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Institutional Development of Organic Farming in the EU

Instytucjonalny rozwój rolnictwa organicznego w UE

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Abstract

The concept of sustainable development has been attracting the attention of the scientific and professional community for decades. Various researches and papers focused on the concept of sustainability, exploring it through the prism of the economic, ecological and social subsystem. In this paper, the authors focus on agriculture and its sustainability. Starting from the assumption that organic farming is a sustainable system production, the authors turn to institutional support, trying to find a link between EU agricultural policy (CAP) and the growth of areas in organic agriculture. The research showed that this kind of support system failed to play the role that was intended for it and did not lead to mass acceptance of organic agriculture everywhere. Authors on the example of Denmark, Germany and Italy show the extent to which state support has influenced the expansion of areas under this system. Also, the comparison with the US agricultural policy leads to the conclusion that support policies for organic production constructed on a one-dimensional focus of payments per unit area will not lead to the expected results in terms of further progress and development of the organic sector.

Key words: organic farming, CAP, sustainability, development, subsidies

Słowa kluczowe: rolnictwo organiczne, CAP, zrównoważoność, rozwój, subsydia

Introduction

Sustainable development is a concept that has occupied the attention of both the scientific and wider social community for a long time. One of the first definitions of sustainable development was given by Repetto, who said that in the core of the sustainability idea lies an assurance that decisions made today should not jeopardize perspectives for preservation or improvement of living standards in the future (Repetto, 1985). A definition most often used in the literature is from 1987, provided by The Brundtland Commission, by which sustainable development is a set of activities that allow meeting the needs of today without compromising the possibilities of future generations to meet their own needs (UN, 1987). However, it can be said that to date, the concept of sustainable development has not yet been uniformly defined and accepted despite a decades-long discussion in the relevant literature (Lele, 1991, Bell and Morse, 2003, Kates et al, 2005, UNEP, 2013).

Despite the challenges that exist in defining this concept, trends in modern society unequivocally emphasize the need for action when it comes to sustainable development. One such call to action is Sustainable Development Goals (SDG), also known as the Global Goals, which were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

The 17 SDGs defined through this action are integrated and correlated. They recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability, because when we talk about sustainable development, it is clear that we need to take economic, technological, social, political, physiological and environmental aspects into consideration (Tomaš Simin et al., 2019). These systems are connected in different and often very significant ways in a complex system (Bossel, 1999, Munitlak-Ivanović 2005, Raskin et al., 2002).

The negative effects of modern agricultural production are often highlighted in the literature (Rodriguez et al., 2004, Lazić and Lazić, 2008, Kovačević et al., 2011, Praneetvatakul et al, 2013, Krajewski, 2016), as a consequence of increasing dependence on the industry (in terms of fertilizers and pesticides), introduction of monoculture, specialization (Peyraud et al., 2014), water pollution with nitrate and pesticides and soil erosion and degradation, reduction of biodiversity (Hall and Crowther, 1998), adverse effects on human health (Lewalter and Leng, 1999; Sarkar et al, 2012) etc. A possible solution of these issues is development of alternative means of agricultural production in order to mitigate their impacts. These alternative means of agricultural production are often categorized as sustainable agriculture. Hinrichs and Welsh (2003) stated that, *Sustainable agriculture offers an encompassing banner under which groups and individuals have gathered to address the environmental, social, and economic equity problems they associate with conventional, industrial agriculture*. Given the positive aspects of organic production compared to conventional production (Stolze et al., 2000, Kaspercyzk and Knickel 2006, Kichler, 2007, Küstermann et al, 2008, Hinrichs and Welsh, 2003, Biao and Xiaorong, 2003, Galiardi and Pettigrove, 2013, Bell et al, 2014) organic farming is often considered as an alternative way of agricultural production that can meet the goals of sustainability. Some authors suggested that areas under organic farming can be used as an indicator of sustainable agriculutural development (Tomaš Simin et al., 2019). Šeremešić et al. (2021) state that *by considering organic agriculture as a mechanism for achieving SDG, different institutions can be mobilized and closely involved in the development of capacity for its implementation. Creating a favorable environment for small farms, converting conventional land to organic, and aiming at the development of this sustainable branch of agriculture would consequently create more favorable socio-economic conditions for rural areas and the employment of the rural population.*
If the initial assumption is accepted that organic farming is sustainable and contributes to sustainable development and achievement of SDG goals, it is interesting to see and show how this production system is institutionally supported and whether this support has led to the expansion of areas in organic production. In this paper, this review is done with an emphasis on the CAP and the European Union.

Organic farming through policies

Organic farming is a specific system of agricultural production which, thanks to its characteristics, requires a different approach when it comes to formulating agricultural policy. One of the basic and highly emphasized advantages of organic production is the fact that this system is legally regulated, i.e. that it is subject to a certification process that ensures and guarantees that the basic principles of organic agriculture have been applied and respected in the production process. Padel and Lampkin (2007) state that, although organic production has existed as a concept for almost seventy years, it received significant attention from European policy makers only in the mid-1980s. Notable growth of this sector since the eighties, the mentioned authors attribute to this significant interest of economic policy makers for this production. There are different views in the literature on the participation of the state in the promotion and development of organic agriculture, among which the prevailing opinion is that such a system of production requires state aid (Bogdanov et al., 2005; Dimitri and Oberholzer, 2005; Dabbert et al., 2003; Lampkin and Padel, 1994; Stolze et al., 2016; Niggli et al., 2008).
Jansen (2000) states that four basic types of policies related to organic production can be distinguished:

- Policies related to environmental management (regulations related to specific production practices);
- Incentives that stimulate conversion;
- Eco-tax systems;
- Trade-related policies.

Dabert et al. (2001) said that there were two main reasons why EU politicians decided to support organic production (in addition to the relatively short-lived idea that lower yields in organic production would help overcome to then problem of agricultural overproduction):

1. The fact that organic production as a system is recognized as a public good that achieves social, natural and other benefits to the community;
2. The recognition of organic production as a young sector (infant industry).

The European Union and its legislation in the segment of organic production is often taken as a reference region because the EU is at the forefront at the world level when it comes to organic production policy. Certain measures and policies related to organic agriculture have been current in the EU for more than 25 years. EU legislation has been in place for ten years when similar legislation appeared in the United States in 2002. Denmark was the first country in the European Union to establish financial support for producers during the conversion period in 1987. Sweden was the first country to continue with financial support even after the conversion period, recognizing the environmental benefits of organic production. In 1989, Germany was the first country to use the CAP to introduce broader measures to support the conversion process[1].

[1] During that period, the EU had problems with overproduction and surplus of agricultural products. The main goals of the policies of that time were to reduce surpluses by extensifying production, ie by determining allowed quotas and production levels (quantitative method) or by focusing on less intensive production systems (qualitative method), among which organic

CAP and organic farming – outline

When designing various programs and measures in the field of CAP, the creators of these policies strive to achieve some of the following goals (Dabbert et al., 2003):

- To minimize the negative impacts of agricultural production on the environment,
- To provide high quality food while ensuring its sufficient quantity,
- To preserve the income of individual farms without distorting the competitiveness of European Union agriculture,
- To promote rural development,
- In the long run, reduce expenditures intended for the agricultural sector.

According to Offermann and Nieberg (2000), the 1992 CAP reform (so-called McSharie's reform) was one of the biggest policy changes that has affected the economic conditions of the European Union's agriculture in the last twenty years. The main feature of the reform was the reduction of price support coupled with complementary payments and the establishment of programs related to both agriculture and environmental protection (agri-environmental programs). Padel and Lampkin (2007) point out that this reform has led to the introduction of a broader environmental support program at EU level (EC reg. 2078/92). Under this program, all member states were obliged to offer grant approval schemes or financial assistance to producers during the conversion period or to those already in certified production.

In 2007, new regulations related to organic production were adopted by the European Commission. New regulations (Reg. 834/2007/EC) and more detailed rules for its implementation (Reg. 889/2008/EC) have set precise requirements for the production and labeling of organic products. In accordance with these new regulations, regulations for the import of organic products from non-EU countries (so-called third countries) have been adopted (1235/2008/EC). One of the main objections to this CAP reform was the inability of organic producers to use the incentives under the first pillar.

The CAP reform for the period 2014-2020 from 2013, among other things, aimed to direct agricultural production in the EU towards production that is more oriented towards environmental protection and positively oriented towards climate change. This step towards *greener* agriculture is presented in the slogan *public money for public goods*. To ensure that the set goals are met – that is, to obtain more public goods from agricultural production[2], the EU used the measures and instruments available under the first and second pillars of the CAP. Organic agriculture was recognized for the first time within both pillars in terms of its contribution to the creation and protection of public goods (Stolze et al., 2016). Compared to previous reforms, organic agriculture is more visible in CAP programs, as a measure that contributes to the creation of public goods, under both the First and Second Pillars. Under Pillar 1, organic farms automatically receive funds for the Green Component. Under Pillar 2, organic agriculture was more represented under the new Rural Development Regulation (EC Reg. 1305/2013), with an explicit mention of payments for organic agriculture (Article 29), investments (Article 17) and quality schemes (Article 16).

On May 30, 2018, the European Commission adopted the new EU Regulation 2018/848 on organic production and labeling of organic products. According to EU Farm to Fork and Biodiversity Strategies which is a part of European Green Deal, Member States should target 25% of organic land by 2030. Berckmans et al. (2021) suggested that in order to achieve this goal EU has to:

- Triple its organic land area between 2019 and 2030;
- Increase its overall CAP expenditure 3-5-fold by 2030;
- Dedicate 9-15% of the CAP budget to organic (instead of 3% as in 2018).

Although the CAP and measures within this policy in support of organic agriculture are an extremely important segment in the EU, it should be noted that a broader approach is needed to encourage the development of this sector. Payments per unit area, together with national and regional action plans, are certainly the measures that should contribute the most to the development of the organic sector. However, such support from public funds can only be effective if it is complemented by a well-functioning competitive industry, consumers and public opinion that has a positive attitude towards organic production, growing demand and universal confidence in the legislative system. Whether the organic sector will develop depends not only on payments per hectare but on a combination of different public policies, including support for the conversion process, marketing support and training and education.

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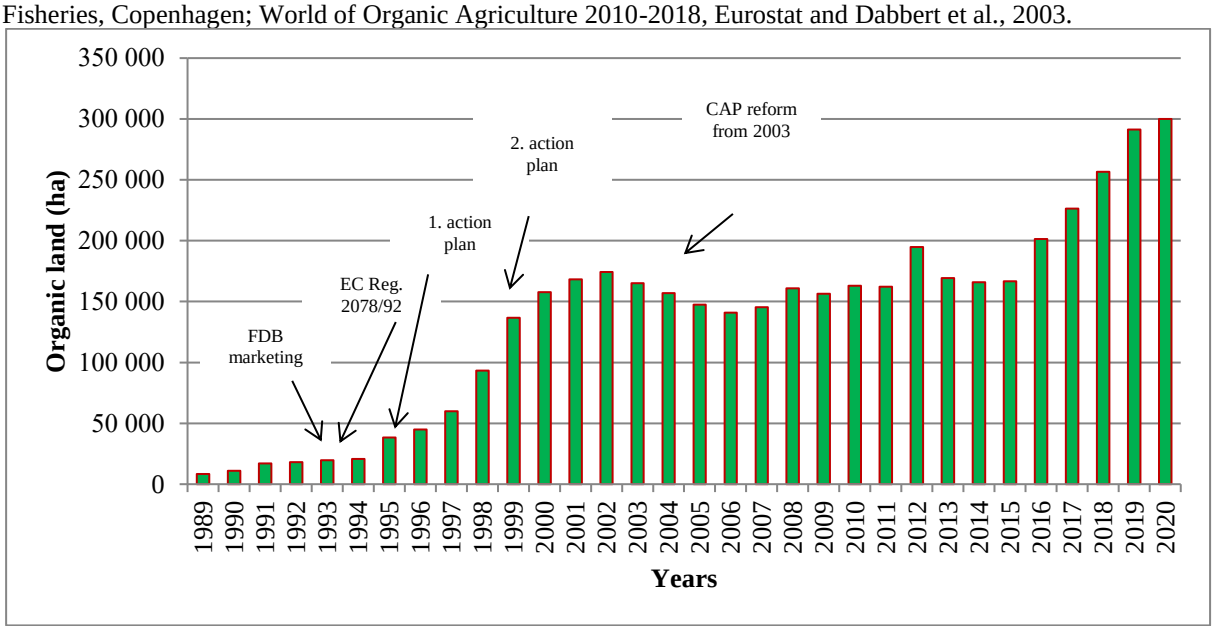
production was recognized. In this way, Germany was the first to use measures that were not directly aimed at organic agriculture to encourage and spread it (see more details in Padel and Lampkin, 2007).

[2] Public goods primarily mean the protection and preservation of a healthy environment (as a public good) and biodiversity (also as a public good).

Some experiences in institutional organic farming development

Denmark[3] – support for organic agricultural production in Denmark began in the mid-1980s. In 1987, the Act on Organic Farm Production was adopted. The aim of this law and the measures within it were to provide financial support to producers during the conversion period and financial support for projects related to the development of infrastructure in organic production. Also, the law provided official labeling of organic products, and a legal system that provided for the certification and control of organic farming. In the first five years since the introduction of legislation and incentives for the conversion process, Dubgaard and Holst (1994) state that the number of farms in the organic system has doubled and that land area has increased by 150% compared to 1988 when this sector existed in Denmark but was less represented and without state support. After five years, there was a standstill and then a drop in the number of producers and farms in the organic production system.
Dabert et al., (2003) in their analysis of Denmark also point out the fact that Denmark was among the first countries to introduce national standards in organic production. The introduction of standards has led to a slight increase in areas in the organic production system, which stagnated or declined slightly until 1994. In 1993, the implementation of Regulation 2078/92 began, ie the Program and measures aimed at encouraging agricultural practices that support environmental protection. The application of these measures did not significantly affect the growth of surfaces in the organic system.
Instead, organic area growth was initiated by the entry of the FDB retail chain (one of the best known in Denmark) into the organic system. The company conducted a significant marketing campaign that led to an increase in demand and almost a shortage of these products. However, the noticeable growth of organic surfaces has been occurring since 1995. That year, large dairies entered the organic sector and began paying additional incentives to buy organic milk - in order to meet growing demand. In the same year (1995) the first national action plan was presented, designed by the National Council for Organic Agriculture. According to this plan, the entire sector needed to be supported, which included financial support for consulting, training, research and especially marketing. Therefore, only one third of the incentives were paid directly to farmers.
In 1999, the second action plan was presented, which was focused on encouraging the export of organic products, primarily as a reaction to the surplus of organic milk to the Danish market. The 2003 CAP reform did not significantly affect the change in the area in the organic system, which recorded continues growth in 2016 (Graph 1).

Graph 1. Organic land in Denmark 1989-2020, source: Adapted from the Ministry of Food, Agriculture and Fisheries, Copenhagen; World of Organic Agriculture 2010-2018, Eurostat and Dabbert et al., 2003.

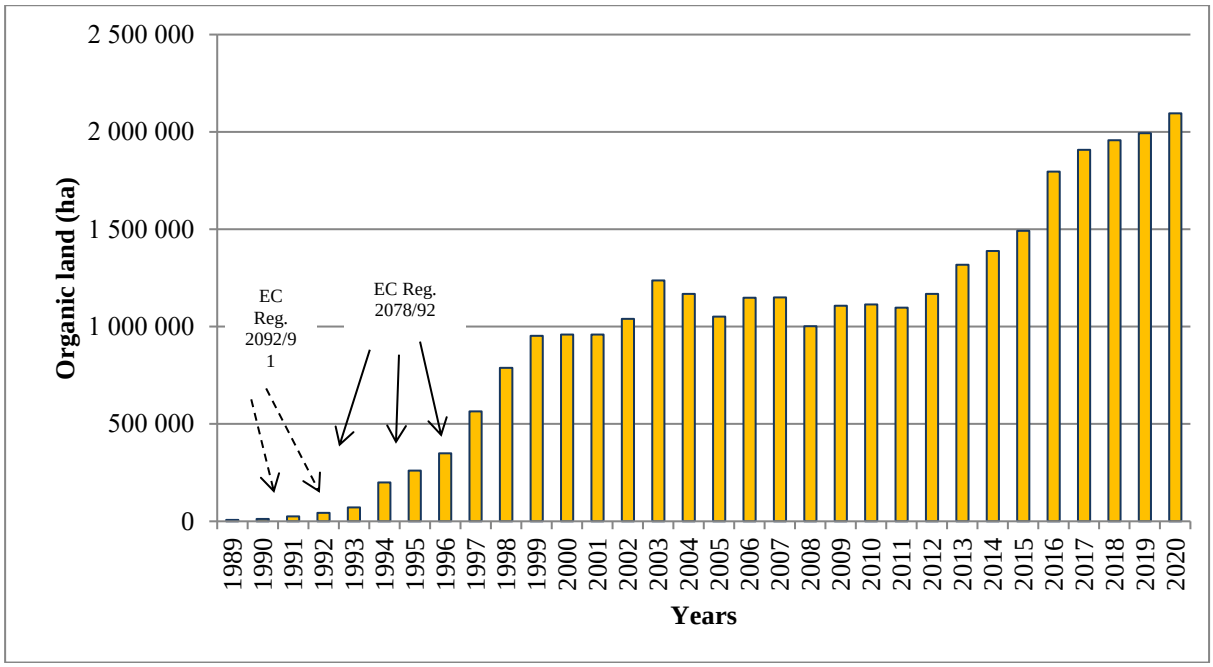


Italy - one of the interesting aspects of the development of organic farming in Italy is certainly the fact that the driver of development in previous years was exports, which absorbed more than 50% of production in the country. The rapid development of organic production in Italy began in the early 1990s. The implementation of European Union regulations related to organic production (EC Reg. 2092/91) and agri-environmental programs (EC Reg. 2078/92) has led to an increase in the area in the organic system in Italy (*Graph 2*). Santucci et al. (1999) state in their research that the claim that European regulations that financially encourage organic production have

[3] See Dubgaard and Holst 1994; Lampkin and Padel, 1994a; Dabbert et al., 2003 for more details.

contributed to the significant growth of organic farming in Italy is supported by the fact that in Italy a year before the introduction of the regulations (1993) there were only 4,200 farms with approximately 71,000 hectares in the organic system and only five years later there were more than 750,000 hectares in the organic system. Progress is even more significant when compared to 1989, when only 800 farms with just over 9,000 hectares were recorded in Italy.

Graph 2. Organic land in Italy 1989-2020, source: Adapted from Santucci and Antoenlli, 2004; Santucci and Pignataro, 2002; Santucci et al., 1999; SINAB 2000-2016; World of Organic 2009-2018, Eurostat.



It is important to note that the domestic market of organic products in Italy developed only at the beginning of the twenty-first century, and that the driver of the development of this sector was certainly the demand for these products in other countries. Experts estimate that close to 50% of organic products are exported - primarily citrus fruits and vegetables (Dabbert et al., 2003). This combination of CAP's encouragement of organic production and significant exports of these products has proven to be positive for Italy in terms of the successful development of the organic sector.

Germany[4] – the process of providing state aid to organic farming in Germany began with the implementation of the European Commission's extensification program (EEC 4115/88) from 1988. This program envisioned two different forms of extensification (Pals et al., 1994):

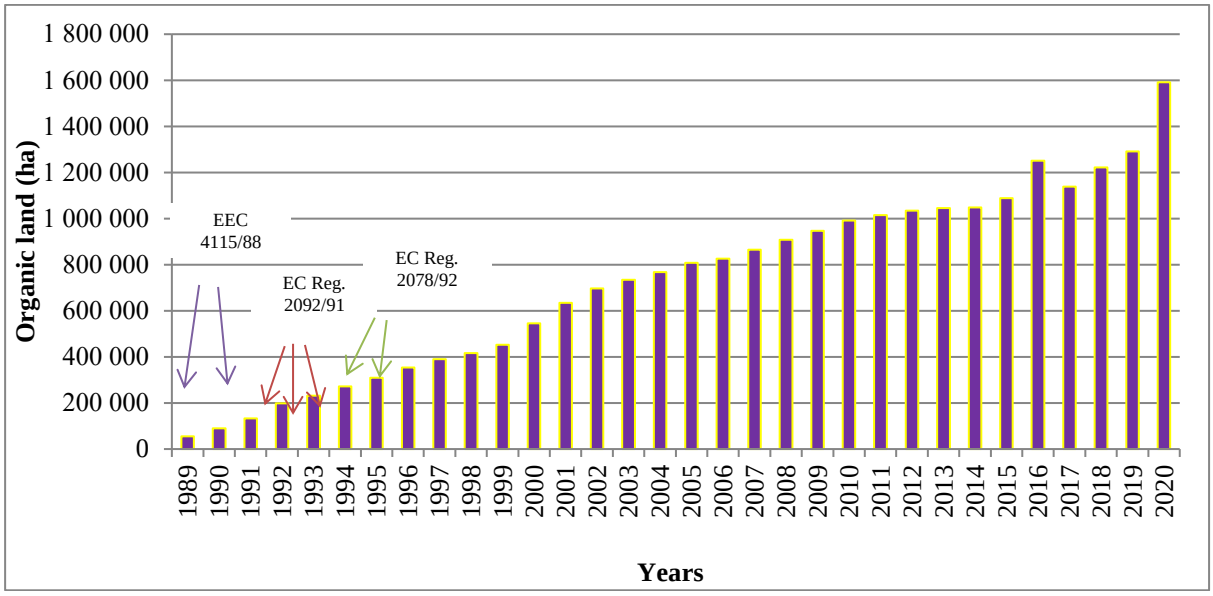
- Quantitative approach that involved an absolute reduction of 20% or land used for certain crops or the number of animals;
- Encouraging production methods that assume sustainable production in which yields are lower by approximately 20%.

Defined in this way, second form of support was important for organic production. Subsidies approved under this program are provided for a period of five years and are paid annually. Their goal was to compensate for the losses caused by lower yields during the conversion, in a period in which producers could not achieve premium prices on the market. Farms that were already certified as organic could not receive subsidies through this program. In the period of the next five years after the implementation of the extensification program, the number of organic farms in Germany increased four times.

In their research, Lampkin and Padel (1994) state that this example of Germany (in the application of this program of measures to help organic production) was followed only by Denmark, which used the extensification program to finance its existing support models. In those years, the low liquidity level of farmers in East Germany may explain the sharp jump in the acceptance of the organic production system, where farmers recognized the possibility of saving in variable costs while receiving incentives from the extensification program. Since 1994, the introduction and development of organic production has been supported through Rural Development Programs (RDPs).

[4] See Dubgaard and Holst 1994; Pals et al., 1994; Lampkin and Padel, 1994a for more details.

Graph 3. Organic land in Germany 1989-2020, source: Adapted from BMEL, World of Organic 2009-2018, Eurostat and Mutlu, 2007.



European Union and the United States – it is interesting to point out that institutional support can contribute to the growth of the organic sector, but that the interaction with the market is of great importance for the effectiveness of the applied incentive measures. In this regard, it is interesting to present the differences in the development of the organic sector between the United States, where development was primarily encouraged by the market and the European Union, where the development of this sector was more focused and encouraged by various policy measures.

Dimitri and Oberholzer (2005) were among the first who attempt to provide such analysis. In the results of their research, Dimitri and Oberholzer state the differences that exist in the organic sector of these two communities of countries: the size of the organic products market, area and number of producers which were higher in the EU than in the USA. Policies to encourage organic production in the United States have largely focused on demand and market mechanisms, where certain grants could be found aimed at on-farm research, producer and consumer education, and marketing. In the EU, policies aimed at the development of organic production are a subset of policies within the measures of sustainable development and agriculture. Each member state independently decides which set of measures (of the offered) will be used. Some countries (such as the Netherlands) have chosen an approach similar to that in the United States, ie policies that allowed the free functioning of the market, while other countries have chosen to actively encourage and promote organic production. The reason for this proactive approach of the EU is the understanding of the European government that organic production brings social benefits that individual producers are not able to see and understand.

As a conclusion of their study, in terms of which policy (US or EU) is better for the development of organic production, these authors note that, regardless of current policy, the organic production sector is dynamic in both regions. What both the US and the EU have in common is that governments define organic standards and enforce legislation and legal frameworks that guarantee consumers that the product purchased is produced according to organic standards. This is roughly where their common traits end. The EU has a wide range of measures under the CAP aimed at increasing land area in the organic production system, guided by the idea of the benefits that organic production has for the community. In the USA, the financing of organic farming is limited, and the measures that exist are primarily the result of lobbying by the organic industry, unlike the EU, where governments actively support this production.

Different "views" on organic production are the causes of these different forms of aid. In the EU, as already mentioned, organic production is seen as a production system which, in addition to the established benefits for individual farms, has wider benefits for the entire community and can contribute to the sustainable development. On the other hand, looking at organic food as a differentiated product produced in an organic production system where government should only provide institutional support to the market and enable consumers to recognize the organic product (through legal regulation of this production) and leave everything else to free market law is a vision of the United States. The final conclusion of this study states that the EU has an advantage in terms of the supply of organic products and that throughout history it has encountered surpluses of these products – as a consequence of its policy of stimulating production. On the other hand, the US market is showing a faster growth

rate, but the demand in this market is unsatisfied and there is a shortage of organic products. It is clear that for the successful functioning of organic farming it is necessary to combine and supplement these forms of support, always keeping in mind the social circumstances in which this policy is implemented.

Conclusion

The initial premise of the paper was that organic farming can be viewed as a sustainable system of agricultural production that can mitigate the negative effects of modern agriculture and contribute to overall sustainable development. Based on that, it is interesting to investigate whether and in what way macroeconomic policies in agriculture affect the spread of organic farming. The research focused on the CAP and the development of organic farming in EU countries. It showed that the introduction of certain incentive measures for organic farming has resulted in an increase in the area and number of producers who have accepted the organic production system in several countries. It can be said that development of organic sector depends not only on payments per hectare (direct incentives) but on combinations of different public policies as well as conversion period, marketing support and training and education. Support policies for organic production constructed on a one-dimensional focus of payments per unit area will not lead to the expected results in terms of further progress and development of the organic sector.

Agriculture itself is an extremely important factor in the sustainable socio-economic growth and development of a country. As a strategic sector, agriculture must be a carrier of development but now a carrier of sustainable development of all or most countries. It can do this through agricultural practices that are in line with the principles of sustainable development, such as organic farming. Organic production (along with other sustainable systems) is participating in a new revolution that will raise the population to a new level of development and help it further improve its well-being, this time keeping in mind everything that a sustainable development entails.

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