

Dobay, Krisztina Melinda

**Conference Paper**

## Agricultural cooperatives in the North-East development region of Romania: Economic perspectives

**Provided in Cooperation with:**

The Research Institute for Agriculture Economy and Rural Development (ICEADR), Bucharest

*Suggested Citation:* Dobay, Krisztina Melinda (2021) : Agricultural cooperatives in the North-East development region of Romania: Economic perspectives, In: Agrarian Economy and Rural Development - Realities and Perspectives for Romania. International Symposium. 12th Edition, The Research Institute for Agricultural Economy and Rural Development (ICEADR), Bucharest, pp. 192-199

This Version is available at:

<https://hdl.handle.net/10419/263040>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# AGRICULTURAL COOPERATIVES IN THE NORTH-EAST DEVELOPMENT REGION OF ROMANIA - ECONOMIC PERSPECTIVES

KRISZTINA MELINDA DOBAY<sup>1</sup>

## Abstract

*The role of agricultural cooperatives in supporting farmers has become increasingly important in the context of crises and unforeseen economic fluctuations, helping to improve their position in the value chain. If at the level of the European Union about 34% of farmers are part of agricultural cooperatives, in Romania only 1% are members in associative entities. The data indicate that the largest number of agricultural cooperatives is located in the North-East Region (a quarter of the total), especially in Botoşani County. However, analyzing the information on their economic activity, we found that a large part of them either never filed a balance sheet or submitted statements that they did not carry out economic activities. Of those who filed a balance sheet, half declared zero turnover. However, 57 agricultural cooperatives registered a profit for 2020 in the analyzed Region. In this paper, we aimed to identify the most profitable fields of activity for agricultural cooperatives in the North-East Development Region of Romania.*

**Keywords:** agricultural cooperative, regional analysis, turnover, profit, North-East Development Region of Romania.

**JEL classification:** Q13, H32, R1

## INTRODUCTION

Cooperatives defined as autonomous and voluntary associations, made up of several persons pursuing economic, social or cultural objectives, represent a type of enterprise with a dual economic and social purpose, their activity being governed, in general, by the principles of the International Cooperative Alliance since 1995 (ICA, 2017): free and voluntary association of members, economic democracy (control and management), autonomy, transparency, solidarity (self-help), cooperation between cooperatives, concern for the community (Talmaciu et al., 2017). Due to their dual nature, they are organizations that can significantly contribute to the sustainable development of farms and rural communities in general (Sutherland et al., 2014; Bezus & Bilotkach, 2018; Candemir et al., 2021).

In the European Union agricultural cooperatives have a long tradition and the experience of member countries is quite different. According to recent studies (Đurić et al., 2021), one-third of the approximately 250,000 cooperatives registered in the U.E. is constituted by agricultural cooperatives, with national market shares ranging from more than 70% to less than 1%, the average being 40% (Bijman, 2016). About the success achieved by agricultural cooperatives compared to other competitors in different fields and sectors of activity, by their better positioning in the supply chains with agri-food products, interesting works have been written over the years (Juan et al., 2012; Höhler & Kühn, 2014), most authors mentioning sectors such as dairy (Hanisch et al., 2013; Bijman & Iliopoulos, 2014; Bijman, 2018), vegetables and fruits (Guzmán & Arcas, 2008; Bijman et al., 2012), viticulture (Bijman et al., 2012), olive oil (Bijman et al., 2012), etc. Moreover, there are studies that mention the role of agricultural cooperatives in supporting farmers in the context of crises and unforeseen economic fluctuations (Smith & Rothbaum, 2013; Kontogeorgos, 2016; Fusco & Migliaccio, 2018; Francesconi et al., 2021).

The issue of association and cooperation in agriculture is an extremely important one for Romania as well, and our efforts in order to study and understand the national, regional and local specificities date back many years. Thus, we studied cooperative models and systems in the world, the history of cooperation in Romania, how marketing cooperatives can be set up and operate, then we participated, in 2002, in the elaboration of the initial draft of the Cooperation Law (Dobay &

---

<sup>1</sup> Researcher II, “Gheorghe Zane” Institute for Economic and Social Research, Romanian Academy – Iaşi Branch, e-mail: [dobaykrisztinamelinda@yahoo.com](mailto:dobaykrisztinamelinda@yahoo.com); [dobaykrisztinamelinda@ices.acadiasi.ro](mailto:dobaykrisztinamelinda@ices.acadiasi.ro)

Apetroaie, 2021). Subsequently, we studied various forms of formal and informal association in agriculture in two counties in Romania (Iași and Ialomița), following their evolution for almost two decades (Dobay & Sabates-Wheeler, 2003; Agarwal et al., 2021).

In recent years, more and more Romanian specialists believe that the development of the cooperative system can be one of the directions for increasing incomes and improving the quality of life of agricultural producers by enlarging their bargaining power (Micu et al., 2015; Bercu et al., 2020; Florea et al., 2020; Toderiță & Popescu, 2020; Toderiță et al., 2020; Dobay & Apetroaie, 2021). In order to see if these expectations regarding the economic potential of agricultural cooperatives are justified, we analyzed data on the dynamics and evolution of some indicators regarding their activity at the level of the North-East Development Region of Romania.

## **MATERIALS AND METHODS**

To carry out this study we consulted the relevant literature and then, to collect data, primary and secondary, as well as various information on associative forms in the Region, we used the complete research method, that is quantitative and qualitative analysis.

Thus, in order to analyze the evolution of agricultural cooperatives in the North-East Region of Romania, we proceeded as follows: we extracted from the database of the National Trade Register Office (NTRO) all the registrations of agricultural cooperatives in the counties of the Region; we consulted the website of the Ministry of Public Finance (MPF) to identify the agricultural cooperatives in each county, that is to find out the full name, unique identification code, NACE<sup>1</sup> for economic activity, year of establishment, years of economic activity, etc. (using the keywords “agricultural cooperative” as a common name for nominal identification); we queried the Topfirme.com website for detailed information and to have a double check for data on turnover, registered profit, average number of employees and registered income; we centralized and processed the data at county and regional level; subsequently, we verified and updated the data by consulting the National Register of Agricultural Cooperatives (NRAC) on the website of the Ministry of Agriculture and Rural Development, September 2021 version.

## **RESULTS AND DISCUSSION**

Statistical data show that in the North-East Development Region of Romania there are about a quarter of the total agricultural cooperatives registered at national level. Of the 317 cooperatives existing in 2020, 41.63% are in Botoșani County (Figure 1).

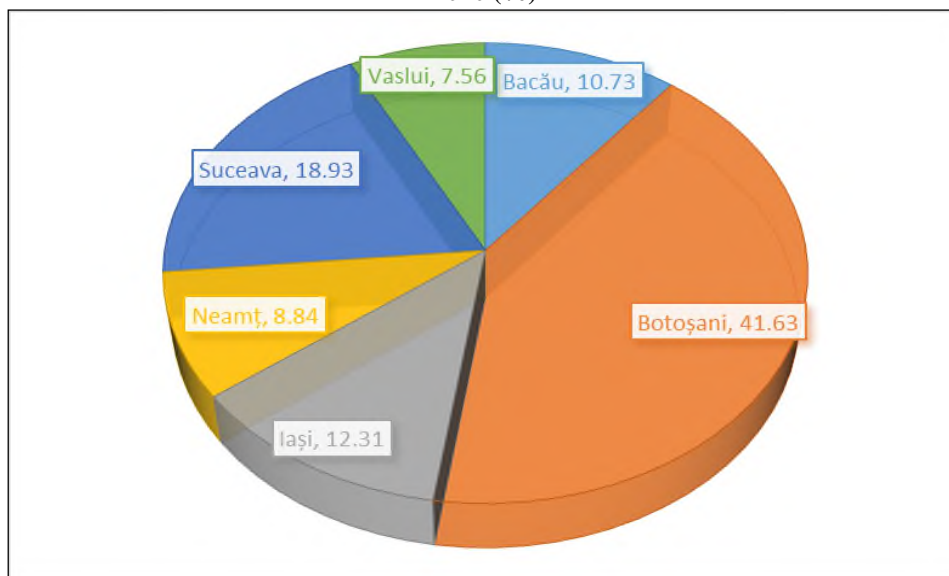
In 2016 we analyzed the situation of agricultural cooperatives, according to the methodology described above (Talmaciu et al., 2017), and we found that half of those registered in the Region were not active, that is they did not submit a balance for 2015, they stated that they did not carry out activities, had decisions for dissolution with liquidation or had suspended their activity.

Regarding the 50 active agricultural cooperatives in Botoșani County, most (38%) had as field of activity occupations related to animal husbandry (Talmaciu et al., 2017). Also, in the case of Suceava County (the second county in terms of number of agricultural cooperatives in the regional ranking), half of the active agricultural cooperatives had as main field of activity either sheep and goat breeding, or activities in mixed farms. These findings strengthened the conclusion of another study conducted in Romania according to which, in general, association and cooperation in agriculture is achieved especially when a greater volume of work and coordination is needed, as is the case of activities related to animal husbandry (Agarwal et al., 2021).

---

<sup>1</sup>Statistical classification of economic activities in the European Community

**Figure 1. Distribution on the counties of the North-East Region of the 317 agricultural cooperatives in 2020 (%)**



*Source: own calculations after NRAC and NTRO*

In 2020, in order to analyze the evolution and activity of agricultural cooperatives in the North-East Region of Romania from January 1<sup>st</sup>2010 to September 30<sup>th</sup>2020, according to the same methodology used in 2016, we extracted again from the NTRO database all registrations of agricultural cooperatives in the counties of the Region; we consulted the website of the Ministry of Public Finance for the identification of agricultural cooperatives in each county, that is to find out the full name, the unique identification code, the NACE for the economic activity carried out, the year of establishment, the years of economic activity, etc. ; we queried the Topfirme.com website to have a double check, and for Iași County we filled in the data with the support of the Iași County Directorate for Agriculture, which provided additional information such as: contact details, current situation of activities cooperatives, projects funded at the level of Local Action Groups (LAGs), etc., and then we processed and centralized data and information at the level of counties and Region (Dobay & Apetroaie, 2021).

The findings were as follows:

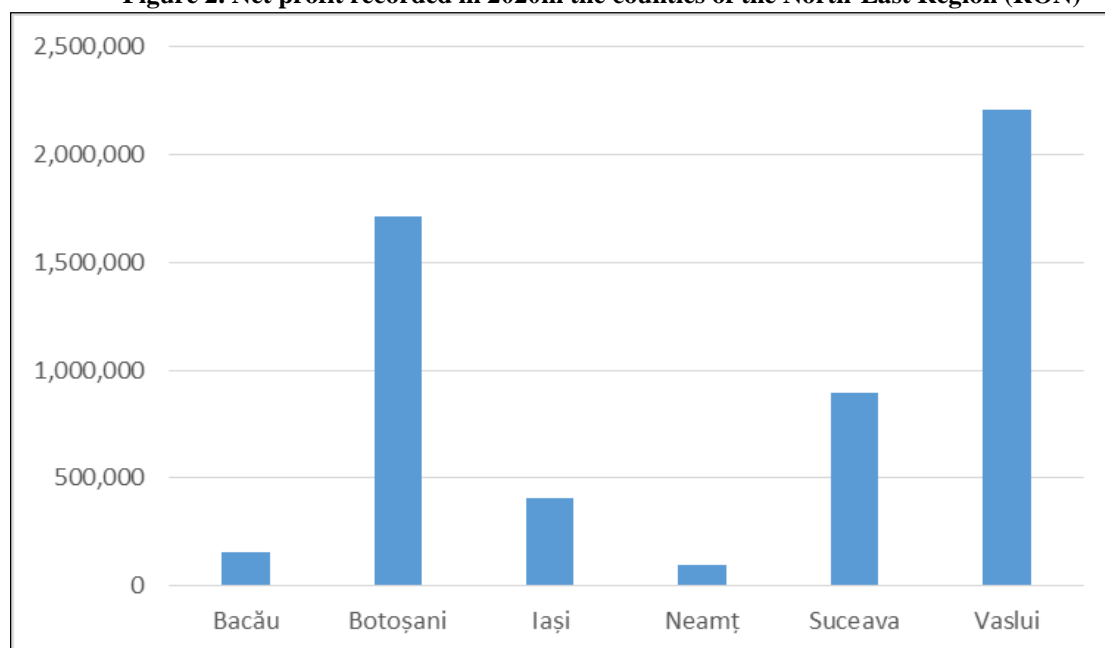
- according to the NTRO database, during the reference period, 278 agricultural cooperatives were registered in the Region, most of which (59) were established in 2010, 2018 (36) and 2019 (30);
- based on the data collected from the website of the Ministry of Public Finance, through a bottom-up approach, looking for information at the level of each county in order to identify by name each agricultural cooperative, one by one, identification completed later by information provided by the Iași County Directorate for Agriculture, we reached a number of 197 agricultural cooperatives sampled by Region, of which 35% had not operated, had not submitted a balance sheet or declared that they had not had any activity, the share being on the decrease compared to the analysis carried out in 2016 when it was 50%;
- at the level of the 197 cooperatives studied, we noticed that the total turnover for 2017 amounted to 158 million lei, in 2018 increased to 236 million, and in 2019 decreased to 189 million lei (Dobay & Apetroaie, 2021);
- there were situations in which agricultural cooperatives had recorded income even if they had no turnover and for the 197 cooperatives analyzed for 2019, the value of the declared revenues was higher than that of the turnover (192 compared to 189 million lei).

On November 23, 2020, Law 265/2020 for the amendment and completion of the Law on Agricultural Cooperation 566/2004, published in the Official Gazette 1113/2020, came into force. It states that in order for an agricultural cooperative to be considered active, it must have had turnover

or employees at any time during the reference period. Also, the National Register of Agricultural Cooperatives (NRAC) is elaborated, updated, administered and published by the Ministry of Agriculture and Rural Development on the institution's website, based on data provided by NTRO. We consider that it was an initiative that brought more transparency and clarity regarding the monitoring of the activity of agricultural cooperatives and provided an easy-to-use tool for this purpose. In the case of this study, it allowed a double verification of the information gathered through the bottom-up approach, according to the methodology presented above, with the data extracted from NRAC (September 2021 for the activity of cooperatives for the last three years, 2018-2020).

For 2020, out of the 317 cooperatives of the Region analyzed based on data extracted from the National Register of Agricultural Cooperatives, 35.34% submitted a balance sheet. The turnover reported by Region was 237,414,149 lei, representing 15% of the one reported at national level, and more than half of the regional one was in Vaslui County (155,692,351 lei) (Figure 2). 57 cooperatives registered profit for 2020, 26 of them being first-degree cooperatives and 31 second-degree ones.

**Figure 2. Net profit recorded in 2020 in the counties of the North-East Region (RON)**



Source: own calculations after NRAC and MPF

The net profit of the Region amounted to 5,480,243 lei, respectively 13.9% of the total in the country (Table 1).

From Table 1 results that if we calculate the difference between total profit and total loss, even in a very simple way, the resulting differences are positive in each county, denoting that, on the whole, the activity of agricultural cooperatives in the analyzed Region is profitable. Also in order to have a quantifiable and comparable perception of the economic potential of agricultural cooperatives, we calculated the profit per cooperative and by fields of activity (Table 2).

As it results from the analyzed data, the most profitable fields of activity were those regarding the processing, preservation and wholesale trade of fruits and vegetables.

The average profit per cooperative calculated for all 15 fields of activity for which profit was registered was 98,264 lei, and for the 7 cooperatives with activities related to horticultural products there was an average profit of 151,910 lei. From this estimate it follows that they seem to be the most profitable fields of activity in the Region.

**Table 1. Agricultural cooperatives in the North-East Region  
- economic activity reported for 2020**

<i>County</i>	<i>Number of cooperatives</i>	<i>With submitted balance sheet No.</i>	<i>%</i>	<i>Turnover (RON)</i>	<i>Net profit (RON)</i>	<i>Loss (RON)</i>	<i>Calculated differences</i>
Bacău	34	11	32.36	3,693,395	158,820	127,288	31,532
Botoșani	132	47	35.61	27,593,160	1,713,345	1,119,963	593,382
Iași	39	16	41.03	30,885,268	407,579	353,984	53,595
Neamț	28	3	10.72	4,426,026	95,246	0	95,246
Suceava	60	27	45.00	15,123,949	896,929	479,493	417,436
Vaslui	24	8	33.34	155,692,351	2,208,324	12,847	2,195,477
Total North-East Region	317	112	35.34	237,414,149	5,480,243	2,093,575	3,386,668

*Source: own calculations after NRAC and MPF*

**Table 2. Net profit recorded by fields of activity, in 2020, in the North-East Region**

<i>NACE</i>	<i>Field of activity</i>	<i>Number of cooperatives</i>	<i>Net profit (RON)</i>	<i>Average profit per cooperative (RON)</i>
1039	Processing and preserving fruits and vegetables	1	675,044	675,044
4631	Wholesale trade of fruits and vegetables	6	2,329,957	388,326
0111	Cultivation of cereals (excluding rice), leguminous and oilseed plants	10	890,896	89,090
0141	Dairy cattle farming	5	387,329	77,466
4621	Wholesale trade of cereals, seeds, fodder and unprocessed tobacco	7	456,142	65,163
0150	Mixed farm activities (growing of crops and raising of livestock)	10	357,580	35,758
0146	Pig farming	2	64,785	32,393
4611	Intermediation in trade in agricultural raw materials, live animals, textile raw materials and semi-finished products	1	32,148	32,148
0145	Sheep and goat farming	5	155,564	31,113
0113	Cultivation of vegetables and melons, roots and tubers	4	109,778	27,445
0124	Cultivation of seeds and stone fruits	1	6,989	6,989
4633	Wholesale trade of dairy products, eggs, edible oils and fats	1	4,581	4,581
4632	Wholesale trade of meat and meat products	1	3,994	3,994
0161	Ancillary activities for crop production	1	3,455	3,455
1051	Manufacture of dairy products and cheese	2	2,001	1,001

*Source: own calculations after NRAC and MPF*

At the level of the analyzed Region, 19 agricultural cooperatives registered a net profit higher than 50,000 lei for 2020 (Table 3). Of the 19 cooperatives, 11 are second-degree agricultural cooperatives.

**Table 3. Top agricultural cooperatives with a net profit of more than 50,000 lei for 2020 in the North-**

<i>Nr. crt.</i>	<i>Data înmatriculării la ONRC</i>	<i>Denumire completă</i>	<i>Tip cooperativă (gradul)</i>	<i>Județul</i>	<i>CAEN</i>	<i>Profit net (RON)</i>
1	11.07.2016	Cooperativa Agricolă Integrată „Țara Mea”	2	Vaslui	4631	2.063.569
2	17.02.2009	Cooperativa Agricolă „Gold Fruct”, Udești	1	Suceava	1039	675.044
3	25.07.2018	Cooperativa Agricolă „Colinele Bucovinei”	2	Botoșani	0111	331.592
4	02.07.2018	Cooperativa Agricolă „Soybean and Mays Prod”	2	Botoșani	0111	329.479
5	29.04.2010	Cooperativa Agricolă „Conceasca”	1	Botoșani	4621	283.898
6	26.07.2017	Cooperativa Agricolă „Moldova Nord Grup”	1	Iași	4631	247.092
7	04.06.2018	Cooperativa Agricolă „Lunca Morii”	1	Botoșani	0141	220.240
8	12.06.2020	Cooperativa Agricolă „Aristotel Crășmaru”	1	Botoșani	0145	127.544
9	14.04.2016	Cooperativa Agricolă a Crescătorilor de Animale din Pungești	1	Vaslui	0141	126.687
10	24.06.2019	Cooperativa Agricolă de gradul II „Rădăcini”	2	Neamț	4621	94.520
11	20.02.2020	Cooperativa Agricolă „Câmpuri Aurii”	2	Bacău	0150	90.283
12	30.05.2017	Cooperativa Agricolă „Dacia noastră”	2	Botoșani	0113	88.008
13	22.08.2018	Cooperativa Agricolă „Sadoveanu”	1	Iași	0111	74.162
14	04.07.2018	Cooperativa Agricolă „Hogs Farm Land”	1	Botoșani	0146	61.100
15	15.10.2018	Cooperativa Agricolă de gradul II „Cooperativa din Deal”	2	Iași	0150	58.421
16	23.10.2015	Cooperativa Agricolă „Baza Siloz Cereal Grup”	2	Botoșani	0111	56.681
17	21.06.2017	Cooperativa Agricolă „Grup Top Agro”	2	Suceava	4621	56.001
18	29.07.2019	Cooperativa Agricolă „Firmele de Nord Moldova”	2	Botoșani	0150	52.340
19	18.07.2018	Cooperativa Agricolă de gradul II „Agrosfera”	2	Suceava	0111	51.507

**East Region**

*Source: own calculations after NRAC and MPF*

Regarding the distribution by counties of the most profitable cooperatives, as presented in Table 3, the results showed that:

- out of the 19 cooperatives that registered a net profit higher than 50,000 lei for 2020, 9 are from Botoșani County, 3 from Suceava, 3 from Iași, 2 from Vaslui and 1 from Neamț;
- in Vaslui County there is the most profitable cooperative whose field of activity is the trade in vegetables and fruits;
- in Botoșani County the cooperatives are profitable that have as field of activity: cultivation of cereals, leguminous and oilseed plants; wholesale trade of cereals, seeds, fodder and unprocessed tobacco; dairy cattle farming; sheep and goat farming; pig farming;

cultivation of vegetables and melons, roots and tubers; mixed farm activities (growing of crops and raising of livestock);

- in Suceava County the processing and preservation of fruits and vegetables was profitable, namely the wholesale trade of cereals, seeds, fodder and unprocessed tobacco and the cultivation of cereals (excluding rice), leguminous and oilseed plants;
- in Iași County the wholesale trade of fruits and vegetables was profitable, namely the activities in mixed farms (vegetable culture combined with animal breeding);
- in Neamț County the field with the highest profit was the one regarding the wholesale trade of cereals, seeds, fodder and unprocessed tobacco.

## CONCLUSIONS

In the context of unforeseen economic crises and fluctuations, cooperatives can play an undeniable role in generating profit for their members by better positioning in the value chain. Our data showed that, at least for 2020, at the level of each county of the North-East Development Region of Romania the total net profit recorded by cooperatives was higher than the reported losses. The dynamic analysis of agricultural cooperatives as well as other forms of association and cooperation in agriculture and food industry shows clear signs of recovery, knowing the fact that existing fiscal facilities and opportunities influence their development. The 57 agricultural cooperatives that registered a profit for 2020, have on average only 4 years of operation, hence the new generation of members is certainly oriented towards the economic goals of agricultural cooperatives.

In many countries around the world agricultural cooperatives are an important part of the food system and the supply system, respectively, and have an important contribution to the transition to sustainability. From this point of view, we consider that an attempt to map and analyze their economic potential at regional level is an absolutely necessary first step in understanding how the current system can be streamlined and transformed.

## REFERENCES

1. Agarwal, B., Dobay, K.M. & Sabates-Wheeler R. (2021). Revisiting Group Farming in a Post-Socialist Economy: The Case of Romania. *Journal of Rural Studies*, 81, 148-158.
2. Bercu, F., Florea, A. M., Stoica, C., Pila, M. M., Ion, I. M. D. & Stanciu, S. (2020). *Revival of the Romanian Rural Areas by Agricultural Cooperatives*, IBIMA.
3. Bezus, R. & Bilotkach, I. (2018). Development of Organic Farmers' Cooperatives: The USA, The EU and Ukraine. *Baltic Journal of Economic Studies*, 4(2), 24-31.
4. Bijman, J., Iliopoulos, C. Poppe K.J, Gijssels C., Hagedorn K., Hanisch, M., Hendrikse G.W/J., Kuhl, R., Ollila, P., Pykkonen P. & van der Dangen, G. (2012). *Support for farmers' cooperatives*. Wageningen UR.
5. Bijman, J. & Iliopoulos, C. (2014). Farmers' Cooperatives in the EU: Policies, Strategies and Organization. *Annals of Public and Cooperative Economics*, 85(4), 497-508.
6. Bijman, J. (2016). Agricultural Cooperatives in the Netherlands: key success factors. International Summit of Cooperatives, Quebec, <https://library.wur.nl/WebQuery/wurpubs/fulltext/401888> [last accessed on October 16<sup>th</sup> 2021].
7. Bijman, J. (2018). Exploring the sustainability of the cooperative model in dairy: The case of the Netherlands. *Sustainability*, 10(7), 2498.
8. Candemir, A., Duvaléix, S. & Latruffe, L. (2021). Agricultural cooperatives and farm sustainability—A literature review. *Journal of Economic Surveys*.
9. Dobay, K. M. & Sabates-Wheeler, R. (2003). Institutional Complexity after Land Reform in Romania, *Anuarul ICES „Gh. Zane”*, 12, 111-132.
10. Dobay, K.M. & Apetroaie C. (2021). Asocierea și cooperarea în agricultură în România – o analiză regională. In: Alexandri, C., Chițea, L.F., Izvoranu, A.M., Kruzslícska, M. & Munteanu C.C. (coord.) (2021). *Durabilitatea și reziliența sectorului agricol și a spațiului rural în fața actualelor provocări*. București, Editura Academiei Române (în curs de publicare).



11. Đurić, K., Prodanović, R. & Jahić, M. (2021). Experiences of European Union Countries in the Field of Agricultural Cooperatives. *Journal of Agronomy, Technology and Engineering Management*, 4(3), 583-590.
12. Florea, A. M., Bercu, F., Radu R. I. & Iuliana O. (2020). The evolution of agricultural cooperatives in Romania, *New Trends in Sustainable Business and Consumption*, 783-790.
13. Francesconi, N., Wouterse, F. & Birungi Namuyiga, D. (2021). Agricultural Cooperatives and COVID-19 in Southeast Africa. The Role of Managerial Capital for Rural Resilience. *Sustainability*, 13(3), 1046.
14. Fusco, F. & Migliaccio, G. (2018). Crisis, sectoral and geographical factors: financial dynamics of Italian cooperatives. *EuroMed Journal of Business*, 13 (2), <https://doi.org/10.1108/EMJB-02-2016-0002> [last accessed on October 16<sup>th</sup> 2021].
15. Hanisch, M., Rommel, J. & Müller, M. (2013). The cooperative yardstick revisited: panel evidence from the European dairy sectors. *Journal of Agricultural & Food Industrial Organization*, 11(1), 151-162.
16. International Cooperative Alliance. *Cooperative identity, values & principles*, <https://www.ica.coop/en/cooperatives/cooperative-identity> [last accessed on October 16<sup>th</sup> 2021].
17. Höhler, J. & Kühn, R. (2014). Position and performance of farmer cooperatives in the food supply chain of the EU-27. *Annals of Public and Cooperative Economics*, 85(4), 579-595.
18. International Cooperative Alliance (2017). *The Guidance Notes on the Cooperative Principles*, <https://www.ica.coop/sites/default/files/publication-files/ica-guidance-notes-en-310629900.pdf> [last accessed on October 16<sup>th</sup> 2021].
19. Juan, F.J. I., Meliá-Martí, E. & García-Martínez, G. (2012). Strategies developed by leading EU agrifood cooperatives in their growth models. *Service Business*, 6(1), 27-46.
20. Kontogeorgos, A., Chatzitheodoridis, F. & Loizou, E. (2016). Adaptation strategies for the Greek agricultural cooperatives during the economic crisis. *Agricultural Economics*, 62(1), 26-34.
21. Micu A. R., Alecu I. N. & Micu M. M. (2015). Analysis of Romanian agricultural cooperatives structure in 2014, *Agrarian Economy and Rural Development-Realities and Perspectives for Romania*, 6th Edition of the International Symposium, Bucharest
22. Smith, S. C. & Rothbaum, J. (2013). Cooperatives in a global economy: Key economic issues, recent trends, and potential for development (No. 68). *IZA Policy Paper*.
23. Sutherland, L. A., Darnhofer, I., Wilson, G. & Zagata, L. (Eds.). (2014). *Transition pathways towards sustainability in agriculture: case studies from Europe*. CABI.
24. Talmaciu, M., Dobay, K. M. & Apetroaie, C. (2017). O posibilă abordare din perspectivă socio-economică a cooperăției agricole din România, în: Alexandri, C., Gavrilăscu, C., Ionel, I., Kruzslıcka, M., Rusu, M. (coord.), *Economie agroalimentară și dezvoltare rurală într-o perspectivă regională*, Editura Academiei Române, 355-375.
25. Talmaciu, M. & Dobay, K. M., (2018). Influența valorilor naționale culturale asupra dezvoltării structurilor asociative. In: Alexandri, C., Gavrilăscu, C., Ionel, I., Kruzslıcka, M., Rusu, M. (coord.), *Economie agroalimentară și dezvoltare rurală din perspectiva integrării europene*, 487-498.
26. Toderiță, A., Ganea O. & Popescu, R. (2020), *Evoluția sectorului cooperativelor agricole din România în perioada 2017-2020*, Centrul Român de Politici Europene.
27. Toderiță, A. & Popescu, R., (2020), *Asocierea fermierilor - soluție pentru o agricultură verde și modernă, O țară ca afară*, Renew Europe.
28. Web sites:
29. <https://www.ica.coop>
30. <https://www.madr.ro/cooperative-agricole.html>
31. <https://www.onrc.ro/index.php/ro/statistici>
32. <https://www.topfirme.com/>