

Cooperatives as Entities Influencing the Sustainable Development of Rural Areas in European Union

Aneta Suchoń

Department of Agricultural, Food and Environmental Law of the Faculty of Law and Administration of Adam Mickiewicz's University in Poznań, Poland

**Corresponding Author: suchon@amu.edu.pl*

DOI: <http://dx.doi.org/10.18196/iclr.v4i2.15913>

Abstract

The aim of the article was, first of all, to determine whether and to what extent legal regulations favour cooperatives and influence the development of rural areas in Poland and selected countries of Western Europe. Secondly, it attempts to indicate the possible directions for the development of cooperatives in rural areas in light of the new rules of the Common Agricultural Policy after 2022 and the European Green Deal. The basic research method involved the dogmatic analysis of normative texts, which is a characteristic feature of a lawyer's work. At the beginning of the article selected issues related to cooperatives in the European Union and EU rural development principles were presented, then regulations concerning the establishment and operation of cooperatives in Poland, Germany, France and Italy. The next part of the article refers to the new EU regulation of December 2021, which will enter into force on 1 January 2023; and indicate regulations that will be of benefit to cooperatives and that will particularly contribute to the development of rural areas. The issue of the European Green Deal and its impact on association in the form of cooperatives was also discussed.

Keywords: common agricultural policy; cooperatives; european green deal; sustainable development of rural areas

1. Introduction

Over the centuries, rural areas have always been important for food production. Socio-economic changes in recent decades, including globalization and urbanization, are changing the role and nature of rural areas. For example, in Poland, due to membership in the European Union, among other things, one can notice the creation of larger entities and a decline in the number of agricultural producers (Suchoń, 2012). At the same time, however, people working in nearby cities are increasingly interested in living in rural areas, recreation and tourism. In the European Union, 137 million people live in rural areas – i.e., nearly 30% of the EU population – and these areas represent over 80% of the EU territory (Communication from the Commission to Parliament, 2021).

As outlined in the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions of 30 June 2021, entitled A long-term vision for EU rural areas - Towards stronger, more connected, resilient and prosperous rural areas by 2040, many Europeans who live in rural areas experience poorer rural infrastructure, deteriorating access to social and education

services, as well as banking services, lower employment opportunities, and falling incomes. Rural areas also have less access to internet and digital innovation (Communication from the Commission to Parliament, 2021).

For agricultural producers, it is important to be competitive (Norer, 2018, 15 and next): to ensure they can process agricultural products, be able to purchase the means of production at a good price, and use agricultural machinery or other tools for agricultural activity. Innovation is also needed, including in digitization. For example, digital technologies allow more farmers to improve the performance of their farms. They play a key role in optimizing the use of seeds, pesticides and biological products, thus contributing to more efficient use of resources (Radziewicz, 2021).

When considering the needs of rural areas, it is essential to ensure their sustainable development. This concept is presented in various ways in the literature, in the legislation of various countries, and in international documents. Although the essence of this concept seems obvious, the precise definition and interpretation of what sustainable development is giving rise to discussions both on theoretical and practical levels (Žmija, 2009). According to Art. 3 point 50 of the Polish Act of 27 April 2001 Environmental Protection Law (Journal of Laws from 2021, item 1973), the concept of sustainable development is understood as such socio-economic development in which the process of integrating political, economic and social activities takes place, while maintaining the natural balance and continued stability of basic natural processes, in order to ensure the possibility of satisfying the basic needs of communities and individual citizens of both the present generation and future generations (Suchoń, 2019).

Improving the quality of life in rural areas, as well as the effective use of their resources and potentials, including agriculture and fisheries, is essential for the sustainable development of the country (Žmija, 2009). Digitization and innovation in agriculture and rural infrastructure are essential. In many European countries, associations of agricultural producers, especially in the form of cooperatives, contribute not only to increasing their competitiveness, but also to providing additional jobs, assistance for the disabled, increased food processing and sales, and environmental protection – as can be seen in the activity of water cooperatives. When considering the concept of sustainable development, it is worth referring to the document *The United Nations in their document (ONZ, 2015) "Transforming our world: the 2030 Agenda for Sustainable Development"*. It says that what is advised to achieve by 2030 is to double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, to implement resilient agricultural practices designed to increase productivity and production, to help maintain ecosystems and to strengthen capacity for adaptation to climate changes. The literature indicates that cooperatives can contribute to the achievement of many sustainable development goals (e.g., Wanyama, F. O. 2014, 10 and next; Zhu & Marjanovic 2020).

Cooperatives in rural areas have a long history, for example, in Poland the first of these entities were established at the beginning of the 19th century. They developed during the Partitions, often uniting Poles in the fight against the occupying powers and securing the economic and social goals of the cooperative's members. They continued to be popular in the 20th and 21st centuries (Suchoń, 2016, 18 and next). In Germany the activity of Friedrich Wilhelm Raiffeisen, who in the nineteenth-century state created cooperatives associating farmers, undoubtedly contributed to the development of rural cooperatives (Helios, 2009, 100 and next).

The functioning of a cooperative is influenced by various factors, including legal, historical and local needs. The cultivation of cooperative principles is closely related to the developments in the local area. Cooperatives provide jobs, including for people with disabilities who are employed by social cooperatives, and they engage in renewable energy projects, such as building biogas plants. They bring together agricultural producers, and this leads to an increase in their income. Rural residents, who are often members of cooperatives, tend to find it easier to innovate than big companies do.

The subject of cooperatives in rural areas has been discussed in legal studies on cooperatives in general in various legal systems, e.g. G. Giuffrida's book *Le co-operative agricole (natura giuridica)*, a work devoted to the legal aspects of agricultural co-operatives in Italy (Giuffrida, 1981). The publication *Les co-operatives agricoles. Identité, gouvernance et stratégies* was written by academics- and experts on - from France, such as C. Chômél, F. Declerck, M. Filippi, R. Mauget, and O. Frey (Chômél, Declerck, Filippi, Mauget & Frey, 2013). In Germany, many commentaries on the cooperative act have been published, such for example edited by K.P. Hillebrandt and J. Keßler (Hillebrandt & Keßler, 2019). In Poland, for example a study on this subject was published by A. Suchoń, entitled *Legal aspect of the organization and operation of agricultural co-operatives in Poland* (Suchoń, 2019). The legal and economic problems of cooperatives in agriculture have been the subject of international conferences, leading, for example, to the publication of *The role of cooperatives in the European Agri-Food System*, edited by R. Fanfani and E. Ricci Maccarini (Fanfani, Ricci Maccarini, 2009). This study contains articles by authors from various countries, mostly discussing economic aspects, but also referring to legal regulations. The publication covers issues such as the role of cooperatives in the agri-food industry in maintaining food safety. As yet, no studies have been published that take into account the issues of COVID-19, the Common Agricultural Policy after 2022 and European Green Deal, or that are focused on sustainable development when considering the operation of cooperatives in rural areas in the European Union, especially in the current socio-economic conditions. It is also relatively rare for a single publication to tackle these issues. However, due to the fact that the topic is very broad, some issues will only be signaled and presented in outline, while a select few will be addressed in detail.

The aim of the article is, first of all, to determine whether and to what extent legal regulations favour cooperatives and influence the development of rural areas in Poland and selected countries of Western Europe. Secondly, it attempts to indicate the possible directions for the development of cooperatives in rural areas in light of the new rules of the Common Agricultural Policy after 2022.

First, selected issues related to cooperatives in the European Union and EU rural development principles will be presented, and then regulations concerning the establishment and operation of cooperatives in Poland, Germany, France and Italy will be presented. The considerations will focus, *inter alia*, on the number of members, as well as on statutes, registration and financing. The aim is to assess legal instruments pertaining to cooperatives in terms of their impact on rural development. The second part of the article will refer to the new EU regulation of 2021, which will enter into force on 1 January 2023; and will indicate regulations that will be of benefit to cooperatives and that will particularly contribute to the development of rural areas.

2. Method

The basic research method involved the dogmatic analysis of normative texts, which is characteristic of the work of lawyers. First, this study tackles all the legal acts concerning cooperative and agricultural law. The subject of the publication also requires an analysis of EU legislation and the use of comparative legal research. Due to the practical significance of agricultural cooperatives, typically legal considerations have been supported by statistical data and practical information. It is also important to refer to the economic context in order to illustrate the type, number and structure of cooperatives in selected countries and the European Union. This method is extremely useful for indicating the directions in which agricultural cooperatives may develop.

3. Discussion and Analysis

3.1. Cooperatives in the European Union and EU Rural Development Principles – General Remarks

The cooperative movement is an international movement which is popular across the world, both in developed and developing countries. The principles on which weavers founded a cooperative entity in 1844 became a model for other cooperatives and are considered the basis of the cooperative movement (Bierzanek, 1984, 21 and next). They include: voluntary and open membership; democratic membership control; education, training and information; inter-cooperative cooperation; and caring for the local community (Zakrzewski, 2005) The International Cooperative Alliance (ICA) was established as early as 1895. Now it associates 318 cooperative organizations from 112 countries, representing over a billion cooperative members, about 3 million individual cooperatives, and 280 million employees (International Cooperative Organizations).

The establishment of the European Economic Community in 1957 (currently: the European Union), the Treaty establishing the European Economic Community (the so-called Treaty of Rome), signed on March 25, 1957 (entered into force on January 1, 1958) (Journal of Laws of 2004, No. 90, item. 864/2) contributed to the separation of the so-called specific EU policies, including agricultural, social, regional, environmental and energy policies. There is no doubt that for their implementation it is extremely important for agricultural producers to associate and undertake such activities as a joint sale of agricultural products, purchase of means of production, engaging in processing, projects in the field of renewable energy sources, supporting ecological agriculture, and providing work for unemployed or disabled people. The functioning of agricultural cooperatives is very much influenced by the Common Agricultural Policy (CAP) (Jurcewicz, 2012). Cooperatives are important entities operating in the industrial agricultural markets, contributing to increasing the income of agricultural producers and strengthening their position in the food chain (COGECA, 2014, 6-12). According to statistical data, there are about 22,000 agricultural cooperatives operating in the European Union, and their total turnover exceeds EUR 347 billion. They have more than a 50% share in the supply of means for agricultural production, and over a 60% share in the purchase, processing and marketing of agricultural products (COGECA, 2014, 22-30; Zuba-Ciszewska 2020).

There are over 235,000 cooperatives in the world (Ruch Spółdzielców), associating 145 million members and employing 4.7 million employees (Krajowa Rada Spółdzielcza, Ruch

Spółdzielców). In terms of the number in Europe, Italy stands out with 41,500, while Spain has 24,000, France 21,000, and Sweden 9,100 (Krajowa Rada Spółdzielcza). In Poland, there are currently over 9,500 cooperatives (Ruch Spółdzielców). Statistical data show that the largest cooperative industry in Europe is comprised of labour cooperatives – production and service cooperatives, which make up 41%, while agricultural cooperatives make up 33%. In turn, 17% are housing cooperatives, 5% cooperative banks, 3% consumer cooperatives, 1% cooperative pharmacies (which in Western Europe are treated as a separate sector) (Spółdzielcza & Spółdzielców).

Although the European Commission has emphasized in many documents that the cooperative economy and cooperatives contribute to the achievement of key objectives of the European Union (Anggriawan et al, 2022), such as social policy and employment, regional development and agriculture, there is no general EU legal act on the establishment and organization of cooperatives (European Commission, 2001, 5 and next). These issues are subject to the national regulations of each Member State. The exception is the European Cooperative Society (SCE), the general principles of the operation of which are defined in Council Regulation No. 1435/2003 / EC of July 22, 2003, on the Statute for a European Cooperative Society (Journal of Laws of EC No. L.207 of August 18, 2003, p. 1.), and supplemented by Council Directive No. 2003/72 / EC of July 22, 2003 (Journal of Laws EC No. L. 207 of August 18, 2003, p. 25) containing provisions on employees of European cooperatives.

According to the EU regulation of 2003, the main purpose of an SCE's activity is to meet the needs of its members and/or support their economic and/or social activities, in particular by concluding agreements with them for the supply of goods or services, or the performance of work as part of the business activities which it carries out, or which is commissioned by the SCE. In addition, an SCE's activity may be aimed at meeting the needs of its members by promoting, as set out above, their participation in economic activities in one or more SCEs and/or national cooperatives. An SCE may operate through subsidiaries.

The links between cooperatives and rural development can take many forms. Cooperatives, due to the fact that they operate in the countryside, far away from cities, often have better access to the customer and fewer transport problems. They are also familiar with the needs and problems of the area and its inhabitants (Bijman, 2012, 2-56). These entities are often very important, stable employers, and when agricultural producers are members of a cooperative this leads to an increase in their income. At the same time, by participating in the implementation of broadly understood public and social goals, such as the development of investment, human capital, environmental protection, and renewable energy, they contribute to the economic and social development of the region in various ways (Anggriawan, 2020). Cooperatives often take part in programs and activities which help promote the area in which they operate (Bijman, 2012, 2-56).

According to the Regulation of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005, the main objectives of the CAP in the field of rural development until the end of 2022 are: (a) promoting the competitiveness of agriculture; (b) ensuring the sustainable management of natural resources and climate action; and (c) achieving a balanced territorial development of rural economies and communities, including job creation and maintenance (see more Canfora 2020).

In terms of association and cooperation, including in the form of a cooperative, it is worth mentioning the operational groups which work toward EIP innovation. According to

Article 56 of the Regulation of the European Parliament and of the Council of 17 December 2013, EIP Operational Groups are a pivotal element of the European Innovation Partnership (EIP) for agricultural productivity and sustainability. They are made up of entities such as: farmers, researchers, advisers and agri-food entrepreneurs who are relevant to the achievement of EIP objectives. The European Innovation Partnership EIP for Agricultural Productivity and Sustainability aims to build bridges between the latest research knowledge and technology and farmers, forest managers, rural communities, entrepreneurs, NGOs and advisory services; to support resource-efficient, economically viable, productive, competitive, low-carbon and climate-friendly agriculture and forestry sectors; and to help ensure a stable and sustainable supply of food, feed and biomaterials – both existing and new kinds.

3.2. Cooperatives in Rural Areas in Poland

Cooperatives have a rich history on Polish soil. The legal, economic and social formula of their organisation and operation has changed a great deal over the years. The beginnings of agricultural cooperatives date back to 1816 when S. Staszic founded the Hrubieszów Agricultural Society for the purpose of “improving agriculture and industry and mutual help in misfortune”. It was supposed to foster the development of common property and individual farms, and to take care of the education and culture of its members (Zalewski, 1945-1946, 17 and next). Cooperatives were also popular in the period of the Partitions, in the inter-war period, and after World War II. However, after 1945 their independence was limited and they were strongly dependent on the state. The transformation of the political system in 1989 led to the dissolution of many cooperatives. Undoubtedly, the accession of Poland to the European Union and the inclusion of domestic agriculture under the Common Agricultural Policy constituted a new stage in the development of agricultural cooperatives.

Currently, there are over 3,000 cooperatives in rural areas in Poland. The basic legal act pertaining to cooperatives is the Act of September 16, 1982 – Cooperative Law (Journal of Laws of 2021, item 648, as amended). In terms of cooperatives in agriculture and rural areas, the following should be mentioned: the Act of October 4, 2018, on farmers' cooperatives (Journal of Laws, item 2073), the Act of September 15, 2000, on groups of agricultural producers and their associations, and on amending other acts (Journal of Laws of 2022, item 395, as amended), the Act of 27 April 2006 on social cooperatives (Journal of Laws of 2020, item 2085, as amended), the Act of April 20, 2004, on the organization of the milk and milk products market (Journal of Laws of 2022, item 381, as amended), the Act of April 23, 1964 – Civil Code (Journal of Laws of 2020, item 1740, as amended); as well as laws related to taxes, agricultural markets and acts of EU law (Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013).

These acts directly or indirectly affect the functioning of agricultural cooperatives and, more broadly, rural areas. It is also worth mentioning the Act of February 20, 2015, on renewable energy sources (Journal of Laws 2021, after 610 as amended), which introduced the definition of an energy cooperative into Polish legislation. According to the Act of 16 September 1982 on Cooperative Law, a cooperative is a voluntary association of an unlimited number of persons, with variable composition and a share fund, which conducts joint economic activities in the interests of its members. It should be stressed that Article 1 of the Act stipulates that a cooperative may also carry out social, educational and cultural activities for the benefit of its members and their environment. Pursuant to Article 6 of the Act on Cooperative Law, persons intending to establish a cooperative (founders) adopt the cooperative statute and confirm its acceptance by affixing their signatures. A general provision

stipulates that the number of founders of a cooperative may not be less than 10 if the founders are natural persons, and 3 if the founders are legal persons. The legislation stipulates that, for some agricultural cooperatives, fewer than ten founders may set up such an entity and, in addition, lays down requirements for the members of the cooperative (or its founders). In agricultural production cooperatives, the number of founders who are natural persons may not be less than five.

The events of recent years related to COVID-19 have resulted in changes to the Cooperative Law. On the basis of the Act of March 31, 2020, amending the Act on special solutions related to the prevention, prevention and combating of COVID-19, other infectious diseases and emergencies caused by them, and certain other acts, and the Act of April 16, 2020, on special support instruments due to the spread of SARS-CoV-2 virus, changes were made to the aforementioned law. For example, in Art. 35 of the Cooperative Law, regulations were added after § 4. The new § 41-44 stipulates that a member of the supervisory board or a member of the management board may request that a supervisory board or management board meeting be convened, specifying the proposed agenda, or that a specific resolution be adopted in writing or by means of remote communication. On the other hand, § 43 indicates that the resolution of the body may be adopted if all members of the body have been properly notified of the meeting of the body or voting in writing, or by means of remote communication. Changes were also introduced by the Act of November 18, 2020, on electronic deliveries. Amendments have been introduced to Art. 16 of the Act of September 16, 1982 – Cooperative Law, namely, the condition for being admitted as a member is the submission of a declaration, which should be submitted in writing as a hard copy or in an electronic form. Letters recorded in electronic form shall be sent to the cooperative's electronic delivery address, and should be accompanied by a qualified electronic signature, personal signature or trusted signature.

The basic feature of a cooperative is an unlimited number of members and their organized cooperation aimed at achieving a common goal. With regard to sustainable development, i.e., social and economic development, environmental protection in order to ensure the possibility of satisfying the basic needs of individual communities or citizens of both the present generation and future generation, it is worth mentioning, above all, dairy cooperatives, cooperative groups of agricultural producers, social cooperatives, cooperative banks, and energy cooperatives.

The activity of dairy cooperatives is connected with animal breeding, ensuring the continuity of supplies for the inhabitants of not only villages, but also cities, and appropriate innovation in the field of electronic services. Dairy cooperatives invested mainly in modernizing the production process. Capital expenditure related to the purchase and assembly of machines and processing lines accounted for nearly 90% of the expenditure incurred. Expenditures related to the construction, expansion and modernization of buildings used to implement innovations amounted to less than 4% of expenditures (Zakrzewska, 2016). Cooperatives make use of various EU funds to modernize and introduce innovative solutions.

In 2019, Poland was the 13th largest milk producer in the world; behind India, the USA, Pakistan, China, Germany, Russia, Brazil, France, Turkey, New Zealand, the United Kingdom and the Netherlands. The leading Polish dairy cooperatives Mlekovita Group and Mlekpól (SM) are among the largest dairy companies in Central and Eastern Europe. Their turnover is around EUR 1 billion (TOP 25 Polska: 2020). However, dairy cooperatives are facing problems that have arisen, for example, due to the war in Ukraine, such as high fuel prices, problems

with gas supplies, and shortages of some goods necessary for milk processing and packaging. External factors negatively affect the sustainable development of dairy cooperatives.

In recent years, groups of agricultural producers have been gaining popularity among agricultural producers in Poland. Currently, there are more than 700 such entities, including more than 500 in the form of cooperatives. Pursuant to the Act of 15 September 2000 on Agricultural Producer Groups, natural persons, organisational units without legal personality, and legal persons, that, as part of agricultural activity, run: 1) a farm, in accordance with the agricultural tax regulations, or 2) an agricultural business in special branches of agricultural production – may be organised into agricultural producer groups in order to adjust agricultural products and the production process to market conditions, to jointly market the products, in particular to prepare the products for sale, to centralize sales and deliveries to wholesale buyers, to set out common rules pertaining to production – especially in connection with crops and the availability of agricultural products, to develop business and marketing skills, to streamline the innovation processes, and to protect the environment. The groups carrying out those objectives help to develop agriculture and to increase the incomes of agricultural producers (Suchoń, 2019, 14 and next).

An agricultural producer group is not a separate legal entity, but such groups can be organised on the basis of each type of business entity, i.e., a limited company, a cooperative, an association and a voluntary association. Currently, most groups are formed on a cooperative basis. agricultural production cooperatives, which have been operating in Poland since the socialist era. According to Article 138 of the Act of September 16, 1982 – Cooperative Law, the purpose of the agricultural activity of an agricultural production cooperative (APC) is to run a joint agricultural holding and to operate for the benefit of the individual agricultural holdings of its members. A cooperative may also engage in other business activities.

Cooperative banks are particularly popular in rural areas in Poland. According to the Act of December 7, 2000, on the functioning of cooperative banks, their affiliation and affiliating banks, a cooperative bank should be understood as a bank that is a cooperative, to which, in the scope not regulated in the aforementioned Act and in the Act of August 29, 1997, the banking law is governed by the provisions of the Cooperative Law of September 16, 1982. As for cooperative banks, despite many socio-economic transformations, they have been a stable sector of cooperatives since the nineteenth century. The stability of relations with clients, the satisfaction of local communities, building the social capital and taking into account new developments resulting from the development of banking law and digitization, as well as the needs of clients of natural persons and entrepreneurs, should be emphasized.

There are also housing cooperatives in rural areas, but their number is much smaller than in cities. The functioning of such cooperatives is based on the Cooperative Law and the Act of December 15, 2000, on Housing. In the justification of the judgment of 15 July 2009, the Constitutional Tribunal stressed that “housing cooperatives should be classified as voluntary associations (Art. 12 of the Constitution), benefiting from the guarantees provided for in Art. 58 of the Constitution. Housing cooperatives, the purpose of which is to meet the housing needs of members and their families, have a special legal status resulting from the Constitution, related to their role in the implementation of the state’s tasks specified in Art. 75 sec. 1 of the Constitution” (see reference number K 5/01, Journal of Laws of 2009 r. No. 117, item 988). Cooperatives. Article 1 of this Act states that the purpose of such cooperatives is to meet the housing needs of other members and their families by members with independent housing units or single-family houses, as well as premises for other purposes. In the

justification of the judgment of 15 July 2009, the Constitutional Tribunal stressed that “housing cooperatives should be classified as voluntary associations (Art. 12 of the Constitution), benefiting from the guarantees provided for in Art. 58 of the Constitution. Housing cooperatives, the purpose of which is to meet the housing needs of members and their families, have a special legal status resulting from the Constitution, related to their role in the implementation of the state's tasks specified in Art. 75 sec. 1 of the Constitution” (see reference number K 5/01, Journal of Laws of 2009 r. No. 117, item 988).

For the sustainable development of rural areas, and especially for social goals, social cooperatives are important, and there are more and more of them in Poland. Under the law, the subject of activity of a social cooperative is to run a joint enterprise based on the individual work of its members and workers of the social cooperative. A social cooperative takes actions for 1) social reintegration of the members and workers of a social cooperative, which includes actions designed to rebuild and maintain the skills of participating in the life of the local community and carrying out the social roles at work, place of residence or stay, 2) professional reintegration of its members and the workers of social cooperatives, which refers to actions designed to rebuild and keep the ability to work independently on the job market – and those actions are not taken as part of the business activity conducted by the social cooperative. The operation of these entities and the concept of social economy are part of the EU actions. Polish laws also provide special regulation for energy cooperatives (and farmers’ cooperatives, but only a few such entities have been established at present.

3.3. Cooperatives in Rural Areas in Germany, France and Italy

Germany is a country where agriculture is still a very important branch of the economy and cooperatives contribute to the development of rural areas and solving the problems that occur there. They operate, for instance, in the field of supply, i.e., purchase of goods needed for the agricultural production carried out by its members, agrotechnical services, storage and joint sale of agricultural products, and processing. Cooperatives make a significant contribution to the economic prosperity and social stability of the country (Suchoń, 2019a; Martinez, 2020, 81-103).

Currently, there are over 900 energy cooperatives in Germany, and a dynamic increase in their number should be noted (Klagge & Meister, 2018; DGRV–Deutscher Genossenschafts- und Raiffeisenverband). In the years 2006–2014, 716 such entities were established, out of over 145,000 cooperatives (approximately 130,000 are private persons, often inhabitants of villages and small towns). Public entities may also be members of cooperatives. Among agricultural cooperatives there are entities operating biogas plants (whose members are agricultural producers), using agricultural products or by-products from agricultural activity (Deutscher Raiffeisenverband e.V).

A significant number energy cooperatives produce solar energy, while some own wind turbines (Enkhardt, 2018). More and more heating projects are being managed by cooperatives, and there are also those dealing with the issues of electromobility and contracting (Klagge, Schmole, Seidl & Schön, 2016). The key resolutions of the climate protection program are important for energy cooperatives. There are also agricultural production cooperatives (also known as LPG, short for Landwirtschaftliche Produktionsgenossenschaft) in the eastern part of Germany, currently numbering about 704. They run joint farms on 27% of the agricultural land area of the eastern federal states. On average, one agricultural production cooperative has about 1,800 ha. And 44 members. Agricultural production cooperatives are entities that engage in agricultural activity with the

use of newer and newer. In addition, they try to take into account the requirements of environmental protection in agriculture. They are active in the production of energy from renewable sources, wind energy, solar energy and biogas. In order to ensure the effective use of energy from biogas, they are involved in the construction of heating networks that supply energy to villages and local recipients. Thus, in this way, they contribute to climate protection. They also participate in creating and maintaining jobs and conduct training in rural areas. In addition, they provide services to the rural population and contribute to the sustainable development of German villages in the eastern federal states (Deutscher Raiffeisenverband e.V.). At the same time, in the western part of Germany, cooperatives dealing with the purchase and sale of products produced on the farm of an individual farmer have a long history. Dairy cooperatives also have an established position in the milk market. The cooperatives, therefore, contribute to the sustainable development of German rural areas, taking into account social, economic and environmental goals.

The basic legal act in the field of establishing and running a business by cooperatives is the Genossenschaftsgesetz (Cooperative Law, known as GenG) of 1889 (Bundesgesetzblatt, I S. 2230). This law has been amended many times (its name was also simplified) (Lang & Weidmüller, 2019; Böttcher, Habighorst & Schulte, 2019; Beuthien, Schöpflin & Wolff, 2018). In addition to this legal act, the activities of the economic entities in question are also affected by other regulations, such as the Umwandlungsgesetz of 1994 (the Act on Transformations BGBl. I S. 3210; 1995 I S. 428) (see: Böttcher, Habighorst & Schulte, 2019; Beuthien, Schöpflin & Wolff, 2018) tax regulations or those related to the Common Agricultural Policy.

On August 18, 2006, the Act on the introduction of a European company and amending the German Cooperative Law (Genossenschaftsgesetz) entered into force (Gesetz zur Einführung der Europäischen Genossenschaft und zur Änderung Genossenschaftsrechts, BGBl. I 2006, s. 1911-1957), which created the legal basis for the implementation of the European SCE as a new legal form in German law. In addition, the introduction of the new regulations was intended to facilitate the creation and registration of cooperatives and the acquisition and maintenance of capital/funds for them, as well as strengthening the rights of cooperative members. The amendment of 2006 introduced changes to the Cooperative Law Act, such as reducing the minimum number of members (from seven to three § 3 GenG), specifying new arrangements for the ability to invest by members, and stipulating the minimum share capital. These modifications were intended to facilitate, in particular, the establishment of cooperatives, and the acquisition and maintenance of their capital. Thus, the aim of the amendment was also to introduce legal solutions to improve the management and functioning of cooperatives. Therefore, with regard to smaller entities, it became possible to appoint a one-person management board and simplify supervision. Simplifications were introduced regarding the provision of information to cooperative members, and it became possible to conduct an online general meeting and cast votes at it via the internet (if the articles of association allow this). (Geschwandtner & Helios, 2006, 113 -150; Beuthien, 2007, 7 and next).

Expanding the range of possible members to include those investing in the cooperative, and not only using its services, was aimed at improving the financial situation of the cooperative. Thus, the amendment to the Cooperative Law of 2006 allowed investing members to join the cooperative. These are entities that are not interested in establishing business relations with the cooperative, but which - by contributing capital - expect a dividend (Münkner, 1994, 83-106).

The Act on Reducing Bureaucracy and Promoting Transparency in Cooperatives of 17 July 2017 (Gesetz zum Bürokratieabbau und zur Förderung der Transparenz bei Genossenschaften) was intended to bring cooperative law into line with contemporary electronic practices and to facilitate innovation. The provisions also strengthened the rights of cooperative members, especially those who were not elected to the assembly of representatives (delegates) by, inter alia, introducing the obligation to convene a meeting at the request of at least 1/10 of the members, amending the procedure for selecting representatives (Helios, 2009, 380 and next).

With the entry into force of the GenG amendment on July 22, 2017, the Act on Reducing Bureaucracy and Promoting Transparency in Cooperatives of July 17, 2017, the cooperative law was adopted in several places to the needs of the practice and the socio-economic conditions in which electronic transmission of information dominates. For example, the regulations from § 6 and 43a of the GenG should be singled out for attention (Hillebrandt & Keßler, 2019).

Amendments to the Genossenschaftsgesetz Act were also introduced in 2015 on the basis of the Act of April 25 2015 on the equal share of women and men in managerial positions in private and public service (Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft im öffentlichen Dienst), which has been in force since May 1, 2015. Its aim was to increase the participation of women in the boards of business and administrative entities. In the case of the supervisory boards of public companies, there is a gender parity of 30%. Entities are required to establish guidelines to increase the proportion of women on boards and senior management positions.

In France, there are around 2,800 agricultural cooperatives in total (excluding CUMA); in addition, there are cooperative unions, SICA, and branches of cooperative entities. The great popularity of this form of business organization is evident from the fact that nine out of ten French farmers are members of such entities. They also provide work for over 150,000 people, and thus contribute to employment and development in rural areas (French Ministry of Agriculture and Fisheries, 2-10).

According to the French Law No. 47-1775 of September 10, 1947 (du 10 septembre 1947 portant statut de la coopération; JORF n°0214 du 11 septembre 1947, p. 9088 ze zm) following the amendment under Law No. 2014-856 of July 31, 2014, on the Social and Solidarity Economy (SSE), a cooperative is defined as an association (company) formed by several persons associating voluntarily to meet their economic and social needs, using their own combined resources. Such associations realize goals in all areas of human life and work, adhering to the following principles: free and open membership for all, democratic management, economic participation of members, training of members, and cooperation with other cooperatives. With the exception of special clauses relating to certain categories of cooperatives, each cooperative member has one vote at the general meeting. At the same time, when allocating the surpluses produced by the cooperative, priority is given to investment in the development of the cooperative and its members. Thus, the French legislator included a direct reference to cooperative principles in the Law (Chômél, 2010, 96 and next).

Detailed regulations concerning agricultural cooperatives were introduced by the French legislator in the Code Rural (Bosse-Platière, 2012, 678-701). These extensive regulations are included in Title II, Articles L521-1 to 528-1, as well as Title II, Articles R521-1 to 529-2. According to D. Hiez, historically farmers' cooperatives are one of the oldest types of cooperatives. They have a specific legal status. Their originality results from the specificity of

agriculture, which is traditionally considered a civil activity, while the activities of other cooperatives are constituted by commercial activities under civil law (Hiez, 2008).

Articles L521-1 of the Code Rural indicate that the aim of agricultural cooperatives is the joint application by agricultural producers of all appropriate measures to facilitate or develop their economic activities and to improve or increase the results of this activity. According to R521-1, the objective of agricultural cooperatives, defined in their statutes, is to undertake, regardless of the method and techniques used by them, one or more of the following activities: a) ensuring or facilitating the production, sale, in particular for export, of agricultural and forestry products from the farms of members of the cooperative, immediately after their collection or storage, packaging or processing, and the improvement of production, storage and management of one or more forest areas for the benefit of members of the cooperative; b) the provision and supply to their cooperatives of products, equipment, tools and animals necessary for the conduct of activities or for the maintenance of forest real estate, provided that they contribute to the production and preparation of necessary products, in particular animal feed or fertilizers, and to participate in the repair and maintenance of agricultural machinery and tools; c) offering members of cooperatives, for the exclusive use of their farms and forestry, all the necessary services, in particular the provision of equipment, agricultural machinery, means of maintenance and repair, animals, measures for technical improvement and vocational training, support for research establishments carrying out experiments and analyses, including suitably specialized personnel; d) generally speaking, carrying out activities and work relevant to agricultural professions for the benefit of members of the cooperative.

The above-mentioned activities may also be performed by cooperatives for farms that belong to them or which they lease, or which have been allocated to them. Importantly, unions of agricultural cooperatives can perform the same activities as agricultural cooperatives (Chômel, 2013a, 66 and next).

Italy is an example of a country that has introduced extensive legislation relating to agricultural cooperatives. In this country, the basic legal regulation concerning the organization and operation of cooperatives, including agricultural cooperatives, is covered by the Italian Civil Code (Art. 2511 et seq.) (Giuffrida, 1981). At the same time, it should be emphasized that this legislation has been changed many times.

Social cooperatives that have developed in Italy deserve special attention. The first entities of this kind were established in 1970 and by the end of the 1990s they had become the dominant form of social enterprise in many parts of Italy (V. Gonzales). It is necessary to explain that the establishment of social cooperatives was associated with the process of reducing the scope of social welfare provided by the state. The consequence was the necessity of, on the one hand, providing people in need (the disabled, unemployed) with alternative social care, since they were 'economically weaker', and on the other hand, of alleviating social tensions related to unemployment (Germano, 2003, 138 and next).

The functioning of the entities in question is currently regulated by the Act No. 381 of 8 November 1991, on social cooperatives. According to this legal act, the goal of social cooperatives is to act in the interest of the local community for the support and social integration of citizens through:

- (a) providing social, health and educational services;
- (b) providing all agricultural, industrial, commercial and service activities aimed at reintegrating disadvantaged people in the labor market into employment.

The provisions relating to the sector in which they conduct their activities are applicable to social cooperatives, which is in line with the abovementioned Act. In the light of the discussed legal act, members of social cooperatives may be natural persons (mainly those who are at a disadvantage in the labor market), business entities, and public bodies interested in the development of cooperatives and volunteers. The latter is entered in the appropriate section of the members' book, and their number may not exceed 50% of the total number of members of the social cooperative.

3.4. Common Agricultural Policy after 2022 and European Green Deal

On December 2, 2021, a new EU regulation was adopted, Regulation (EU) 2021/2115 of the European Parliament and of the Council, establishing rules on support for strategic plans prepared by the Member States under the common agricultural policy (CAP strategic plans) and financed by the European Agricultural Guarantee Fund (EAGF) and the European Agricultural Fund for Rural Development (EAFRD), repealing Regulations (EU) No 1305/2013 and (EU) No 1307/2013.

The new regulation will enter into force on January 1, 2023. It was indicated in the preamble that a more intelligent, modern and sustainable CAP must use research and innovation in order to support the multifunctionality of EU agriculture, forestry and food production systems, by investing in technological development and digitization. For the general objectives of the Common Agricultural Policy after 2022, art. 6 of the regulation included supporting decent farming incomes and the resilience of the agricultural sector throughout the Union with the aim of increasing long-term food security (Maidin et al, 2013), as well as ensuring the economic sustainability of agricultural production in the Union, contributing to climate change mitigation, including increasing carbon sequestration. It is also important to promote sustainable energy and facilitate the development of sustainable economic activities in rural areas, by promoting employment, growth, gender equality (including the participation of women in agriculture), social inclusion, and local development in rural areas, including the circular bioeconomy and sustainable forestry.

Diversification of economic activity should be based on sustainable local economic strategies, including activities that increase the attractiveness of this environment for businesses. Economic diversification also requires providing communities with access to digital and hybrid education and training so as to enable the acquisition of new skills and entrepreneurial attitudes.

It should be emphasized that the Member States establish CAP strategic plans in accordance with the new regulation of 2 December 2021 to implement EU-funded support. Each Member State establishes a single CAP strategic plan for its entire territory, taking into account its constitutional and institutional rules, and covering the period from 1 January 2023 to 31 December 2027.

The regulation of December 2, 2021, provides for the continuation of the European Innovation Partnership for agricultural productivity and sustainability. Its aim is to stimulate innovation and improve knowledge exchange. It should encourage the wider use of available innovative solutions, including exchanges between farmers. EIP operational groups, supported under the cooperation initiative, can be between, for example, an agricultural

producer, an agricultural production cooperative and a university. Entities can also form a new entity, such as a cooperative. Each EIP operational group draws up a plan for an innovative project to be developed or implemented. EIP operational groups may operate at a transnational level, including across borders.

It is also worth mentioning the European Green Deal and its impact on the association of agricultural producers, including in the form of cooperatives. The European Green Deal, presented on 11 December 2019 by the European Commission, is a sustainable growth agenda that aims, among other things, to strengthen competitiveness in the economy, including agriculture, while protecting the environment and providing consumers with new rights and creating employment opportunities. The European Union aims to become more sustainable and achieve zero net greenhouse gas emissions by 2050 (https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_pl).

The strategy identifies ten priorities which pose a challenge to agricultural producers and the food supply chain, such as the creation of a fair, healthy, environmentally friendly food system; the promotion of green financing and investments; more ambitious climate targets for the European Union; and the provision of clean, affordable and secure energy (https://ec.europa.eu/commission/presscorner/detail/pl/ip_20_884).

One of the main aims of the European Green Deal is to implement the UN 2030 Agenda for Sustainable Development it is part of the green economy. Key measures of the European Green Deal concern the circular economy. This is not a new issue. Already on 2 December 2015, the European Commission signed a package called the Circular Economy Action Plan, which aimed to introduce a model of an economy, raw materials, products and waste in a way that promotes energy savings and reduces greenhouse gas emissions (Sękowski, 2017; Wiesmeth, 2021, 11 and next)

The 'farm to fork' strategy for a fair, healthy and environmentally friendly food system rightly points out that the circular economy still qualifies as an untapped potential for farmers and their cooperatives. It is far easier for an association of agricultural producers acting as a single legal entity to build and run biorefineries producing biofertilisers, protein feed, bioenergy and biochemicals than it is for an individual farmer to engage in such activities, which are associated with high costs. Joint investments also have the potential to create new jobs. It is important for agricultural producers to work together to implement measures on farms to reduce methane emissions from livestock farming by developing renewable energy production, as well as to invest in fermentation chambers for the production of biogas from agricultural waste and residues such as manure.

4. Conclusion

Cooperatives maintain traditions while embracing the challenges of the present day. They are popular all over the world, especially in the countries of the European Union. The basic rules of cooperativeness are the same, but each country has its own legal regulations. Cooperatives were ahead of the times of globalism, and they provide a positive example of combining locality with globalization (Suchoń, 2018). Cooperatives try to take into account sustainable development and the disruptions resulting from the current situation. Examples are the COVID-19 pandemic and the war in Ukraine. Cooperatives express concern for people, their members, but take into account the need to develop and adapt to the problems and challenges of modern times.

If one considers legal regulations on the association of agricultural producers, one may conclude that in many European countries the regulations favour collective action. This is most evident in France and the Code Rural. Undoubtedly, the subsequent development of cooperatives in the 21st century in Germany has been greatly influenced by amendments to the German Cooperative Law (*Genossenschaftsgesetz*). The legislator has sought to introduce regulations that will solve the legal problems of existing cooperatives and encourage the establishment of new cooperatives in agriculture and rural areas. In doing so, the legislator takes into account the challenges for agriculture and rural areas identified in EU policy and law. Cooperatives are involved in sustainable rural development, pursuing social, economic and environmental objectives. Cooperatives also protect the interests of the weakest groups in society, who are often excluded from social life (e.g., social cooperatives), and the weakest economic entities (e.g., farmers who have the weakest position in the production chain). As far as the Polish legislator is concerned, increasing interest in the subject of cooperative of agricultural producers. First of all, the passing of the Act on Farmers' Cooperatives and the detailed regulations concerning energy cooperatives in the Act on Renewable Energy Sources should be assessed positively. The provisions relating to agricultural producer organizations have been amended.

The association of agricultural producers in organizations (as a rule in the form of cooperatives) is to be one of the basic instruments of the future Common Agricultural Policy after 2022. In 2017, 3434 agricultural producer organizations and 71 associations operated throughout the European Union, 50% of which were in the form of cooperatives. Agricultural producer organizations are popular in, for example, Germany (Busse, 2020, 105-125), Italy (Camfora, 2020, 121-130) and France (Del Cont & Macé, 2020, 61-81). The challenge for Poland in the coming years is the creation of agricultural producer organizations, especially in the form of cooperatives.

The current trend in the development of agricultural cooperatives is in line with the development of EU policies. This is connected, for example, with the need to increase the competitiveness of agricultural producers, the protection of regional products, social economy, energy, environmental protection and processing. A cooperative is a complex legal organism and, at the same time, a dynamic entity in terms of how it reflects changes in the CAP and EU policies. Agricultural producers' associations will contribute to the objectives of the European Green Deal. Some of the objectives of the new policy are a continuation or an extension of current challenges. For example, some cooperatives have already been investing in renewable energy projects for many years. They are also involved in the circular economy, by helping to reduce food waste and waste. There is no doubt that by acting together it is easier to build a biogas plant or a wind power plant, or to put solar panels on buildings. An example of this is provided by the energy cooperatives in Germany, of which there are over 900. Renewable energy cooperatives are also active in France. They can contribute to new innovations such as energy recovery from agricultural by-products, recycling, resource efficiency, and the reuse of equipment and products, including through repair. Furthermore, continued investment in renewable energy is extremely important in the light of the European Green Deal and in the context of decarbonization.

References

Anggriawan, R. (2020). Insolvency Proceedings: ASEAN and EU Comparison on the Rules of Foreign Court Jurisdiction. *Indonesian Comparative Law Review*, 3(1), 35-44.

- Anggriawan, R., Salim, A. A., Gunawan, Y., & Arumbinang, M. H. (2022). Passenger Name Record Data Protection under European Union and United States Agreement: Security over Privacy? *Hasanuddin Law Review*, 8(2), 95-110.
- Beuthien, V., Schöpflin, M., & Wolff, R. (2018). *Genossenschaftsgesetz: mit Umwandlungs- und Kartellrecht sowie Statut der Europäischen Genossenschaft*. München.
- Bierzanek, R. (1984), *Prawo spółdzielcze w zarysie*, Warszawa.
- Bijman, J. (2012). *Support for Farmers' Cooperatives; Sector Report Fruit and Vegetables*. Wageningen.
- Borzaga, C., Carini, C., Costa, E., Carpita, M., & Andreau, M. (2012). *Cooperation in Italy in 2008*. Euricse Working Papers, 26, 2-20.
- Borzaga, C., & Santuari, A. (2000). *Social enterprises in Italy. The experience of social cooperatives*. Working paper nr 15, <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1067.864&rep=rep1&type=pdf>
- Böttcher L., Habighorst O., & Schulte, Ch. (2019). *Umwandlungsrecht, Gesellschaftsrecht, Steuerrecht, Verfahrensrecht*. Baden-Baden.
- Busse Ch., Quo vadis Agrarorganisationenrecht? – Eine kurze Betrachtung in sechs Kapiteln In Suchoń, A. (Ed.), *Legal and economic aspect of associations of agricultural producers in the selected countries of the world*. UAM Press. Poznań.
- Canfora, I. (2020). The Italian legislation on producer organisations in agriculture towards the evolution of the European framework. In Suchoń, A. (Ed.), *Legal and economic aspect of associations of agricultural producers in the selected countries of the world*. UAM Press. Poznań.
- Chômél, C. (2010). France. In: *Study on the implementation of the Regulation 1435/2003 on the Statute for European Cooperative Society (SCE)*, Part II. National Report. Brussels.
- Chômél, C. (2013). Le cadre juridique et la gouvernance des coopératives agricoles. In: Chomel, C., Declerck, F., Filippi, M., Mauget, R., Frey, O. *Les coopératives agricoles. Identité, gouvernance et stratégies*, Paris.
- Chômél, C., Declerck, F., Filippi, M., Mauget R., & Frey, O. (2013). *Les coopératives agricoles Identité, gouvernance et stratégies*. Paris.
- COGECA (2014). *Development of Agricultural Cooperatives in the EU*. Brussels.
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions of 30 June 2021, entitled *A long-term vision for EU rural areas - Towards stronger, more connected, resilient and prosperous rural areas by 2040*.
- Del Cont, C. & Macé, A. (2020). Les organisations de producteurs en France: état des lieux et réflexions in Suchoń, A. (Ed.), *Legal and economic aspect of associations of agricultural producers in the selected countries of the world*. UAM Press. Poznań.
- Deutscher Raiffeisenverband e.V. (2014). *Aktueller Geschäftsbericht, Rückblick (2014) – Ausblick*. <http://www.raiffeisen.de>

- Deutscher Raiffeisenverband e.V.(2010). *20 Jahre Agrargenossenschaften eine Erfolgsgeschichte*, <http://www.raiffeisen.de>
- DGRV–Deutscher Genossenschafts- und Raiffeisenverband. *Energiegenossenschaften Bürger, Kommunen und 97 utter Wirtschaft in 97 utter Gesellschaft*. https://www.genossenschaftsverband.de/site/assets/files/30796/broschuere_-_energiegenossenschaften.pdf.
- Enkhardt, S. (2018). *Energiegenossenschaften sehen sich von Politik bei Photovoltaik ausgebremst*. <http://www.pv-magazine.de/2019/07/22/energiegenossenschaften-sehen-sich-von-politik-bei-photovoltaik-ausgebremst>
- Fanfani R., & Maccarini, R. E. (Ed) (2009). *The role of cooperatives in the European Agri-Food System*, Bologna.
- French Ministry of Agriculture and Fisheries (2019). *Agricultural Cooperation in France*, Paris.
- Germanò, A. (2003). *Manuale di diritto agrario*, Torino.
- Giuffrida, G. (1981). *Le co-operative Agricole (natura giuridica)*, Milano.
- Goals, J. Z., & Marjanovic, O. (2021). Mapping of Platform Cooperatives' Contribution to Sustainable Development, *Review of International Co-operation*, 106.
- Habersack, M., & Wicke, H. (Ed.) (2019). *Kommentar zum Umwandlungsgesetz*, München.
- Helios, M. (2009). Ertragsbesteuerung der Genossenschaft und ihrer Mitglieder. In: Helios M. & Strieder Th. (Ed.). *Beck'sches Handbuch der Genossenschaft*. München.
- Hiez, D. (2008). Poursuite de la lente évolution des coopératives agricoles. *Revue des Societes*, 2, 53-64.
- Hiez, D. (2013) France. In Cracogna, D., Fici, A., Hagen, H. *International Handbook of Cooperative Law*, Berlin-Heidelberg.
- Hillebrandt, K.P. & Keßler, J. (Ed.) (2019). *Berliner Kommentar zum Genossenschaftsgesetz*. Berlin. https://www.ilo.org/empent/Publications/WCMS_240640/lang--en/index.htm
- International Cooperative Alliance. *International Cooperative Organizations*. <https://www.ica.coop/en/about-us/international-cooperative-alliance#:~:text=A%20total%20of%20318%20organisations%20from%20112%20countries,fisheries%2C%20health%2C%20housing%2C%20insurance%2C%20and%20industry%20%26%20services>
- Jurcewicz, A. (2012). *Traktatowe podstawy unijnego prawa rolnego w świetle orzecznictwa. Zagadnienia wybrane*, Warszawa, LEX/el.
- Klagge, B., & Meister, T. (2018). Energy cooperatives in Germany – an example of successful alternative economies?. *Local Environment*, 7, 697-716.
- Klagge, B., Schmole, H., Seidl I., & Schön, S. (2016). Zukunft der deutschen Energiegenossenschaften Herausforderungen und Chancen aus einer Innovationsperspektive. *Bericht aus Forschung und Praxis*, 243-250.
- Klotz, G. (2016). *Genossenschaften als Alternative zu Kapitalgesellschaften in Zeiten der Finanz- und Wirtschaftskrise? Eine Analyse aus rechtlicher, soziologischer und wirtschaftlicher Perspektive*. Saarbrück.

- Komisja Europejska (2001). *Biała Księga o przedsiębiorstwach spółdzielczych. Dokument konsultacyjny Unii Europejskiej* Brussels.
- Krajowa Rada Spółdzielcza, *Spółdzielnie budują lepszy świat*, <<https://www.krs.org.pl/images/Media1/folder-krs.pdf>>.
- Lang, J., & Weidmüller, L. (2019). *Genossenschaftsgesetz, Gesetz betreffend die Erwerbs- und Wirtschaftsgenossenschaften. Mit Erläuterungen zum Umwandlungsgesetz. Kommentar*. Berlin.
- Leinpinsel, J. (2007). Biogasanlagen in genossenschaftlicher Rechtsform. *Dialog*, 2.
- Lorentowicz, E. (2018). Cyfrowe rolnictwo - cyfrowe zarządzanie. *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu*, 4, 104-110.
- Maidin, A. J., Zulkarnain, R., Sulaiman, S. S., & Ramli, N. M. (2013). Enhancing Value of Customary Land: a Case Study of Negeri Sembilan. *Jurnal Media Hukum*, 20(1), 16.
- Martinez, J. (2020). Das Recht der Kooperation der landwirtschaftlichen Erzeuger in Deutschland. In Suchoń, A. (Ed.). *Legal and economic aspect of associations of agricultural producers in the selected countries of the world*. UAM Press, Poznań.
- Münkner, H. (2010). Germany. In: *Study on the implementation of the Regulation 1435/2003 on the Statute for European Cooperative Society (SCE), Part II. National Report*. Brussels.
- Münkner, H.-H. (1994). Fördermitglieder, Investorenmitglieder und externe Anteilseigner - neue Ansätze zur Milderung der strukturellen Schwächen im Finanzierungsbereich. In Steding, R. (Ed.). *Genossenschaftsrecht im Spannungsfeld von Bewahrung und Veränderung*. Göttingen.
- Norer, R. (2018). *Agrarrecht: Entwicklungen*. Bern.
- ONZ. *Transforming our world: the 2030 Agenda for Sustainable Development*. http://www.un.org/files/164/Agenda%202030_pl_2016_ostateczna.pdf
- Radziewicz, J. (2021). *Digital farming - rolnictwo przyszłości*. <https://rme.cbr.net.pl/index.php/rolnictwo-w-unii-europejskiej-i-na-swiecie/1279-digital-farming-rolnictwo-przyszlosci>
- Ruch Spółdzielców. *Spółdzielczość w liczbach*. <http://ruchspoldzielcow.pl/baza-wiedzy/spoldzielczosc-w-liczbach>
- Ryszewska, B. (2013). *Zielona gospodarka - teoretyczne podstawy koncepcji i pomiar jej wdrażania w Unii Europejskiej*. Uniwersytet Ekonomiczny we Wrocławiu, Wrocław.
- Sękowski, M. (2017). *Gospodarka o obiegu zamkniętym - szanse dla rolnictwa i leśnictwa*, <https://www.cdr.gov.pl/images/Radom/2017/roleko/Gospodarka%20o%20obiegu%20zamknietym.pdf>
- Suchoń, A. (2012). Legal and Economic Aspects of the Operation of Cooperatives in Polish Agriculture, David Publishing Company USA, *Journal of Agricultural Science and Technology B* 7, 737-749.
- Suchoń, A. (2016). *Prawna koncepcja spółdzielni rolniczych*. UAM Press, Poznań.
- Suchoń, A. (2018). *Cooperatives in the face of challenges of contemporary agriculture in the example of Poland*. In Budzinowski, R. (Ed.). *Contemporary challenges of Agriculture Law: among Globalization, Regionalisation and Locality*, UAM Press, Poznań.

- Suchoń, A. (2019). *Legal aspects of the organization and operation of agricultural cooperatives in Poland*, UAM Press, Poznań.
- Suchoń, A. (2019a). Spółdzielnie w Niemczech wobec wyzwań współczesnego rolnictwa – wybrane aspekty prawne, *Prawo i Więź*, 4, 74-99.
- Suchoń, A. (Ed.) (2020). *Legal and economic aspect of associations of agricultural producers in the selected countries of the world*. UAM Press, Poznań.
- TOP 25 Polska: 2020, <https://www.forummleczarskie.pl/firmy/top-polska/2020>
- Wanyama, F.O. (2014). *Cooperatives and the sustainable development goals: A contribution to the post-2015 development debate*. International Labour Organization
- Wiesmeth, H. (2021). *Implementing the Circular Economy for Sustainable*. Amsterdam.
- Zak, K. (2015). Green economy – w drodze do nowego globalnego standardu biznesowego. *Studia Ekonomiczne*, 226.
- Zakrzewska, A. (2016). Innovativeness of Dairy Cooperatives in Poland, *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu*, 18, 4-12.
- Zakrzewski, P. (2005). Zasady Międzynarodowego Związku Spółdzielczego. *Kwartalnik Prawa Prywatnego*, XIV, 1.
- Zalewski, Z. (1946). *Krótki zarys historii spółdzielczości*, Warszawa.
- Zhu, J., & Marjanovic, O. (2020). How Do Platform Cooperatives Contribute to Sustainable Development Goals? *AMCIS Proceedings*, 8, 1-5. https://aisel.aisnet.org/amcis2020/sig_green/sig_green/8
- Żmija, D. (2014). Zrównoważony rozwój rolnictwa i obszarów wiejskich w Polsce. *Studia Ekonomiczne*, 166, 149-158. https://www.ue.katowice.pl/fileadmin/_migrated/content_uploads/14_D.Zmija_Zrownowazony_rozwoj_rolnictwa.pdf
- Zuba-Ciszewska, M. (2020). The role of the agricultural cooperative movement worldwide – economic comment. In Suchoń, A. (Ed.) (2020), *Legal and economic aspect of associations of agricultural producers in the selected countries of the world*. UAM Press, Poznań.