ASPECTS REGARDING THE ACTIVITY OF AGRI-FOOD COOPERATIVES IN GERMANY

Irina-Adriana CHIURCIU, Ionela Mituko VLAD, Elena SOARE, Elena TOMA (DIACONU), Andreea-Roxana FIRĂȚOIU

University of Agronomic Sciences and Veterinary Medicine Bucharest of Bucharest, Faculty of Management and Rural Development, 59 Marasti Boulevard, District 1, 011464, Bucharest, Romania, Emails: chiurciu.irina@managusamv.ro, vlad.ionela@managusamv.ro, soare.elena@managusamv.ro, toma.elena@managusamv.ro, andreea.chiurciu@gmail.com

Corresponding author: chiurciu.irina@managusamv.ro

Abstract

In this paperwork a x-ray regarding the main aspects related to the activity of agro-food cooperatives in Germany was accomplished. A series of indicators related to cooperatives in Germany were analyzed and presented. Forms of associations, producer groups and horizontal and vertical cooperation have proven to be opportunities for small business development. This is underlined by agricultural cooperatives in Germany, a major EU grower, farmer and producer, at the forefront of agricultural excellence. Agricultural cooperatives are associations of farmers and family farms working together on the land. They are established by law to increase efficiency and strengthen market positions. At the same time, they take responsibility for all aspects of the environment, thereby preserving the landscape and preserving the biodiversity of plant and animal species. On the one hand, many cooperatives use the latest technologies in fields such as farming, fertilization, plant protection, and the introduction of digitalization in the production process promotes the development of environmentally friendly management. After German reunification, existing economic units were dissolved or converted. Those who continued their activities took the legal form of agricultural producers' cooperatives, sponsored and represented by the Cooperative Audit Association and the German Association of Raiffeisen. Statistical data used in this research was mainly taken from the International Cooperative Alliance (ICA) website, the rest being obtained from other sources.

Key words: agri-food cooperatives, Germany, German Raiffeisen Association, turnover

INTRODUCTION

Cooperatives are autonomous associations of persons, for economic, social and cultural purposes, which have a voluntary structure and which serve the needs of the members who contribute to their capital [9].

Legal forms traditionally used in agriculture, cooperatives are engaged in environmental protection and preservation of surrounding landscapes, through the following actions:

- -the creation on their lands and the maintenance of some landscape features;
- -the use of modern technologies for soil cultivation, fertilization and crop protection,
- -rehabilitation of exploited areas;
- -protection against floods, as it deals with the maintenance of ditches and dams,
- -production of renewable energy (biogas, wind, sun) that supports the reduction of the use of fossil fuels.

Agricultural cooperatives also stand out in the area of charitable actions and at the same time it should be mentioned their important contribution to the development of rural areas, being the largest employers and taxpayers and offering several types of auxiliary services [6].

They constitute an important sector of the economy, as the EU has a total of 250,000 cooperatives, which have 163 million members (which represents a third of the EU population) and employ 5.4 million people [9].

Currently, agriculture in Europe is undergoing profound transformations, so that it is able to respond to the new challenges caused by pollution, but also by climate change. European agriculture, and not only, benefits from technological progress, contributing greatly to ensuring food security. Another aspect that needs to be specified is represented by the increasing industrialization of the

agricultural sector. However, the role of small and medium-sized farms due to their multifunctionality should not be neglected. Both small and medium-sized farms and agricultural cooperatives can capitalize on the material and social potential, so as to contribute to sustainable development [15].

As for the agricultural cooperatives according to the specialists in the field, they are not so well known and appreciated at their true value.

Even if the aforementioned phenomenon happens, it is necessary to mention that, however, cooperatives hold a significant share in most of the European agricultural and agrifood sectors [10].

Within these cooperatives are distinguished agricultural cooperatives, which at union level are structured in Copa-Cogeca, "the united voice of farmers and agri-cooperatives in the EU".

According to the data available on the website, Copa-Cogeca "is the union of the two big agricultural umbrella organisations COPA and COGECA":

- -"Copa (the Committee of Professional Agricultural Organisations) represents over 22 million European farmers and their family members in a combined effort with its members to promote the best interests of the agricultural sector among the EU institutions and other relevant stakeholders" [4].
- -"Cogeca (the General Confederation of Agricultural Cooperatives) represents the general and specific interests of European agri-food, forestry, and fishery cooperatives among the EU Institutions and other socioeconomic organisations contributing to European decision making"[4].

In the countries of the European Union, agricultural cooperatives are presented in various forms and types, but are based on the same principles of operation and organization according to the European Council Directive. According to the data presented in Table 1, there were around 22,000 agricultural cooperatives in the EU, which had more than 6,000,000 members. The turnover of these cooperatives amounted to over EUR 300 billion.

Table 1. Agricultural Cooperatives in the EU			
EU:	Total number	Total number	Turnover
Member	of	of Members*	(million
States:	Cooperatives		Euro)
Italy	5,834	863,323	34,362
Spain	3,844	1,179,323	25,696
Germany	2,400	1,440,660	67,502
France	2,400	858,000	84,350
Hungary	1,116	31,544	1,058
Bulgaria	900	-	-
Portugal	735	-	2,437
Croatia	613	10,734	167
Slovakia	597	-	1,151
Greece	550	-	-
Czech	548	524	1,327
Republic			
Lithuania	402	12,900	714
Slovenia	368	16,539	705
Belgium	301	-	3,257
Austria	217	306,300	8,475
Netherlands	215	140,000	32,000
UK	200	138,021	6,207
Poland	136	-	15,311
Ireland	75	201,684	14,149
Romania	68	-	204
Luxembour	55	-	-
g			
Latvia	49	-	1,111
Finland	35	170,776	13,225
Sweden	30	160,350	7,438
Denmark	28	45,710	25,000
Estonia	21	2,036	512
Malta	18	1,815	204

^{*} multiple membership

Cyprus

Total

Source: [3], 2014.

In the European Union, the countries with the strongest network of agricultural cooperatives are: Italy; Spain, France and Germany. These agricultural cooperatives in the countries specified above have different economic powers [2].

24,917

6,172,746

62

347.342

14

In Germany, cooperatives were established in the 1840s in the form of credit unions, and towards the end of the XIX century the phenomenon became very popular. It is the merit of 2 visionaries, Franz Hermann Schulze-Delitzsch (1808-1883) and Friedrich Wilhelm Raiffeisen (1818-1888).established the first forms of support. Thus, in 1847, Raiffeisen created an association that under favorable granted, repayment conditions, loans to small farmers in the municipality of Weyerbusch (Westerwald). Schulze-Delitzsch also founded, in 1847, the carpenters' and shoemakers' association, and

⁻ data not available

in 1850 the first loan and economics association, the current Volksbank.

Cooperation continued to expand, and in 1870 led to the formation of regional and national federations and entities [13].

Images showing fractions from the activity of agricultural cooperatives are presented in Photos 1 and 2.



Photo 1. From the activity of cooperatives in Germany Source: [7].

During communist period, the the cooperatives in East Germany were transformed into "Landwirtschaftlichen Produktionsgenossenschaften"/ Agricultural production cooperatives, while in West Germany the cooperative phenomenon continued to develop. In 1972 Raiffeisen and Schulze-Delitzsch merged and formed the DGRV - Deutscher Genossenschafts Raiffeisenverband/German Cooperative and Raiffeisen Confederation [5].

After the fall of the Berlin Wall the "Landwirtschaftlichen

Produktionsgenossenschaften"/ Agricultural production cooperatives were reorganized and became part of the national organization Raiffeisen.

Cooperatives in Germany and German legislation of cooperatives, one of the oldest in the world, have been elements of inspiration for similar forms in other countries, especially from Europe and Asia [13].

In terms of legislation, in Germany, all cooperatives operate in accordance with the Cooperative Societies Act, which was promulgated in 1889. The law has undergone several changes over time, and in 2006 it was correlated with the specifications of

Regulation (EC) No. 1435/2003 – Statute of the European Cooperative Society [8].

In 2015 Germany proposed to include the idea of cooperation in Unesco's Intangible Cultural Heritage of Humanity, a proposal officially accepted in 2016.

In this context, the paper aims to present the situation of the agricultural cooperatives that are part of the Deutscher Raiffeisenverband - DRV/German Raiffeisen Association, following their number, members and turnover.



Photo 2. From the activity of cooperatives in Germany Source: [7].

MATERIALS AND METHODS

The work focused, on the one hand, on the presentation of agri-food cooperatives in Germany, and on the other hand, on the analysis of some indicators specific to their activity. From the indicators presented and analyzed in the work we mention: the number Raiffeisen cooperatives existing Germany in the main agricultural sectors; number of members of cooperatives in Germany; turnover achieved by Raiffeisen cooperatives in the main agricultural sectors. Some of the data presented in the paper was taken from the International Cooperative Alliance website, ICA. It should be noted that this data was obtained by the ICA by applying online questionnaires to the members of the cooperatives, as a result of the partnership signed with the European Commission, for the period 2016-2020, regarding the cooperative movement. The data analyzed in the work were presented in graphic form to reflect as well as possible the situation of cooperatives in Germany.

RESULTS AND DISCUSSIONS

According to data presented by BMEL, in Germany agriculture differs between regions. Thus, in the South of the country, small family farms predominate, in the north larger farms, and in the east large corporations and cooperatives of agricultural production [1]. Here, the approximately 800 cooperatives cover 23.2% of the total agricultural area in the area.

These cooperatives appeared after the reunification of Germany, as a kind of continuation of the former production cooperatives [14].

In eastern Germany, where the former Democratic Republic stretched before 1989. about 4,500 "Landwirtschaftlichen Produktionsgenossenschaften"/ Agricultural production cooperatives operated. Subsequently thev were dissolved transformed into modern entities. transformation took place at the structural and staff level, with the loss of many jobs and the migration of young people to cities, and represented the transition from a planned economy to a market economy [11].

With all the problems, 1,500 former cooperatives continued their activity, and their number was reduced over time, mainly due to mergers, reaching 800. They were later incorporated by the Deutscher Raiffeisenverband - DRV/ German Raiffeisen Association [6].

A method used by some cooperatives to overcome the problems that arose due to competition and lack of skilled labor was the expansion of the fields of activity and services, thus also practicing non-agricultural activities.

Ranked 3rd in the EU in 2014 in terms of the number of agricultural cooperatives, but in first place in terms of number of members and 2nd in terms of turnover (Table 1), Germany had in 2017 a total of 7,319 cooperatives, and the sectors of activity in which most cooperatives operated are shown in Figure 1.

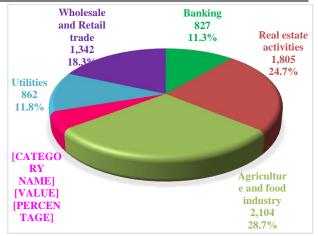


Fig. 1. Number and percentage of cooperatives from the main sectors in Germany, 2017 Source: [13].

It is noted that the largest share was held by cooperatives in the Agriculture and Food Industry sector (28.7%), followed by real estate activities sector (24.7%) and Wholesale and Retail trade (18.3%).

Other sectors in which cooperatives operate in the territory of Germany are:

- -Information and Communication;
- -Insurance:
- -Construction;
- -Professional Scientific and Technical Activities;
- -Administrative and support service activities;
- -Education:
- -Human health and social work activities.

The members of the cooperatives from the main sectors of activity in Germany in 2017 are presented in Figure 2. Regarding the number of members related to cooperatives, in 2017, the Banking sector was detached (18,500,000 members), followed by Real estate activities (2,821,000 members) and Agriculture and Food Industry (1,300,000 members).

From the data presented in Fig. 2, it can be seen that the cooperatives in the Utilities sector recorded the lowest number of members in 2017 (180,000 members).

The turnover of cooperatives from the main sectors of activity in Germany in 2017 is presented in Figure 3.

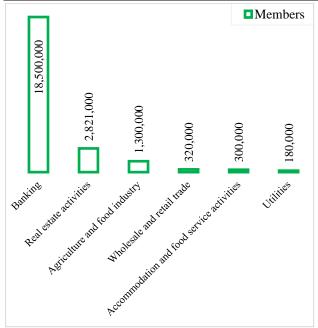


Fig. 2. Members of cooperatives from the main sectors in Germany, 2017

Source: [13].

The most significant turnover of the cooperatives was registered by the Wholesale and Retail sector (133 billion Euro). This was followed by Agriculture and Food (62 billion Euro) and Real estate activities (10.6 billion Euro). The lowest turnover related to cooperatives was achieved by the sector Utilities and Accommodation and food service activities (1 billion Euro per sector).

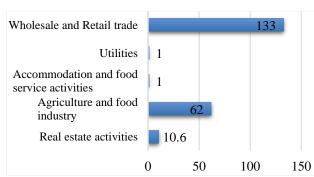


Fig. 3. Turnover of the cooperatives from the main sectors in Germany, 2017 (billion Euro) Source: [13].

In Germany, three ICA member organizations operate:

-DGRV - Deutscher Genossenschafts und Raiffeisenverband (German Cooperative and Raiffeisen Confederation) - intersectoral national organization, full member;

-GdW - Bundesverband deutscher Wohnungs und Immobilienunternehmen (Federal association of German housing and real estate companies) - national organization, the housing sector, full member;

-ZdK - Zentralverband deutscher Konsumgenossenschaften (Central Association of German Consumer Cooperatives) - national organization, the consumer sector, associate member.

-Consumer Cooperatives) - national organization, the consumer sector, associate member.

DGRV - Deutscher Genossenschafts und Raiffeisenverband (German Cooperative and Raiffeisen Confederation) includes 4 associations of cooperatives, as it appears in Figure 4.

They are composed of:

- ♦ 4 regional associations;
- ♦ 5 trade associations;
- ♦ 6 Companies in the Volksbanken Raiffeisenbanken cooperative financial network;
- → 39 Raiffeisen headquarters and subsidiaries;
- ♦ 13 Affiliates and other members;
- ♦ 28 Companies of the BÄKO Group;
- ♦ 24 Companies of the REWE Group [5].



Fig. 4. Composition of DGRV - Deutscher Genossenschafts und Raiffeisenverband (German Cooperative and Raiffeisen Confederation)
Source: [5].

One of the most important associations that is part of the DGRV organization - Deutscher Genossenschafts und Raiffeisenverband/German Cooperative and Raiffeisen Confederation is Deutscher Raiffeisenverband - DRV/ German Raiffeisen Association. It deals with:

- ➤ 66% of German milk processing;
- ➤ 50% of German grain trade;

- ➤ 33% of German livestock trade;
- > 33% of German wine harvest [6].

The evolution of the number of Raiffeisen cooperatives in Germany during 1950-2019 is shown in Figure 5. From the presented statistical data it can be seen that during this time the number of Raiffeisen cooperatives was framed by a decreasing trend. The largest number of Raiffeisen cooperatives was registered in 1950 (23,753 cooperatives), and the smallest number was registered in 2019 (1,984 cooperatives). Raiffeisen cooperatives in Germany in 2019 decreased by: 11.8%, compared to 2015 and by 61.8%, compared to 1990.

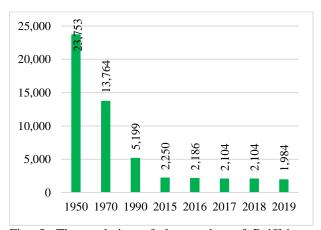


Fig. 5. The evolution of the number of Raiffeisen cooperatives in Germany, 1950-2019 (cooperatives) Source: [6], 2020.

The number and percentage of Raiffeisen cooperatives in the main agricultural sectors in Germany in 2020 is presented in Figure 6. In 2020, in Germany there were 1,766 Raiffeisen cooperatives distributed as follows: Farming (542 cooperatives, respectively 30% of the total); Others (422 cooperatives, respectively 24% of the total); Purchasing and marketing (342 cooperatives, respectively 19% of the total); Dairy (168 cooperatives, respectively 10% of the total); Wine growers (148 cooperatives, respectively 8.0% of the total); Fruit, vegetables, horticulture (82 cooperatives, respectively 4.0% of the total) and Cattle and meat (75 cooperatives, respectively 4.0% of the total).

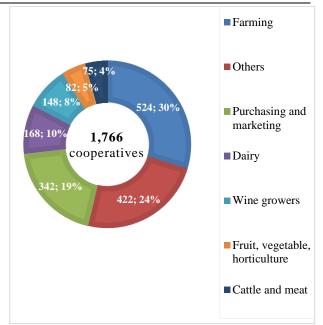


Fig. 6. Number and percentage of Raiffeisen cooperatives from the main agriculture sectors in Germany, 2020

Source: [6], 2020.

The evolution of turnover for Raiffeisen cooperatives from the main agriculture sectors in Germany, 1950-2019, (billion Euro) is presented in Figure 7. From the presented statistical data, it is found that in the period 1950-2015, the turnover attributed Raiffeisen cooperatives the in main agricultural sectors in Germany was on an upward trend, from 3.5 billion Euro (1950) to 61.7 billion Euro (2015). In 2019, the turnover increased by 58.2 billion Euro, compared to 1950.



*including sales of the subsidiaries and holdings of the cooperative companies

Fig. 7. Evolution of turnover for Raiffeisen cooperatives from the main agriculture sectors in Germany, 1950-2019, (billion Euro)

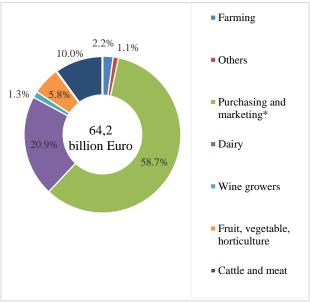
Source: [6], 2020.

The substantial increase in turnover mentioned above demonstrates that agricultural cooperatives directly contribute to the realization of sustainable businesses of which their members benefit. During 2015 - 2019, the turnover of Raiffeisen cooperatives registered a series of changes [12].

The most representative turnover was recorded in 2019 (65.6 billion Euro), and the lowest was 58.8 billion Euro (2016). In 2019, the turnover increased by 6.3%, compared to 2015.

According to statistical data and studies conducted for the period 2010-2019, it was highlighted that the turnover of agricultural cooperatives in Germany has increased by approximately 53.0%. Another aspect that must highlighted for 2010, is represented by the market share established in the report, the sectoral turnover, as follows: cooperatives afferent to the cereal sector (about 50% of the turnover); cooperatives in the vegetables and sector (40% of the turnover); cooperatives in the field of pork (less than 20% of turnover) etc [16].

The turnover (including sales revenues related to subsidiaries and cooperatives' participations) of cooperatives in the main agricultural sectors in Germany in 2020 is shown in Figure 8.



*including sales proceeds of subsidiaries and holdings of the cooperatives

Fig. 8. Turnover of the cooperatives from the main agriculture sectors in Germany, 2020 (billion Euro) Source: [6], 2020.

From the presented data, it is found that the turnover achieved by the cooperatives in 2020 was of 64.2 billion Euro.

The turnover was distributed as follows: Purchasing and marketing (37.7 billion Euro, respectively 58.7% of the total); Dairy (13.5 billion Euro, respectively 20.9% of the total), Fruit, vegetable, horticulture (3.7 billion Euro); Cattle and meat (6.4 billion, respectively 10.0% of the total); Farming (1.4 billion Euro); Farming (1.4 billion Euro and 2.2% of the total); Wine growers and Others (0.8 billion Euro).

ACKNOWLEDGEMENTS

This research work was carried out with the support of the Project ERASMUS+2019-1-RO01-KA203-063752 "Coo Performance Digital, state-of-the-art agribusiness education for farmer led enterprises in the agri-food value chain".

CONCLUSIONS

Agricultural cooperatives in Germany have developed over time both upstream and Following downstream of sectors. of presentation and analysis the main specific indicators to the agri-food cooperatives in Germany, the following were found:

- -In 1950, the largest number of Raiffeisen cooperatives was registered (23,753 cooperatives);
- -In 2019, the lowest number of Raiffeisen cooperatives (1,984 cooperatives) was registered in Germany;
- -In 2020, out of the 1,766 Raiffeisen cooperatives existing in Germany in the main agricultural sectors, 542 cooperatives belonged to the Farming sector;
- -In 2017, the Agriculture and Food Industry sector registered 1,300,000 members;
- -Between 1950 and 2015, the turnover achieved by Raiffeisen cooperatives in the main agricultural sectors was on an upward trend:
- -In 2019, the highest turnover generated by Raiffeisen cooperatives in the main

agricultural sectors was recorded, of 65.6 billion Euro;

-In 2020, the turnover of cooperatives in the main agricultural sectors in Germany was of 64.2 billion Euro. The sector that had the largest contribution to the turnover was "Purchasing and marketing" (37.7 billion Euro, respectively 58.7% of the total).

In the future, in the European Union, but also in Germany, the agri-food cooperatives will be able to meet the requirements in order to achieve a sustainable agriculture.

REFERENCES

[1]Bundesministerium für Ernährung und Landwirtschaft-BMEL (Federal Ministry of Food and Agriculture), 2019, https://www.bmel.de/DE/Home/home_node.html,

https://www.bmel.de/DE/Home/home_node.html, Accessed on 26.02.2022.

[2]Brătulescu A.M., 2017, Agricultural cooperatives in developing agriculture in Romania and the European Union, Agrarian Economy and Rural Development - Realities and Perspectives for Romania, 8th Edition of the International Symposium, November 2017, Bucharest, The Research Institute for Agricultural Economy and Rural Development (ICEADR), Bucharest, pp. 285-289.

[3]Cogeca, European Agri-Cooperatives, Development of Agricultural Cooperatives in the EU, PUB (14)9112:2, https://www.agro-alimentarias.coop/ficheros/doc/04519.pdf, Accessed on 26.02.2022.

[4]Copa Cogeca, https://www.copa-cogeca.eu/, Accessed on 2.03.2022.

[5]Deutscher Genossenschafts und Raiffeisenverband (German Cooperative and Raiffeisen Confederation) - DGRV, https://www.dgrv.de/, Accessed on 25.02.2022. [6]Deutscher Raiffeisenverband-DRV (German Raiffeisen Association), 2021, https://www.raiffeisen.de/, Accessed on 26.02.2022.

[7]Deutschland, 2018, www.deutschland.de, Accessed on 2.03.2022.

[8]EUR-Lex, https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=celex%3A32003R1435, Accessed on 27.02.2022.

[9]European Commission, Cooperatives, https://ec.europa.eu/growth/sectors/proximity-and-social-economy/social-economy-eu/cooperatives_en, Accessed on 2.03.2022.

[10]Frey O., Study on European agricultural coops, 2020, https://olivierfrey.com/study-top-100-european-coops/, Accessed on 25.02.2022.

[11]Hagedorn, K., Mehl, P., 2000, Social Policies for German Agriculture/Agriculture in Germany, Tangermann S. (Ed.), Frankfurt am Main, DLG, pp. 135–167.

[12]International Cooperative Alliance, ICA, 2021, Economic integration and cooperation among cooperatives, https://coops4dev.coop/en/node/15581, Accessed on 9.03.2022.

[13]International Cooperative Alliance, ICA, 2020, Mapping: Key figures national report: Germany ICA-EU Partnership, https://coops4dev.coop/en, Accessed on 9.03.2022.

[14]Laschewski L., Siebert, R., 2004, Social Capital Formation in Rural East Germany/Power and gender in European rural development. (Perspectives on rural policy and planning), Goverde, H. J. M., de Haan, H. J., & Baylina, M. (Eds.), Ashgate Publishing Limited, pp. 20-31.

[15]Micu, M.M., Dumitru, E.A., Vintu, C.R., Tudor, V.C., Fintineru, G., 2022, Models Underlying the Success Development of Family Farms in Romania, Sustainability, 14(4):2443. https://doi.org/10.3390/su14042443, Accessed on 9.03.2022.

[16]Vlad, I. M., Ortega Cano, C., Hanisch, M., Vameşu, A., Toma (Diaconu) Elena, 2022, Country reports on cooperatives in Romania, Spain and Germany. Guidelines on policies for cooperative producer organizations in Romania, CERES Publishing House, Bucharest, pp.81-87.

http://www.managusamv.ro/cooperformance/images/R eporting/O3_Country_report_Policy_EN_site.pdf, Accessed on 9.03.2022.