https://doi.org/10.59277/AERD.2023.2.03

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AGRICULTURAL COOPERATIVES IN THE ROMANIAN AGRI-FOOD SYSTEM

ABSTRACT

In the recent years, agricultural markets and supply chains have been quite strongly affected, in an unprecedented geopolitical and economic context, caused by the COVID-19 pandemic, the war in Ukraine, climate change and the challenges of implementing the European Green Deal. Under these conditions, food has once again emerged as a central element of life, alongside health, and healthy eating for all depends more on social and economic conditions than on the technical aspects of food production and processing. Thus, the need to rethink and revalue local productions, supply chains and the links established at territorial level, in order to increase the resilience of agri-food systems and ensure their sustainable development, emerged. The cooperative model is considered to be suitable to address the challenges generated by transitions to sustainability, and agricultural cooperatives can significantly contribute to increasing the resilience of agri-food systems. Many agricultural cooperatives, from different countries of the world, have managed to adapt to the new situation, proving that they are important entities in the agri-food system.

In this paper, we tried to identify some particularities regarding the changes in the cooperative system in Romania, in recent years, as a reaction to the challenges that the agri-food system has to face. For this purpose, we analysed the evolution of agricultural cooperatives before and after the COVID-19 pandemic and estimated the market share in different areas of activity with significant turnover, the evolution of some economic indicators, as well as their dynamics by counties and regions in an attempt to identify their development trends.

Key words: agricultural cooperatives, agri-food system, market share.

JEL Classification: Q13, Q01.

1. INTRODUCTION

In recent years, agri-food systems have been exposed to unexpected, unprecedented shocks that have generated interconnected crises, generically referred to as the "4 Cs" – climate, COVID, conflict and costs (Riemer *et al.*, 2023). At the same time, achieving the sustainability goals of the 2030 Agenda, the Paris Agreement on climate, as well as the other conventions aimed at climate, biodiversity and land restoration, requires the transformation of agri-food systems.

Agri-food systems are complex socio-economic systems, where a wide network of actors/stakeholders participate in actions related to agricultural activities, production, distribution, consumption and recycling. In these complex systems, an important role belongs to agricultural cooperatives, autonomous and voluntary associations formed by several people, which represent a type of enterprise with a double purpose – economic and social – and whose activity is governed by cooperative principles: free and voluntary association, economic democracy, autonomy, transparency, solidarity, cooperation among cooperatives, concern for the community, which have proven to be resilient to unexpected shocks and suitable for the transition to sustainability.

2. STATE OF KNOWLEDGE

Agricultural cooperatives exist in almost every country and contribute to food security and poverty alleviation in different areas of the world by helping farmers increase their incomes and profits through the sharing of resources and better positioning in value chains.

According to the *2022 World Cooperative Monitor* (ICA&EURICSE, 2022), agricultural cooperatives represent a third of the top 300 cooperatives in the world considering the turnover reported for the year 2020. This ranking includes cooperatives that operate throughout the entire agricultural value chain, starting from crop cultivation and animal husbandry to the industrial processing of plant and animal products, as well as those in the fishing industry. The included entities are both agricultural producer cooperatives and cooperative consortia (or similar arrangements) that process and market agricultural commodities for their members. The top 10 ranked are agricultural cooperatives from Japan, South Korea, the USA, Germany, New Zealand, the Netherlands and Denmark, with turnovers ranging from $12.16 billion to $57.67 billion in 2020.

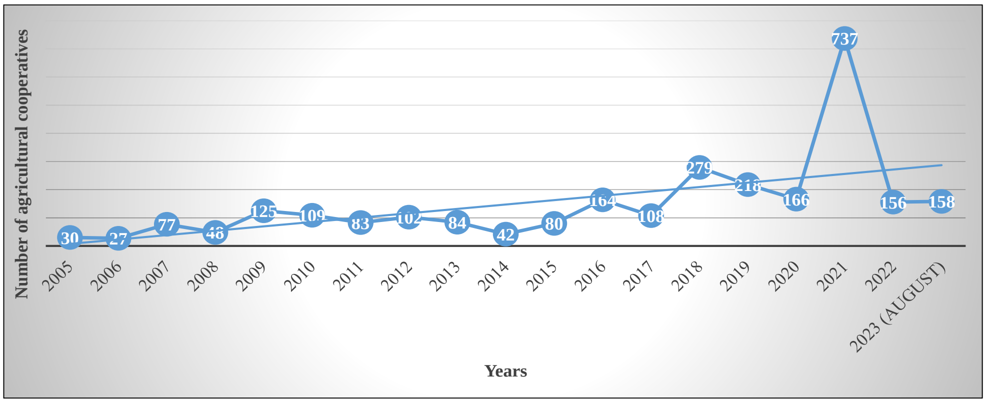
With a relatively recent history, which practically dates back to 2004, with the appearance of Law no. 566 of December 9, 2004 on agricultural cooperation, the current agricultural cooperatives in Romania have much lower turnover than those in the world's top, with values below 41 million dollars for the year 2020 (data processed according to the National Register of Agricultural Cooperatives, September 2022). However, these play an important role in the agri-food system in Romania. Thus, the data for the year 2020 revealed that the domains in which most of the agricultural cooperatives that recorded significant turnover and profit are active are: production of cereals, leguminous crops and oil seeds; wholesale of grain, unmanufactured tobacco, seeds and animal feeds; wholesale trade of fruit and vegetables; mixed farming (Dobay, 2022). In order to identify the particularities of changes in the cooperative system in Romania, as a reaction to the unforeseen shocks in the agri-food system, we analysed the evolution of agricultural cooperatives before and after the COVID-19 pandemic, as well as the changes in the fields of activity with significant turnover.

3. MATERIAL AND METHOD

To carry out this study, we consulted, extracted and processed data on the activity of agricultural cooperatives in Romania for the period 2018–2021 from the National Register of Agricultural Cooperatives, from the website of the Ministry of Agriculture and Rural Development (September 2022 version), as well as data from the databases of the National Institute of Statistics, the National Trade Register Office and from various websites. Thus, the data on the main fields of activity according to the Nomenclature of Economic Activities (NACE rev. 2), turnover, net profit and/or losses for the years 2018–2021 were extracted from the National Register of Agricultural Cooperatives. For registrations of agricultural cooperatives, data were extracted from National Trade Register Office. In order to calculate certain indicators, data were taken from the National Institute of Statistics regarding the population by residence. To estimate the market share held by agricultural cooperatives, information from the website https://www.coduricaen.ro/ was used.

4. RESULTS AND DISCUSSIONS

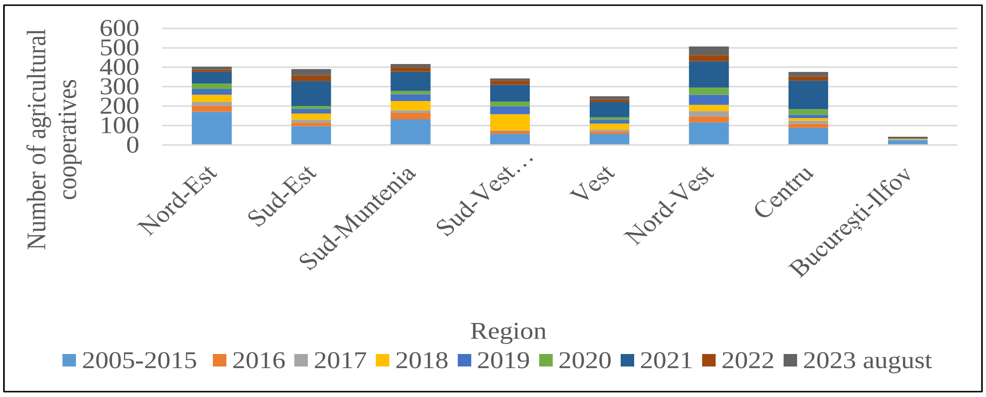
In the period January 1st 2005 – August 31st 2021, more than 2700 agricultural cooperatives were registered in Romania. The rate of annual registrations of agricultural cooperatives in the National Trade Register Office varied quite a lot. While until 2015 this had an almost linear evolution, from 2016 it started to fluctuate, culminating in the significant increase in 2021 (Figure 1). The causes of this increase are related to the financing and fiscal facilities that agricultural cooperatives and their members can benefit from, the experience gained with the implementation of projects that stimulated the establishment and development of cooperatives, the favourable legislative framework (Law no. 265/2020 on the amendment and completing the Agricultural Cooperative Law No. 566/2004 with the provisions regarding the inclusion of new NACE domains, widening the range of activities, the possibility of the peasant household entering as a member, the clear definition of the active agricultural cooperative, the period of concluding contracts between the cooperative and the members for minimum 3 years, etc.), the support provided by the Local Action Groups, etc. (Dobay, 2022).



Source: Processing based on the National Trade Register Office statistics.

Figure 1. Registrations of agricultural cooperatives between January 1st 2005 and August 31st 2021.

Cumulatively, by regions, most agricultural cooperatives were registered in the Nord-Vest (507), Sud-Muntenia (417), Nord-Est (403), yet it can be noticed that there have been changes in their evolution (Figure 2).

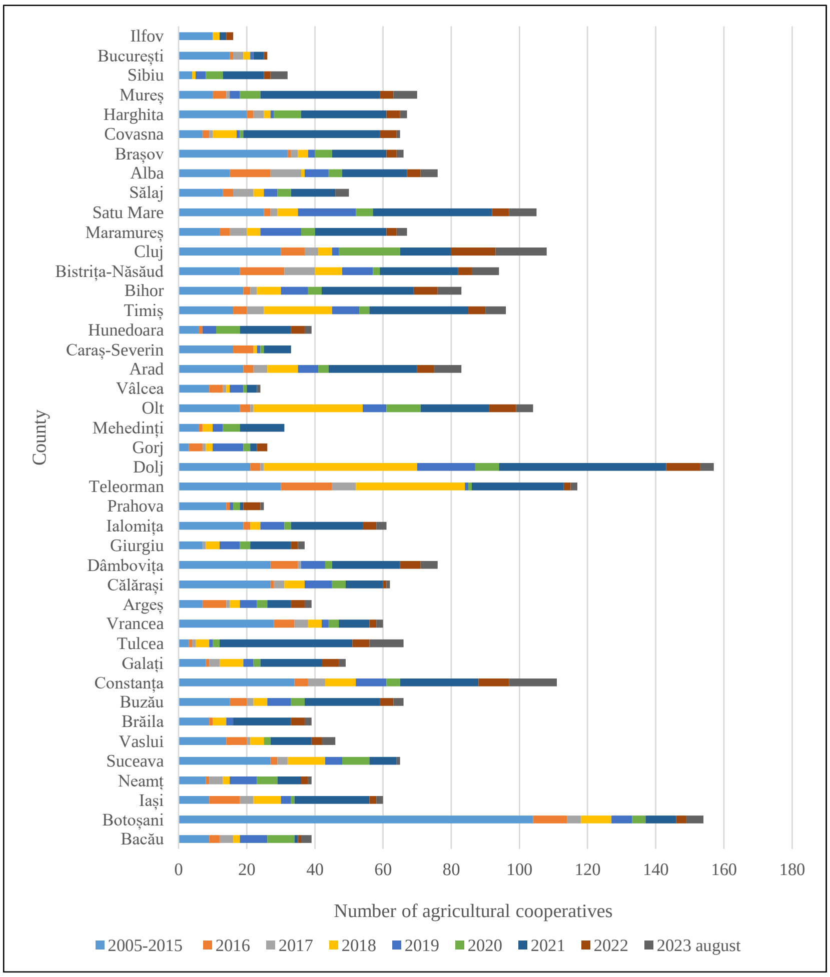


Source: Processing based on the National Trade Register Office statistics.

Figure 2. Registrations of agricultural cooperatives
between January 1st 2005 and August 31st 2021, by regions.

While most cooperatives were registered in the Nord-Est Region until 2015 (25% of the total number in the country), in recent years, the rate of registration has increased more in other regions. Since the regions differ in size in terms of population, we calculated the number of registered agricultural cooperatives per 1000 rural inhabitants (National Institute of Statistics data as of January 1, 2023). Compared to the country average (0.299), higher values are noticed in the Nord-Vest (0.402), Centru (0.373), Vest (0.350), Sud-Est (0.342) and Sud-Vest Oltenia (0.338) regions.

In absolute terms, most agricultural cooperatives were registered in the counties: Dolj, Botoșani, Teleorman, Constanța, Cluj, Satu Mare and Olt (Figure 3). The counties in which the total number of registered agricultural cooperatives in 1,000 inhabitants in rural areas indicates that there is an increased interest in the association are: Tulcea (0.642), Botoșani (0.624), Covasna (0.605), Satu Mare (0.564), Alba (0.559), Teleorman (0.545), Dolj (0.527) and Bistrița-Năsăud (0.510). At the opposite pole there are counties where the values are lower than the national average: Ilfov (0.052), Prahova (0.069), Bacău (0.112), Argeș (0.127), Vâlcea (0.128), Neamț (0.133), Iași (0.138), Gorj (0.149), Suceava (0.164), Giurgiu (0.202), Galați (0.207) and Vaslui (0.211).

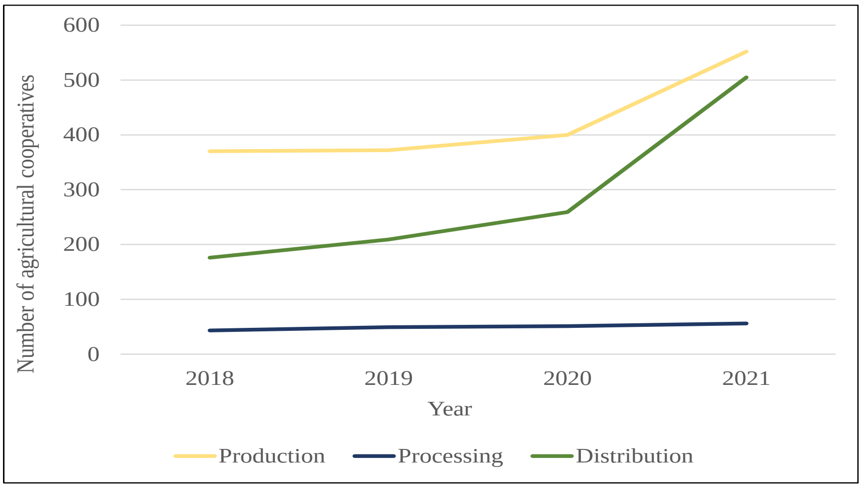


Source: Processing based on the National Trade Register Office statistics.

Figure 3. Registrations of agricultural cooperatives
between January 1st 2005 and August 31st 2021, by counties.

In order to determine the main fields of activity of the agricultural cooperatives, we analysed the situation for the year 2021 based on data from the National Register of Agricultural Cooperatives. Out of the 1115 functional agricultural cooperatives with a balance sheet submitted for the year 2021, most of them had the following main fields of activity: wholesale of grain, unmanufactured tobacco, seeds and animal feeds (199), growing of cereals (except rice), leguminous crops and oil seeds (191), wholesale trade of fruits and vegetables (137), mixed farming (85), wholesale of dairy products, eggs and edible oils and fats (550), growing of vegetables and melons, roots and tubers (54), agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods (46), raising of dairy cattle (43), raising of sheep and goats (38), raising of other animals (30), etc.

If we group the activity fields according to the components of the agri-food system, we shall notice that in the year 2021, agricultural cooperatives whose main object of activity is primary production prevail (552), followed by those dealing with the distribution/commercialisation of products (505), while fewer cooperatives can be found in the processing sector (56).



Source: Processing based on the National Register of Agricultural Cooperatives.

Figure 4. Agricultural cooperatives in the Romanian agri-food system (2018–2021).

There are several areas where there have been significant increases (from 2.4 to 4.9 times) in the number of functional agricultural cooperatives in 2021 compared to 2018. These areas are: wholesale of grain, unmanufactured tobacco, seeds and animal feeds; wholesale of dairy products, eggs and edible oils and fats; wholesale of fruit and vegetables; wholesale of meat and meat products; manufacture of bread; manufacture of fresh pastry goods and cakes; wholesale of beverages; growing of pome fruits and stone fruits; growing of vegetables and melons, roots and tubers, etc.

The NACE areas with moderate increases in the number of functional agricultural cooperatives (doubling or increasing by one third) were the following: manufacture of grain mill products; retail sale of fruit and vegetables in specialised stores; other retail sale of food in specialised stores; growing of cereals (except rice), leguminous crops and oil seeds; growing of other tree and bush fruits and nuts; processing and preserving of meat; raising of other cattle; operation of dairies and cheese making; raising of poultry; warehouses; raising of dairy cattle; raising of sheep and goats; non-specialised wholesale trade; support activities for animal production; agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods; raising of pigs; mixed farming.

The NACE fields in which the number of functional agricultural cooperatives has decreased are: growing of citrus fruits, growing of fibre crops, plant propagation, manufacture of prepared feeds for farm animals, growing of beverage crops, post-harvest activities, freshwater fishing.

Regarding the financial results reported for the analysed period, we can mention the fact that, while in 2018, the losses reported by agricultural cooperatives at country level were higher than the net profits, in 2019 the situation changed, and the favourable differences were increasingly larger (Figure 5).

Source: Processing based on the National Register of Agricultural Cooperatives.

Figure 5. Analysis of financial statements reported by agricultural cooperatives in the period 2018–2021.

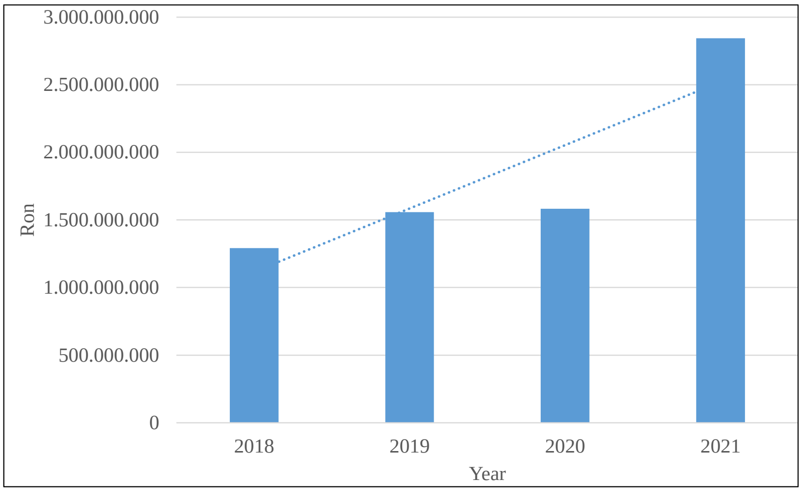
The turnover reported annually increased significantly, from 1.2 billion RON in 2018 to 2.8 billion RON in 2021 (Figure 6).

In order to estimate the market share in different fields, we reported the turnover by each NACE field separately, for the year 2021, to the market share registered for all companies active in the respective field (according to data on the website https://www.coduricaen.ro/).

The results highlighted the following:

– the 31 agricultural cooperatives in the field of agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods hold 10% of the total market;
– the 137 agricultural cooperatives in the field of growing of cereals (except rice), leguminous crops and oil seeds have a market share of 8%;
– 6% market share is recorded in each of the fields: support activities for animal production and wholesale of dairy products, eggs and edible oils and fats;
– 5% in the raising of poultry, 4% in the processing and preserving of poultry meat;
– 3% market share in the fields: raising of pigs, wholesale trade of live animals, wholesale trade of fruits and vegetables;
– 2% market share in the fields: growing of vegetables and melons, roots and tubers; wholesale of grain, unmanufactured tobacco, seeds and animal feeds;
– 1% market share in the fields: growing of pome fruits and stone fruits; raising of dairy cattle; mixed farming; support activities for crop production.

In the remaining fields in which the agricultural cooperatives operate, the market shares are below 1%.



Source: Processing based on the National Register of Agricultural Cooperatives.

Figure 6. The evolution of turnover in the period 2018–2021.

If we group the fields according to the components of the agri-food system, we will obtain the following market shares held by the agricultural cooperatives in Romania for the year 2021: primary production 28%, distribution 24%, processing 4%.

5. CONCLUSIONS

The financial results from the analysed period, 2018–2021, namely the dynamics of net profits and the increase in the difference between total net profits and losses, highlighted the fact that the cooperative system is capable of generating profit, and the number of agricultural cooperatives that have managed to adapt to the new circumstances is significant, thus proving that they are resilient.

The COVID-19 pandemic, as well as the current complex macroeconomic situation, have highlighted the blockages in the agri-food system. The analysed data revealed a tendency of greater involvement of agricultural cooperatives in the marketing activities of agri-food production and in primary production. Thus, it turned out that the number of agricultural cooperatives increased significantly in the fields related to the distribution of cereals, live animals, dairy products, eggs, edible oils and fats, fruits and vegetables, meat and meat products; bread making, cake making and fresh pastry products; wholesale of beverages; cultivation of seed and stone fruits; cultivation of vegetables and melons, roots and tubers, etc.

The novelty of the work consists in the identification of the changes in the cooperative system and the estimation of the market shares held by the agricultural cooperatives in Romania in different fields of activity, as well as in the agri-food system in the current macro-economic situation. With market segments ranging from 1% to 10% separately by field of activity, agricultural cooperatives have managed to own almost one third of primary agricultural production and almost one quarter of the distribution of agri-food products. We believe that through the developments of recent years, agricultural cooperatives are beginning to position themselves on a long-awaited trajectory.

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