

RELATIONSHIP BETWEEN SUSTAINABILITY AND ECOLOGICAL FARMING

Nowadays, due to climate change, the adverse effects of industrial agricultural production and the increase in health risks, sustainability and environmental awareness are becoming more and more important in terms of farming and consumption.

Organic farming is not a new production method, as our ancestors produced the goods necessary for their livelihood in a similar form until the beginning of the 20th century; without chemicals, with organic fertilization, with animal and manual works. Organic farming is based on the concept of ecological farming, which is where the adjectives "ecological" and "biological" come from. The aim of ecological farming is to ensure sustainable development, during it reaches back to locally available reserves. Its most important principles include the protection of the soil and the environment (SZENTE, 2005).

The beginnings of organic farming in Europe date back to the 1920s and 30s, when agricultural productivity, profitability and product quality began to deteriorate (JÁRÁSI, 2009). At that time, developed countries sensed the signs of nitrogen over-fertilization and animals had productivity problems due to protein overfeeding. The rejection of this led to the creation of ecological farming (SZENTE, 2005). Between the two world wars, German agriculture sought solutions to its problems. Rudolf Steiner is credited with the creation of biodynamic farming, today known as Demeter. According to Steiner, a healthy economy must produce everything it needs itself (JÁRÁSI, 2009).

According to Roszik, organic farming is a sustainable farming method that is declared by regulations and legislation. This means that at the end of any closed cycle, the state of the environment must be at least the same as it was at the beginning of the cycle. However, the sustainability of the environment can only be realized if the farmer can carry out his activities profitably and safely, otherwise he will be ruined, and the environmental sustainability of farming will also decrease (ROSZÍK, 2004).

Ángyán, however, does not consider ecological farming to be the only guarantee of sustainability, but distinguishes between biodynamic, ecological and integrated farming within the sustainable farming strategy (ÁNGYÁN, 1995).

In ecological and organic farming, the emphasis is on the process of the production. In biological farming or organic production, the emphasis is on the product. In all three activities, the emphasis is placed on health, protecting the environment, fairness and care – it means, they do not use materials, tools or procedures that could cause harm. The ecological farming is based on the biological circulation of the available resources, which is primarily manifested in the minimization of external influences and the replenishment of soil power. Organic farming is based on natural materials and processes, and perhaps expresses the essence of the endeavor more precisely than ecological farming. In organic production, unlike the previous ones, the produced final product, the organic product. It plays a decisive role, which takes place under strict regulations and "biocontrol". These procedures primarily serve to expand the available products and satisfy special consumer needs. Ecological, organic farming and organic production are characterized by lower crop averages and yields, higher specific costs, limited market opportunities and protection of the growing area (FEHÉR, 2005).

Eco- (or bio-) farming produces its products without the use of foreign materials. It strives to create sustainable, diverse, balanced, environmentally friendly and profitable systems that produce valuable, healthy food (SÁRKÖZY, 1998).

According to Fehér (2005), organic farming goes beyond farming in the traditional sense. The ecological farmer performs services and ensures the survival of goods whose value can be demonstrated using the tools and calculation methods of traditional economics. Here, primarily for the protection of the environment and nature, the restoration of previously tipped balances,

the creation of new recreational opportunities, the so-called external effects are related to specific public goods.

Organic farming is gaining ground in our country as well. EEC Regulation 2092/91 recognizes the names used in individual member states as equal. In 33 percent of the cases, they talk about ecological farming, 55 percent about biological farming, and 12 percent about organic farming. In domestic legal regulations (Government Decree 140/1999 and FVM-KÖM Joint Decree 2/2000) the adjective "ecological" is widespread (JÁRÁSI, 2009). His approach is supported by Roszik, according to which organic farming is a farming system precisely defined by legislation, and only products from this system may be marketed with ecological, biological (bio) and organic labels in the European Union. The official term is organic farming (ROSZÍK, 2010).

However, in professional circles, the terms "eco" and "bio" are often used as synonyms. Furthermore, the two concepts are used identically for the product and the producing process. According to the opinion of Alvincz and Koltai (2009), the term "organic" should be applied to the product, and the name organic seems more appropriate to indicate the production process, so we can talk about organic products and organic farming. Organic farming means productive activity in close harmony with the natural environment, and in some respects it also has social aspects.

The definition of organic farming based of IFOAM (International Federation of Organic Agriculture Movements) is generally known: "Organic agriculture includes all agricultural systems that are sustainable from an environmental, social and economic point of view, and ensure the production of healthy food and products. Protects soil fertility as the key to successful farming. It prioritizes the natural balance of plants, animals and the soil, and aims to improve the quality of agriculture and the environment. It significantly reduces the intake of external energy sources, refraining from the use of synthetic fertilizers and plant protection agents. Instead, it allows the processes of nature to prevail in order to increase yield and resilience." According to IFOAM's latest definition, "Organic agriculture is a farming system that maintains a healthy state of soil, ecosystems and people. It is based on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of substances imported from the outside with harmful effects. By combining tradition, innovation and science, organic farming has a beneficial effect on the shared environment and promotes the establishment of equitable relationships and a high-quality life for all concerned" (<http://www.biokutatas.hu>).

Organic production is the only production system clearly defined at the EU level and legally regulated by Regulation (EC) 834/2007, which "aims to create a sustainable management system in agriculture that respects the systems and cycles of nature". and produces high-quality food in way that "do not harm the environment, human health, plant and animal health and well-being" (IFOAM EU GROUP, 2010).

Organic farming is one of the fastest growing farming methods in the world nowadays. Its rapid spread is explained by the fact that many consumers and producers consider it to be the most environmentally sustainable agricultural practice, which provides healthy, safe food for consumers.

[**CAPTIVATE**](#) project, funded under the Erasmus+ program of the European Union, is dedicated to knowledge transfer and vocational training of farmers and agricultural advisors related to the current EU strategic lines, such as the Green Deal, Farm to Fork Strategy and Organic Action Plan. One of the CAPTIVATE's main objectives is that farmers better understand conditionality, eco-scheme and rural development regulations, they choose and participate in the certain schemes with more responsibility and awareness, carrying out the new CAP measures more effectively.

The article primarily provides farmers and consultants with basic information about the current situation of organic farming. Within the framework of the CAPTIVATE program, it provides information on the topic of sustainable and organic farming.

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