annually, the state allocates significant amounts of money for the carrying out of public procurement contracts concerned with the supply of food products. Rural areas, due to their natural potential, but also to their existing human resource, can further develop through the implementation of projects concerned with circular economy and a sustainable food chain. The implementation of Green Deal policies, the integration of appropriate sustainable development strategies will allow the economic growth of rural areas. In the making of this article, information published in the Electronic Public Procurement System (EPPS), during the 2018-2021 period was collected, concerning contracts for the supply of various food products. The novelty of this article consists in the analysis carried out on food related public procurement, by product categories and institutions. Based on the results of this research, there are suggestions for opportunities of development in rural areas, issues related to the sustainability of the food chain which should be integrated in sustainable public procurement procedures.*

**Key words:** public procurement, food, enterprise, sustainability, rural

### INTRODUCTION

The Green Public Procurement (GPP) represents, for each state, a system through which the sustainability policies set by the European Commission can be applied, so that the Sustainable Development Goals (SDGs) can be achieved. The public institutions, called contracting authorities (Directive 24/2016, EU) [1], must approach sustainable procurement just like a jigsaw puzzle [3], that fits perfectly into the field for which it is intended, but also, they must comply with the legislation applicable to the public procurement and contract field. The circular economy (CE) must be found in everyday life; moreover, it must become a normal behaviour of any citizen and be present in all areas of activity. The European Union, through the policies of the Green Pact [5], outlines the directions to follow for a sustainable society development. The goals of the 2030 Agenda (UN) [13], show us that we do not have time to waste to achieve the SDGs and that there is much to be done. Each state must pay more attention to achieving the goals of sustainable

development, must set clear directions and the path it has to take. Five categories of the SDGs have been taken over by the Food and Food Agriculture Organization [7], for countries to reduce food waste by 50%, by 2030.

Sustainable procurement for goods, services or works must be realised with minimal damage to the environment. The inclusion of green products in public procurement contracts means that they are already part of a sustainable supply chain [15], and that are developed/created in a circular economy [11]. Through the public procurement contracts, the volumes of goods and services generated by these, the companies can develop thus contributing to the implementation of sustainability policies. At the same time, a reduction in the procurement interest, from the state, can produce imbalances in the economic activity of the companies. The study in this paper looks at the evolution of public procurement in Romania between 2018-2021 in the field of "Agriculture and food", as well as the influence of the Covid pandemic on the volume of goods purchased

by contracting authorities. Also, by analysing the data collected from the Electronic Public Procurement System (EPPS) [4] and processed in this paper, we demonstrate the role of procurement in the rural areas economy and propose directions for the development of these areas through public procurement. The novelty of the paper is given by the research on public procurement from Romania in a certain field.

From the structural point of view, the paper consists of a section dedicated to the applied research method (in which we presented the information source and the comparative method used). The article continues with the section "Results and discussions" (which contains an analysis of the procedures for awarding contracts in the field of information on "Agriculture and food", from 2018-2021), followed by the chapter "Conclusions" (where we proposed topics for future research, but also directions to follow in the rural areas development, with the help of public procurement).

The aim of the paper is to identify the interest shown by the contracting authorities (CA) in procuring products that could come from local rural areas and to identify, at the same time, the opportunities for the development of these areas through public procurement.

## **MATERIALS AND METHODS**

The data analysed in this paper were collected from (EPPS). This is an electronic platform [4], through which the contracting authorities are obliged to carry out the procurement procedures whose estimated values are above certain value thresholds (according to Law no. 98/2016 on public procurement). This paper did not take into account the procurements carried out outside EPPS as the respective data are not found, centralized, on public sites.

The chosen reference period was between 01.01.2018-31.12.2021 due to the fact that the current form of SEAP is functional from 2018. Of interest for research, are the public procurement procedures completed by contract/framework agreement, grouped in EPPS, in the field "Agriculture and food". All

information is centralized according to the total amount of estimated values related to the procedures performed. In order to establish the role that public procurement has in the rural areas development, for the period 01.01.2018-31.12.2021, the types of contracting authorities that initiated procedures in the field "Agriculture and food" and product categories included in this domain were analysed.

The comparative method was used to determine the evolution of procurement, in the period 2018-2021, and to establish the factors that influence such contracts. By centralising and interpreting the data taken from EPPS, factors were identified that may influence the procurement of products that can be purchased from rural areas.

## **RESULTS AND DISCUSSIONS**

In carrying out the activities and missions for which they were established, the public institutions must procure various types of products (office supplies, IT equipment, cars but also food, firewood, plants etc.), but also services (for example, cleaning, catering, security) or works to achieve investment objectives. In this paper, we analyse the product procurements made through EPPS and grouped in the field of "Agriculture and food", such as: dairy, meat, fruits, vegetables, bakery products, but also plants, seeds, animal feed, timber etc. Of interest are the public procurement procedures, in the mentioned field, initiated in the period 01.01.2018-31.12.2021 and which were finalized by awarding a contract or concluding a framework agreement.

In order to demonstrate the influence that public procurement has on the development of rural areas, we are concerned with identifying the product volumes and the financial (monetary) values generated by products that could come from such areas, but also the contracting authorities that require such products. In this sense, the analysis of the collected data was performed in several aspects: identifying the CAs that need products, in the field of "Agriculture and

food” and establishing the categories of products that are most requested.

A first indicator of interest is the CA categories, respectively the activity field of the institutions that purchase products included in “Agriculture and food”. From the data collected, most of the contracts concern food products purchased by entities that have to provide food for people. Most such CAs are from: the medical field (hospital units, rest and recovery centers), social assistance (social assistance units), defense (military units), education (kindergartens, schools,

universities), the penitentiary system, territorial administrative units-ATU (county councils, local councils that provided, for students, food packages or hot meal, milk). The entities also include national companies, sports clubs, ministries, research institutes, zoos etc. In Table 1, the contracting authorities were grouped by field of activity and ordered in descending order, by the total amount of the procurement procedures estimated values, in the four years that were analysed.

Table 1. The procurements volume depending on the contracting authority activity field

CA field	Contracts' estimated value (RON)				Total
	2018	2019	2020	2021	
Other entities	46,885,970.38	1,358,726,223.39	81,403,895.08	168,486,496.55	1,655,502,585.40
ATU	616,657,016.64	289,855,812.74	434,638,687.03	190,970,459.93	1,532,121,976.34
Social assistance	182,833,955.16	224,884,246.02	308,592,298.31	325,149,217.02	1,041,459,716.51
Medical	127,272,926.32	282,154,959.11	259,778,284.45	201,716,927.07	870,923,096.95
Defence	36,476,690.63	58,632,730.04	102,272,199.38	133,946,750.30	331,328,370.35
Penitentiary	29,304,708.70	54,956,113.17	63,151,314.17	50,574,500.76	197,986,636.80
Education	40,030,739.83	59,275,603.12	31,907,045.08	58,973,505.02	190,186,893.05
<b>Total</b>	<b>1,079,462,007.66</b>	<b>2,328,485,687.59</b>	<b>1,281,743,723.50</b>	<b>1,129,817,856.65</b>	<b>5,819,509,275.40</b>
	Number of initiated procedures				
<b>Total</b>	<b>725</b>	<b>1,095</b>	<b>931</b>	<b>891</b>	

Source: [4].

Between 2018-2021, through EPPS, 3,642 award procedures were carried out (out of which, 1,638 open tenders, 22 accelerated open tenders and 1986 simplified procedures), whose estimated values were, in total, de 5,819,509,275.40 RON.

In the situation that life would have been normal, without a pandemic, and the population structure and the need for purchase would have remained approximately the same, the estimated value of products in the field of “Agriculture and food” should have increased from 2018 to 2021, proportional to the rate of inflation.

But in 2020 and 2021, their value has almost halved due to the pandemic situation.

The reasons for their reduction shall be detailed after determining the percentage of the CA representative categories and the types

of products that are found in the field of “Agriculture and food”.

Of all the CA categories, ATUs initiated the most procedures, for which the total estimated value of the contracts, 1,532,121,976.34 RON, represents 26.32% of the total of 5,819,509,275.40 RON.

An edifying picture (Table 2) of the CA that buys the most products in the selected field is obtained by comparing the estimated values percentages of the procedures initiated by each category (percentage obtained by reporting the estimated value on a category of CA, to the total estimated values of that year). Every year, the ATUs made the most purchases in the field of “Agriculture and food”, mainly for the development of food package programs for students and preschoolers.

Table 2. The estimated values percentage on a CA category (%)

CA field	2018	2019	2020	2021
Other entities	4.34	58.35	6.35	14.91
ATU	57.13	12.45	33.91	16.90
Social assistance	16.94	9.66	24.08	28.78
Medical	11.79	12.12	20.27	17.85
Defence	3.38	2.52	7.98	11.86
Penitentiary	2.71	2.36	4.93	4.48
Education	3.71	2.55	2.49	5.22

Source: [4].

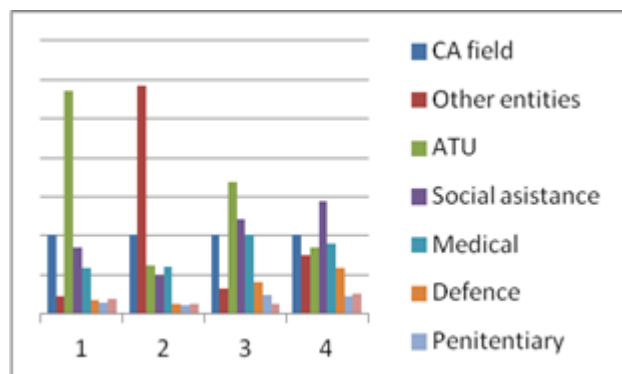


Fig. 1. Percentage of procurements volume by CA areas of activity

Source: [4].

In the next place, are the social assistance units that have to provide food for the people in care. Naturally, the health units and medical units allocated significant sums of money for the procurement of food for the sick, respectively for the employed staff. CAs in the penitentiary system also carried out

significant value procedures for food procurement.

A relatively small percentage is held by educational institutions, through acquisitions made, in particular, by universities.

A similar distribution of the supply level (presented in Table 2) was also established by [12], but with the following order of CA activity sectors: medical assistance, social assistance, education, business and industry, penitentiaries, military services.

From the comparative analysis of each CA percentage, the influence of the pandemic on the needs of the contracting authorities can be easily observed.

In 2019 and 2020, the school activity took place mainly on-line. Under these conditions, the ATUs no longer had to provide the students with the "milk-corn-apple" package or a hot meal (in the units that carried out this project). Also, the universities did not have students to provide food for.

The medical system was the only one to record an increase in food consumption, which could be explained by the increase in the number of patients.

The centralised data show that a significant volume of food is purchased by county councils, local councils, local welfare departments, but also hospitals.

Table 3. The procurements volume by product categories

Product categories	The estimated value of performed procedures (RON)				
	2018	2019	2020	2021	Total
Food	1,036,163,623.92	2,244,523,544.56	1,235,087,295.03	1,045,560,138.39	5,561,334,601.90
Wood	15,465,184.37	32,554,353.75	23,218,790.86	30,100,374.07	101,338,703.05
Plants	10,401,779.07	21,110,228.13	8,918,014.53	37,380,137.39	77,810,159.12
Animal feed	16,711,196.30	13,027,330.58	11,493,430.08	13,539,047.08	54,771,004.04
Seeds	235,015.00	13,592,493.07	2,085,827.00	1,873,819.00	17,787,154.07
Horticultural products	485,209.00	3,643,937.50	935,066.00	830,680.72	5,894,893.22
Animals		33,800.00	5,300.00	533,660.00	572,760.00
<b>Total</b>	<b>1,079,462,007.66</b>	<b>2,328,485,687.59</b>	<b>1,281,743,723.50</b>	<b>1,129,817,856.65</b>	<b>5,819,509,275.40</b>

Source: [4].

Of interest in our research, is the volume of food that could be provided by rural areas. In this sense, depending on the contract's object, the procurement procedures were grouped by

the authors in various categories: food, animals, animal feed, wood (predominantly firewood), plants (bulbs, trees, shrubs etc.), horticultural products (especially grass) and

seeds (Table 3). The largest amounts are spent on food.

After separating the product categories and ordering them according to the cumulative total in the four years, we found that most of the purchases (95.56%) related to the analysed field, is represented by food, followed by firewood (1.74%) and plants (1.34%). The rest of the products represent only less than 1% of the total period.

From Table 3, the influence of the pandemic on the supply need is observed. In 2020 and 2021, the value of purchased food decreased compared to 2019 (most of them being purchased for school food programs). Also, in 2020 and 2021, the purchase of seeds and horticultural products (especially grass) decreased. However, in 2021, there is an increase in the acquisition of small animals (mice), for research programs, in order to prevent SARS-COV-2.

An in-depth research of the food product types purchased through EPPS, led to the conclusion that significant values are allocated for the provision of food to students and preschoolers, through the "Romanian School Program for 2017-2023" (approved by G.D. no. 640/2017) [16], "Pilot program for providing food support for preschoolers and students" (approved by G.E.O. no. 9/2020) [17], or through various other projects for providing a hot meal to students (Table 4).

Table 4. The procurements volume depending on the food recipients

Year	The estimated value (RON)		
	Food for school programs	Other product categories	Total
2018	597,664,004.53	481,798,003.13	1,079,462,007.66
2019	271,505,580.82	2,056,980,106.77	2,328,485,687.59
2020	426,001,060.57	855,742,662.93	1,281,743,723.50
2021	159,550,944.58	970,266,912.07	1,129,817,856.65
Total	1,454,721,590.50	4,364,787,684.90	5,819,509,275.40

Source: [4].

In the 4 years that were analysed, procurement procedures amounting to de 1,436,449,012.43 RON ((approximately 25%, out of a total of 5,819,509,275.40 RON). dedicated to food supply programs and catering services were carried out through

EPPS (to ensure a warm meal), in schools and kindergartens. Out of these procedures, 94.63% are for the purpose of granting food packages containing milk, corn and apples.

Taking into account the data from Table 1 (procurements volume depending on the CA activity field), together with those from Table 3 (procurements volume by product categories) and Table 4 (procurements volume by food recipients), it is observed that an increased need for food (25% of the procedures total value) is registered by ATUs, for the development of students and preschoolers food supply programs. Significant food purchases are also recorded by the CA from the social assistance system, the medical system and in the military units.

The products procurement in the field of "Agriculture and food" generates contracts with high values and large product volumes that, for the most part, could be supplied by rural areas from Romania. Or, many vegetables, fruits, dairy products, but also meat or other foods and raw materials necessary for food preparation come from imports, to the detriment of local, Romanian products.

The supply of these products is part of a food chain, with many companies involved, between which there must be collaboration: agricultural producers, processors, packers, transporters [1]. Most of the producers operate either on the outskirts of cities or in agricultural areas, mostly rural. The information extracted from the EPPS shows that, if the amounts in these contracts were to "remain" in rural communities, they would register a different economic level. However, for the procurement to be made from local products, it is necessary to have a political shall, the contribution of the local authorities, but also of the central ones.

The state, through its double quality of constant buyer, but also of regulator, must be the engine of the rural areas development, of the local productions promotion, but also of the sustainable public procurements. The contract award documentations for the provision of food products and services must reflect EU recommendations. The correct application of these recommendations would

lead to the supply of products from rural, local areas. The introduction of criteria regarding the position of the supplier in the supply chain [8], the criteria regarding certified organic products, the reduction of excessive packaging [12], or the ecological transport would provide a chance to gain profit for the economic operators located closer to production source.

Setting some criteria on nutrition [19], on student food recipes to include, in certain percentages, organic products (such as dairy, eggs, vegetables, fruits, meat) would encourage farmers to introduce sustainable practices into their agricultural production. Such recipes/consumption patterns for organic products are found in many countries: in Belgium, rules are established regarding the consumption of meat, dairy and vegetables; Ireland has schemes that include eggs and poultry; in Austria, 15% of meals must include organic products; in Italy, it is recommended that, in certain percentages, meat and fish be made from organic products [12].

Imposing green product lists and green public procurement rules shall change the way all participants work in the complex supply chain network which, in turn, consists of several subnets [2]. New strategies for approaching public procurement shall be created, and producers shall be forced to create organic farms, to collaborate with partners who also respect the circular economic rules. The development of ecological practices in rural areas, as well as the need to find new production solutions requires cooperation between companies that form the food chain [20]. The agricultural production includes both policies regarding the environment and conservation of natural resources and biodiversity, but also practices for animal breeding and plant cultivation [3].

In the food products supply, the practices of the circular economy must be encouraged, with the reduction of food waste, the selective collection of waste, the reintroduction of some products in the industrial circuit and packaging re-use [21]. The economy must move from the linear recycling path “take - transform - throw”, to the circular one “take -

transform – re-use” [14]. In the provision of food and catering services, but also of other services adjacent to them, the economic operators must reduce the impact on the environment, such as reducing pollution with kitchen equipment, means of transport and waste [12].

The use of “clean” local products in food preparing shall reduce the supply chain, which means a reduction in the pollution created by processing, transport, storage, packaging etc. At the same time, in order to establish a menu based on organic products, the state must supplement the funds needed to purchase them because these products are more expensive than the “classic” ones.

The introduction of sustainability rules in the food supply must be done gradually in order to avoid unbalancing the supply process that could be generated by the small number of farms with organic products, but also by the high values of the products.

The rural areas can be supply sources and other categories of products, such as plants, seeds, shrubs, grass, as shown by the information collected from EPPS (Table 3). Even if their estimated value, in the period 2018-2021, represents only 4.44% of the total acquisitions, the need to supply them creates business opportunities in the respective areas.

Not only is the actual supply of products a way of economic growth of an area, but also the services through which it is obtained. Without the creation of an infrastructure, one cannot speak of long-term business, but only of seasonal activities. The construction of greenhouses, farms, raw material processing sections, but also packing workshops, as well as the construction of cold storage, irrigation works are some of the minimum investments necessary for a rural area to raise its socio-economic level. The involvement of local and central administration in making different categories of investments, establishing procurement mechanisms and regulating the prices of organic products would contribute to increasing the welfare of private companies in these areas, in proportion to living standards improvement [9]. The implementation of the projects from the National Recovery and Resilience Plan, provided for the rural

regions, shall have an immediate effect on the attraction of economic agents.

The obligation to make green public procurement and the establishment of sustainability criteria in the award procedures shall increase the demand for green products. This direction must drive local firms to formulate new business models in order to meet the demands of the public procurement market.

The role of the state in the organic products procurement, but also in the development of local business, is capital without a doubt [10]. On the one hand, as a buyer, through the development of various food procurement programs, catering services, respectively through the volume of purchases it makes. It may also impose, in the public procurement procedures, criteria in order to oblige economic operators to comply with the requirements of sustainable development. On the other hand, as a provider of services (medical, health care, education etc.), through the way it provides them, the state can impose working models and practices to comply with the rules of sustainability (for example, recycling and reuse of food packaging, re-use of used oils in food preparation, reduction of food waste).

Through financing programs, through subsidies, by supporting local producers, but also by creating the infrastructure necessary to carry out commercial activities, the state can boost the rural economy.

Farmers need to take advantage of the high demand for food from public institutions in order to sell their products and increase their future production by taking part in public procurement procedures. By knowing the areas where the largest volumes of food are required (Table 1), the economic operators can establish new business directions and improve their company's development strategies. The above analysis showed that most of the procurement is made through simplified procedures. The SME companies with a small number of employees and a low turnover may also take part in such procedures. Manufacturers should have the courage to participate especially in the simplified procedures, where qualification

requirements are minimal, appropriate to the tendering capacity of the SMEs. But in order to win a procedure, producers need to know how to prepare the offer. Their lack of experience in preparing tender documents shall reduce their chances of winning public procurement contracts. Many companies consider that their professional experience, skill in their field of activity, their production capacity and the quality of their products are enough assets to win the procedures. However, an open tender or a simplified procedure is won only if the tenderer proves, by all the documents he has submitted, that he can meet the need of the contracting authority. The hiring of trained staff in public procurement to prepare the tender shall be reflected in the positive rate of participation in contract award procedures [18].

As award procedures are conducted electronically, rural producers must learn to bid electronically, to sell via the internet. The development of the business with the help of the internet shall ensure a larger sales area, shall create a virtual market, but also a direct, efficient and faster communication.

Sustainable public procurement represents a challenge for all parties involved, both for the public buyer - the state, and for the seller - the economic operator. Sustainable development of rural areas can be stimulated through procurement if CAs, bidders find a balance between meeting consumer needs, protecting the environment and supply capacity.

## CONCLUSIONS

The public procurement contracts, through the important values they generate, are of high interest to all economic operators. This paper has focused on analysing the impact that food procurement may have on the economy of the rural areas. This analysis reveals that the high volume of food supply contracts, correlated with the requirements of sustainable procurement, is an opportunity for the development of enterprises from the rural areas. The results obtained through this paper identify the public sectors that procure the largest quantities of food. The EPPS information allows companies to find new



business opportunities that are appropriate for their work capacity. The participation of producers in public procurement procedures, for the supply of organic food, is a chance for the development of both companies, and rural areas. Also, through this paper, it is highlighted the fact that the state, by establishing some sustainability criteria, may determine the way to be followed for the fulfilment of the sustainable development objectives.

Based on the findings of this paper, research can be developed on: (i) sustainable evaluation factors that can be used in award procedures; (ii) the creation of lists for organic agricultural products which may be imposed on institutions that provide food; (iii) ways to reduce the carbon footprint in the supply chain.

## REFERENCES

- [1]Bhattacharya, A., Fayezi, S., 2021, Ameliorating food loss and waste in the supply chain through multi-stakeholder collaboration. *Industrial Marketing Management*, Vol. 93, pp. 328-343, <https://doi.org/10.1016/j.indmarman.2021.01.009>, Accessed on 10 February 2022.
- [2]Bourlakis, M., Maglaras, G., Gallea, D., Fotopoulos, C., 2014, Examining sustainability performance in the supply chain: The case of the Greek dairy sector. *Industrial Marketing Management*, 43(1), pp. 56–66, <https://doi.org/10.1016/j.indmarman.2013.08.002>, Accessed on 4 January 2022.
- [3]Bucea-Manea-Tonis, R., Dourado Martins, O. M., Ilic, D., Belous, M., Bucea-Manea-Tonis, R., Braicu, C., Simion, V.E., 2021, Green and Sustainable Public Procurement-An Instrument for Nudging Consumer Behavior. A Case Study on Romanian Green Public Agriculture across Different Sectors of Activity. *Sustainability*, 13 (1), 12. <https://doi.org/10.3390/su13010012>, Accessed on 10 January 2022.
- [4]Electronic Public Procurement System (EPPS), [www.e-licitatie.ro](http://www.e-licitatie.ro), Accessed on 15 December 2021.
- [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 [online] C 640 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52019DC0640>, Accessed on 10 February 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 16 January 2022.
- [7]Food and Agriculture Organization of the United Nations, 2019, Our priorities – The Strategic Objectives of FAO. Rome: FAO, p 28. <http://www.fao.org/3/i8580en/i8580en.pdf>, Accessed on 17 January 2021.
- [8]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 19 February 2022.
- [9]Lombardozzi, L., 2020, Patterns of accumulation and social differentiation through a slow-paced agrarian market transition: The case of post-Soviet Uzbekistan. *Journal of Agrarian Change*, 20, pp.637–658. <https://doi.org/10.1111/JOAC.12366>, Accessed on 20 February 2022.
- [10]McIver, C.P., Metcalf, A.L., Berg, E.C., 2018, Procurement Contracting and Forest Communities: Factors Affecting Local Business Utilization in the Inland Northwest. *Journal of Forestry*, Vol 116(5), 412–419, <https://doi.org/10.1093/jofore/fvy033>, Accessed on 15 January 2022.
- [11]Moraga, G., Huysveld, S., Mathieux, F., Blengini, G.A., Alaerts, L., Van Acker, K., de Meester, S., Dewulf, J., 2019, Circular economy indicators: What do they measure? *Resources, Conservation and Recycling*, Vol. 146, 452–461, <https://doi.org/10.1016/j.resconrec.2019.03.045>, Accessed on 16 January 2022.
- [12]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 16 January 2022.
- [13]Organization of the United Nations, 2015, Transforming our world: the 2030 Agenda for Sustainable Development. Resolution 70/1, New York: ONU. [https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A\\_RES\\_70\\_1\\_E.pdf](https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf), Accessed on 22 January 2022.
- [14]Ormazabal, M., Prieto-Sandoval, V., Puga-Leal, R., Jaca, C., 2018, Circular Economy in Spanish SMEs: Challenges and opportunities. *Journal of Cleaner Production*, 185, pp. 157-167, <https://doi.org/10.1016/j.jclepro.2018.03.031>, Accessed on 23 February 2022.
- [15]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 20 December 2021.



[16]Romania's Government, 2017, Decision no.640/2017 for the approval of "Romanian School Program in the period 2017-2023", <https://www.madr.ro/docs/agricultura/program-scoli-2018/HG-640-2017-Programul-pt-scoli.pdf>, Accessed on 15 January 2022.

[17]Romania's Government Emergency Ordinance No.9/2020 for providing support for preschoolers and schoolers from 150 state pre- university education units, <https://www.edu.ro/consultare-public%C4%83-proiect-de-ordonan%C8%9B%C4%83-de-urgen%C8%9B%C4%83-privind-aprobarea-continuu%C4%83rii-programului-pilot>, Accessed on 15 January 2022.

[18]Sastamoinen, J., Reijonen, H., Tammi, T., 2017, The role of training in dismantling barriers to SME participation in public procurement. *Journal of Public Procurement*, Vol. 17 (1), 1-30. doi.org/10.1108/JOPP-17-01-2017-B001, Accessed on 29 January 2022

[19]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 19 February 2022.

[20]Wrzaszcz, W., Prandeckia, K., 2020, Agriculture and The European Green Deal. *Problems of Agricultural Economics*, 365(4), 174. <https://doi.org/10.30858/zer/131841>, Accessed on 19 February 2022.

[21]Zorpas, A., 2020, Strategy development in the framework of waste management. *Science of The Total Environment*, 716, pp. 137088, <https://doi.org/10.1016/j.scitotenv.2020.137088>, Accessed on 16 January 2022.

