

## HISTORICAL DEVELOPMENT OF ORGANIC PRODUCTION<sup>1</sup>

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### Summary

*The authors are discussing the concept of organic production, its origins and development. Organic agriculture has been developed in three stages: stage of emergence (1924-1970), stage of expansion (1970-1990) and stage of growth (after 1990). In the first stage organic production faced problems in terms of its scientific recognition, acceptance by the producer, members of the wider community as well as acceptance at the national level. The second stage was defined with gradual expansion of the production system, the establishment of non-governmental organizations, the recognition and the establishment of the first legislative framework and the adoption of organic practices. In the third stage organic production is recognized and accepted around the world. Today there are laws on organic production in almost all developed countries, and in most of the developing countries. Areas under this system are increasing and the state official are acting as advocates of organic agriculture, supporting this system in the form of various premiums and subsidies for producers.*

**Key words:** *organic production, emergence, history, development.*

**JEL:** *N50, Q57*

### Introduction

The concept of organic agriculture developed in the early twentieth century, first in Europe and then in the United States. Pionires of Organic Agriculture Movements were motivated by a desire to resolve long-standing problems of conventional production - erosion, reduction of the production capacity of the soil, reduction in the number of varieties of plants, low quality of food and nutrients and ubiquitous rural poverty.

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- 1 Paper is a part of research project financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia "Production of cheese with added value manufactures from the milk from organic and sustainable systems", No TR 31095.
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They have embraced a holistic approach that the health of the nation must be built on a healthy agriculture, which depends primarily on the long-term soil fertility<sup>4</sup>. It was believed that the health and vitality of the soil depends on its surface layer, called humus. On this basis, a system of land management was developed called “humus farming” and it was based on the principles of maintaining soil fertility as a basis for sustainable agricultural production. Kuepper (2010) states that such production system represents a conscious management of land resources. Through this system it is possible to maintain and increase the fertility of soil and to avoid over-exploitation of natural resources. This system, according to him, is considered as a forerunner and one of the first forms of organic agriculture.

Organic farming can be defined as an approach to agriculture where the aim is: to create integrated, humane, economic and naturally sustainable agriculture with optimal utilization of renewable energy sources originating from the farm. Accordingly, organic farming requires proper management of ecological and biological processes in order to ensure acceptable levels of yield and nutrients, protection from pests and diseases and acceptable return on investment of labor and other resources (Lampkin, 1994). In other words, “... organic production creates and develops integrated, humane, environmentally and economically sustainable production systems that rely on resources within the farm, encouraging the use of renewable resources” (Lazić, Lazić, 2008). Organic farming, together with a number of other alternative production systems produces food that contributes to the overall well-being of man (Lockie, Halpin, 2005). Sustainability was an integral part of this concept from the very beginning (Stolze et al., 2000, Kasperczyk, Knickel, 2006, Pacini et al., 2003).

When considering the system of organic farming, the question that often arises is where did it begin? When and where in human history does this vague idea of organic agriculture first come to mind? In practice, and in theory (Lockeretz, 2007), one often comes to an opinion that it began centuries ago, when first hunter-gatherers finished with a nomadic lifestyle and began establishing communities and practicing agriculture. However, producers in the distant past certainly did not have at their disposal modern means of chemization. The main difference between organic farming in present terms and organic production from the past is *the intention* of the producers. Today’s production, among other things, is characterized by deliberate intention of producers to turn to this production system, which distinguishes it from the producers of the past. In the past they also produced without using chemization and other inputs, but only because they had no other choice.

During the period of the formation and development organic production was going through different stages of acceptance of this production system. Lockeretz (2007) states that in a period of time, organic production was under attack of representatives of

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4 Aeberhard and Rist (2008) indicate that today’s motives are more connected with the economic benefits of organic agriculture, expressed through a premium price, which under certain conditions can make a profit equal to or higher than in conventional production.

the profession and practice, with or without supporting evidence. Thus, at the annual meeting of the American Association for the Advancement of Science - AAAS in 1974, a panel of scientists examined the “myth of organic production”, calling this production “scientific nonsense” and blaming “pseudo-scientist” for alerting the public, forcing consumers to pay more money for their food. They also claimed that the organic myth is counterproductive for the well-being of people, as it leads to a refusal of procedures that are necessary for the production of healthy foods with maximum efficiency and that it reverses decades of prosperity in agricultural research. However, seven years later, the journal of this same association published an important research article that concluded that organic production is highly efficient and economically competitive production system, with reduced use of energy and less land degradation, compared to conventional farms.

No less important issue in the literature is: what caused the growth of organic production in the second half of the twentieth century? Lockeretz (2007) states that in the absence of fundamental analysis one can only speculate, highlighting several possible answers:

- Activists of organic movements were sufficiently successful in promoting their vision to public, researchers and creators of the macroeconomic environment;
- The problem of environmental pollution, the position of agricultural producers and small farms around the world and food safety issues - organic farming became more attractive alternative to the dominant conventional production among farmers but also among consumers;
- Over the decades the technology of organic farming changed, adapting to the audience, contrary to the narrow circle of users from previous years.

Modern organic agriculture represents a number of different schools of thought. In 1924, Austria’s philosopher dr Rudolf Steiner presented the alternative forms of agricultural production, which originate from science called (or pseudoscience, as some call it (Staudenmaier, 2013)) antroposophy. This formed the basis for the further development of biodynamic production, which today exists in many countries of the world. At about the same time dr Hans Müller from Switzerland founded the movement for agricultural reform, which explored the concept of land management and the preservation of family farms. Later, dr Hans-Peter Rusch contributed to the development of this idea, concentrating on issues of soil fertility and soil microbiology, which led to the further development of organic-biological agriculture in Central Europe (Lampkin, 1994).

Also, Lampkin (1994) states that in the UK and other English-speaking countries, scientists like Sir George Stapledon and Sir Albert Howard, were under the indirect influence of Rudolf Steiner, although his ideas were adopted later. However, Stapledon`s work with alternative systems of cultivation and Howard`s work on the role of organic matter in the soil and composting have provided impetus for the establishment of the organic movement by Lady Eve Balfour. Ideas of Howard and Balfour emphasized the role of a healthy and fertile soil to produce healthy plants and animals and their link

to human health was established by J. I. Rodale and later his son Robert Rodale in the United States.

### **Methodology and data sources**

The aim of the research was the analysis of the origin and development of organic farming as an alternative system of agricultural production. Analysis related to the emergence of organic agriculture in theory and practice, and the formation of the organic movement as broader social construction whose base was organic farming. During the research the historical method was used and the method of description in conjunction with the method of abstraction for defining and determining the period of development. Synthesis is used in making conclusions, together with the inductive method. As data sources secondary sources of literature were used as well as primary data resulting from the research in mentioned project.

### **The development of the organic movement**

The development of the organic movement in the last seventy years can be summarized in three main stages (Tate, 1994). According to Shi-ming and Sauerborn (2006) those three phases are classified as stage of emergence (1924-1970), stage of expansion (1970-1990) and stage of growth (after 1990).

#### ***Stage of emergence (1924-1970)***

Years 1924-1970 represent a period of struggle and financial difficulties for organic agriculture in a rather hostile environment and the period in which key papers are written. Modern organic farming began to develop in Europe in 1920 and immediately incounted with a powerful chemical lobbies. During this period, organic farming has been primarily recognized as biodynamic production. As such, during development it faced with different problems. Before World War II Germany was considered as extremely favorable country for the development of biodynamic production (Staudenmaier, 2013). Staudenmaier (2013) states that “regardless of whether it is a system of production in accordance with the laws of life, the natural way of production or production method that will restore the health and fertility of the German land and German people, biodynamic production has found reliable partners in the Nazi hierarchy.” On the other hand, Tate (1994) states that in mentioned period the government was interested in maximizing output from agriculture for economic, social and political reasons; the environment was ignored. At worst case of persecution, biodynamic agriculture was banned by the Nazis in 1940, influenced by the powerful chemical industry in Germany (Tate, 1994). This rejection of biodynamic production, above all, was linked to the period from the forties onwards, when the chemical industry was in full swing (period known as Green Revolution -between 1930 and 1960).

To understand the origin and development of organic agriculture<sup>5</sup> it is necessary to examine the processes and events that were current at that time (Vogt, 2007): 1) The crisis in the agricultural practice and science; 2) the emergence of science of biological control in agriculture; 3) Life and Food Reform movements; 4) increase awareness of agriculture practice in the Far East in Western countries.

Between two world wars agriculture found itself in crisis, where environmental problem and the problems of soil fertility come to the fore. Along with those economic and social problems that are related to the rural community emerged. Use of chemization and mechanization is seen either as a solution or as a cause of these problems. At that time science of biological control of agricultural land appeared. Biologically oriented agriculture is primarily related to the research focused on biological analysis and control of soil. Life Reform and Food Reform movements related to the period at the end of the nineteenth and beginning of the twentieth century in Germany and the USA. They refer to the disapproval of industrialization that was in progress, urbanization and the dominance of technology in the “modern” world. Supporters of the movement were “invited” to the “natural way of life,” which among other things included the return to land and agricultural production.

At this stage of development, the most important people who have made great contribution to the development of the concept of organic production appeared: Rudolf Steiner from Austria, Hans Müller from Switzerland, Lady Eve Balfour from Britain, J.I. Rodale in the United States, Albert Howard from Britain and Masanobu Fukuoka from Japan.

The influence of Rudolf Steiner (1861-1925) was important and deep in many areas, notably education. Steiner started the development of the earliest, and for a time the most influential forms of organic farming, biodynamic production. He was a mathematician, physicist and chemist and had no previous training in agriculture. Biodynamic movement, with its symbol of Demeter, the Greek goddess of agriculture, was created from a series of Steiner’s lecture, which was held in 1924, a year before his death. Steiner has accepted an invitation to lecture a group of German farmers in Koberwitz-u. They were concerned about a new trend in agricultural production, which they called “scientific” agriculture, which assumed increased use of chemicals. In his lectures, Steiner pointed out the shortcomings of materialistic approach to agricultural production (Steiner, 1924). He stressed the great impact of natural forces on production. Even in the early twentieth century, farmers have noticed the decline of soil fertility, reduced ability of the seed and the bad state of health of the animals. The term “biodynamic” was coined in 1925 by Erhard Bartsch (1895-1960) and Ernst Stegemann (1882-1943), as combination of two main aspects: the biological character

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5 Some authors (Vogt, 2007) considered that the concept, which is now known as organic agriculture is a combination of different ideas that mostly originate from parts of the German and English-speaking countries. Accordingly, the specific analysis of the development of this movement in the German and English-speaking area is met.

of fertilization on the one hand, and the dynamic effect of natural forces on the other (Vogt, 2007).

Hans Müller (1891-1988) was a politician and farmer. He wanted to end what he saw as the exploitation of farmers by middlemen and establish a direct link between producers and consumers. In 1946, Müller founded BIO Gemuse AVG, a Swiss cooperative of small farmers that produced using organic-biological methods of production. Studenmaier (2013) states that Müller was a supporter of biodynamic production methods, issuing a series of books and pamphlets on biodynamic production in his publishing house, and strongly promoting biodynamic production in the journal he edited (*Lieb und Leben*). Also, Müller has continuously used his position in a political party urging for biodynamic producers, providing visible support to organic projects on behalf of the Nazi Party. Along with other supporters of this movement, he founded the League of the Reich for biodynamic agriculture.

Building on Müller's research, H. P. Rusch explained the theory of organic-biological agriculture in his book "Soil fertility" in 1968. Rusch emphasized the critical role of microbial activity in soil on its fertility and encouraged fertilization with fresh manure of grazed cattle. Soil tillage should be shallow and light in order not to destroy vital organisms in the soil.

Lady Eve Balfour (1899-1990) was the driving force behind the organic movement in 1946. She was among the first advocates for establishing and she helped to establish the Soil Association, Britain's leading organizations in organic production. She published her best-selling work "The Living Soil" in 1946. The basic principle that guided her research was that the health of soil is inseparable from human health. Between 1938 and 1970 she conducted what later became known as Haughley experiment on farm in Suffolk. Lady Eve cooperation with the Soil Association lasted for 44 years. Originally, the Association attracted significant international membership but it then fell into financial difficulties and internal division. In 1980, the Association appears as a highly respected organization with standards for certification. The name of Lady Eve Balfour is, before all the other, linked to the development of organic agriculture in Britain (Tate, 1994).

Albert Howard was researching several segments of agriculture - the cultivation of plants, plant protection, soil, composting, fertilizing with manure. Thanks to this he finally began to look at the farm as a closed organism. Reintegrating various agricultural disciplines he concluded that the health of soil, plants, animals and people is interconnected. Soil rich in humus is the key to successful (organic) production; soil fertility is a prerequisite for healthy plants and animals. His famous book "An Agricultural Testament" (Howard, 1940), summarized his experiments, stressing the whole farm as a starting point and a base unit of agricultural research.

In the United States, J.I. Rodale has published the ideas of Eve Balfour and Albert Howard in a successful magazine "Organic Gardening", which reached a number of 2 million copies until 1980. The success of the magazine funded the establishment of

the Rodale Institute, which was a pioneer of organic agriculture research in the United States in the seventies and eighties, and has led to the publication of the magazine “New Farm” for organic producers. His work was continued by his son Robert Rodale.

In Japan, Masanobu Fukuoka has developed a very different approach to organic agriculture, in philosophical and practical terms, that is best presented through his book “One Straw Revolution” (Tate, 1994).

### *Stage of expansion (1970-1990)*

The basic schemes and symbols of organic agriculture have been established between 1970 and 1980. Together with growth in demand for organic products, “green” awareness was growing and retail stores with organic products grew rapidly. The last quarter of the twentieth century brought the permanent production surplus of agricultural products in the west countries and belated concern for the welfare of the planet, which has led to better recognition of organic production. The positive relationship between supply and demand in the market for organic products has enable dan increase in hectares undercertified organic production.

In 1970, William Albrecht introduced the definition of ecological agriculture by which the ecological principle of production was associated with organic farming (Shiming, Sauerborn, 2006). Since 1980, organic farming has been accepted, national and international standards were developed and governments have begun providing assistance to farmers who were in an organic production system. Tomaš Siminand Janković (2014) stated that the original motives for the transition to this production system (connection to nature, a holistic approach to life, etc.) were laterre placed by economic motives. Confirmation of newly gain respect for organic production was created in the eighties when Sweden, Denmark and German government introduced incentives that encourage farmers to engage in this production system. Shortly afterwards the legal definition of organic farming in the United States and the European Union followed.

It is believed (Kuepper, 2010) that in the seventies two key studies that have influenced the further development and acceptance of organic agriculture was published. Better known is the USDA study, published in 1980 entitled “Report and Recommendations on Organic Farming”. The study contains interviewes with a large number of organic farming patrons, promoters, journalists, writers and farmers. In the study organic farms across the worldwas investigated, the farms in Europe were visited and a conclusion of the study emphasizes the benefits of organic production, satisfactory use of resources in this production, innovations in protection against diseases and pests and stresses the need for USDA and the University to better respond to the requirements and needs of producers who are in organic system. At the same time organic agriculture was researched in the Midwest. The research was done under the control of the Centre for the Biology of Natural Systems (CBNS) in Washington, St. Louis University. This research was directed to the rational use of energy in the cornbelt, but the efforts were

focused towards organic production because it has shown that this system uses the rational energy inputs.

During this period research infrastructure in organic production was developed (Stinner, 2007). A brief overview of the development of these institutions is given in the following table (Table 1).

**Table 1.** Development of research institution in organic agriculture

Institution	Founding period	Main objectives and activities
Rodale Institute, Pennsylvania, USA	1947	Research is based on a thesis that healthy soil produces healthy plants, animals and humans. Although it was founded in 1947, researches at the Institute gained in importance in 1970, when 135 ha of agricultural land has been acquired, which enabled the setting up of experiments in organic production.
The Research Institute of Organic Agriculture (FiBL), Frick, Switzerland	1973	Established jointly by farmers and scientists as a private foundation. The primary reason for the establishment was the implementation of the experiments relating to organic production, since organic producers at that time were not yet supported by the federal and cantonal authorities. Their research today is conducted on a farm in Frick and on over 200 associate farms throughout Switzerland. Special attention deserves the so-called DOK study that began in 1978 and compares biodynamic, organic and conventional production in various aspects.
International Federation of Organic Agriculture Movements (IFOAM)	1972	The five organizations that participated in the founding of IFOAM are Soil Association from Great Britain, Sweden biodynamic production association, Association for soil in South Africa, Rodale Press from USA and the Nature et Progrès from France. The Federation is designed as an umbrella organization at the international level, with the idea to bring together similar organizations at national and local levels. Since its founding up to 1975 it consisted of 50 members from 17 countries. Today, IFOAM has more than 750 members from over 100 countries. IFOAM members are organized at regional levels, for example, EU, Mediterranean and Asia. The goals are still the promotion and development of organic agriculture, provision of a common platform for all participants, representing the interests of organic agriculture in important institutions and bodies, etc.



Institution	Founding period	Main objectives and activities
Louis Bolk Institute, Driebergen, Norway	1976	The basic idea of founding was to link the current social problems with research in organic agriculture, nutrition and health care. The Institute defines as its main goal help to farmers in finding practical solutions to problems of farm management, help to doctors in the promotion of human health and vitality and help to researchers around the world in the application of modern achievements.
Ludwig Boltzmann Institute for Organic Agriculture and Applied Ecology, Vienna, Austria	1980	Founded as a center for research of organic production methods in a broader, multidisciplinary approach. Its sphere of interests is related to crop production, composting, agroecology and food quality.
Elm Farm Research Centre, Hampstead Marshall, UK	1980	Founded on Elm Farm, with 94 ha of organic land. Research is conducted there and on the other associated farms. It is a leading institution in the UK in the field of organic agriculture.
Chair of Organic Agriculture, Witzenhausen, Germany	1981	Establishing of this Chair at the University of Kassel is a historic moment of entry of organic agriculture in official education. In 1987, the University of Bonn also founded another Chair for organic agriculture. This trend has continued after the nineties.

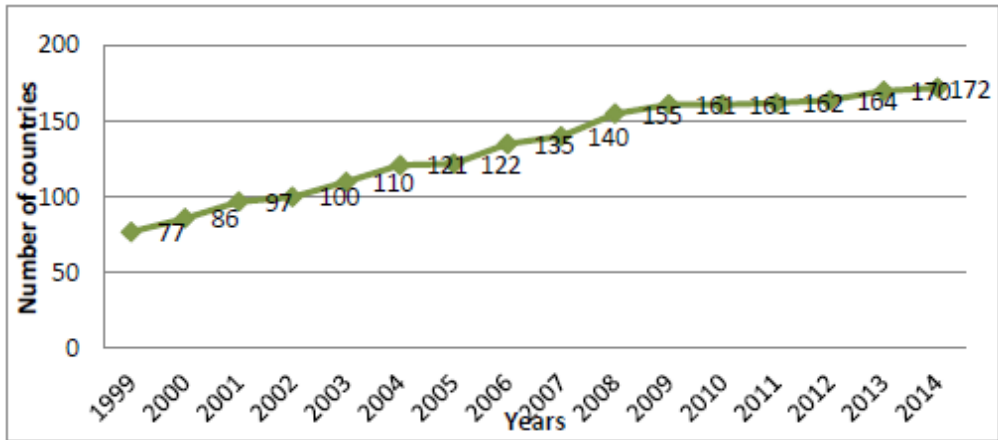
Source: Authors according to Lapmkin, Padel (1994)

### *Stage of growth (after 1990)*

After a stage of development in which infrastructure in organic agriculture was established and developed, a growth stage of this production came to place. In this stage total areas in organic agriculture continued to grow, which led to an increase of market value of organic products. With regard to the development of infrastructure in the stage of growth more attention is paid to monitoring and analysis of organic production at international level. Thanks to this, other issues come to the fore and among biggest was the problem of lack of data, which is a problem when performing any kind of analysis.

Since 2000, IFOAM in cooperation with FiBL is trying to solve this problem and as a result annually publication the “World of Organic Agriculture”, which documents the current situation in the field of organic agriculture, was developed. From 2000 until today, the number of countries that monitor the state of organic farming in their national borders is constantly increasing, as are the areas and market for organic agriculture (Graph 1).

**Graph 1.** Countries with organic activities 1999-2014



Source: FIBL/IFOAM, 2016.

In 2014 43.7 million ha (including areas under conversion) was under organic agriculture. Organic share of total agricultural land makes around 0.99%. Although this is still a relatively low proportion, the rate of growth and the number of organic producers are relatively high. In comparison with 1999, the area under this system of production tripled. The current state of organic production is shown in Table 2.

**Table 2.** Organic agriculture in 2014

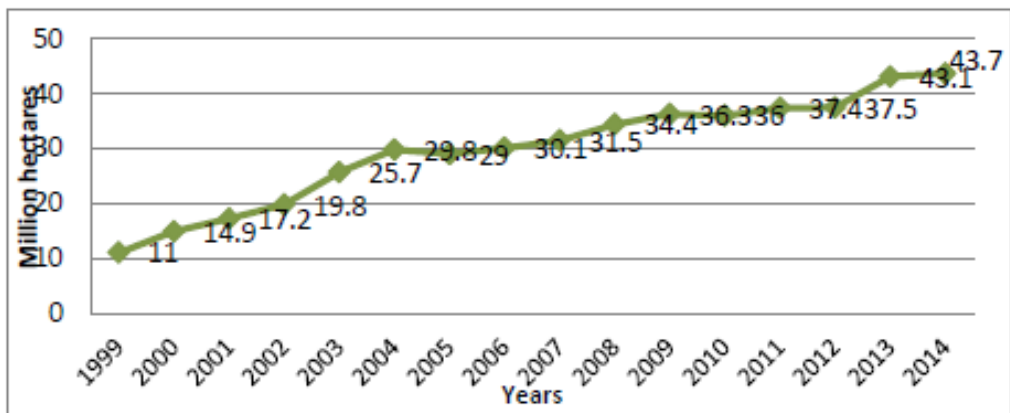
Indicator	World	Top countries
<b>Countries with organic activities</b>	2014: 172 countries	New countries: Kiribati, Puerto Rico, Suriname, United States Virgin Islands
<b>Organic agricultural land</b>	2014: 43,7 milion hectares (1999: 11 miliona hectares)	Australia (17,2 mil. ha, 2013) Argentina (3,1 mil ha) US (2,2 mil. ha, 2011)
<b>Organic share of total agricultural land</b>	2014: 0.99%	Falkland Island (Malvinas) (36,3%) Liechtenstein (30,9%) Austria (19,4%)
<b>Wild collection and further, non-agricultural areas</b>	2014: 37,6 million hectares (2012: 30,4 miliona hectares, 2010: 31,7 million hectares)	Finland (9,1 miliona ha) Zambia (6,8 miliona ha, 2009) India (4 miliona ha)
<b>Producers</b>	2014: 2,3 million producers (2010: 1,6 mil., 2009: 1,8 mil. producers)	India (650.000, 2013) Uganda (190.552) Mexico (169.703, 2013)

Indicator	World	Top countries
<b>Organic market size</b>	2014: 80 billion US dollars (1999: 15,2 billion US dollars)	US (35,9billion US dollars, 27,1 billion euros) Germany (10,5billion US dollars, 7.9 billion euros) France (6,8billion US dollars, 4.8 billion euros)
<b>Per capita consumption</b>	2014: 11 US dollars (14 euros)	Switzerland (221euros) Luxemburg (164euros) Denmark (162 euros)
<b>Number of countries with organic regulations</b>	2015: 87 countries	

Source: FIBL/IFOAM, 2016.

In addition to the agricultural land other areas are also used for organic production. Mostly these are wild collection areas, the area under pastures, beekeeping and aquaculture. They make up more than 37 million ha, so a total area under organic production is nearly 81.2 million ha (agricultural and non-agricultural areas). The growth of organic agricultural land is presented in Graph 2.

**Graph 2.** Organic agricultural land 1999-2014



Source: FIBL/IFOAM, 2016.

Niggli (2007) states that on the basis of the adopted concept of “naturalness” that was present during the beginning of the organic movement, the pioneers of organic farming mainly define themselves as producers who do not use chemicals in its production. This definition in the negation remained until today, although production methods of organic farming largely rely on the positive correlation between arable land, healthy crops and domestic animals.

## **The development of organic production in Serbia**

According to Kalentić et al (2014) application of organic production method in Serbia started many years before the adoption of legal regulations. Organic production began its development in southern Serbia, around Blaca, in 1989 thanks to the initiative of the business company DenJuro which resulted in the export of first contingent of organic fruit from Serbia in 1990.

The development of the NGO sector of organic production in Serbia started in 1990 by founding of Association Terra's in the municipality of Subotica. This NGO has started its existence as part of the Open University of Subotica, and had representatives from University of Novi Sad. Terra's organization conducted a number of campaigns to promote organic production in accordance with standards of the International Federation of Organic Agriculture Movements (IFOAM). Terra's became a member of this organization in 1992, and in 1997 hosted the IFOAM Conference on Organic Production countries of Central and Eastern Europe. This organization remained the driving development force of organic sector in Serbia, while the formal and informal groups that promote this production began to appear also in other parts of the country. At the time of the Federal Republic of Yugoslavia the first Law on organic production in Serbia was passed. After the establishment of the new government in 2000 foreign investment, as well as customers, projects and donors arrived; this created an opportunity for the advancement of knowledge and export opportunities. Avalon from the Netherlands, SIDA from Sweden and Diaconia from Germany were the first foreign organizations to promote organic production in Serbia through regional projects. In 2003, GIZ supported Terra's organization in establishing cooperation with the German certification organization BCS, thereby laying the groundwork for the first certification body in Serbia.

These international organizations have recognized the potential of organic production in Serbia and facilitate the formation of new associations that are engaged in organic production, primarily at local and regional level. Moreover, several companies began to work on export oriented organic production. In 2004 GIZ has supported first participation of Serbian traders and processing companies at the international fair Biofach in Nuremberg. Together with the Green Network of Vojvodina, Terra's started the development of the local market, which resulted in the realization of first Biofest in Subotica in 2005. In the coming years, with the exception of GIZ and SIPPO from Switzerland, the US Agency for International Development (USAID) and the Ministry of Agriculture, Forestry and Water Management (MAFWM) also supported the participation of Serbian producers and businesspeople at the Biofach fair. In 2006 MAFWM joined the Network for organic production Mediterranean and soon after was followed by an international organic production project, financed by the EU and the various Mediterranean countries.

During 2007 and 2008, donors have continued through various projects to support the development of the organic sector. The Austrian Development Agency (ADA) focused

its activities on regional development of rural areas in Vojvodina and Sandzak, trying to join the small-scale organic production with the community development and the local processing of agricultural raw materials. Swiss Development Corporation (SDC) engaged in a big project to introduce food safety standards, such as HACCP and GlobalGAP. GIZ concentrated on advisory policy, coordination of donors and creation of business associations.

National Association for Organic Production “Serbia Organica” (NASO) was established in 2009 with the aim to unite the participants in the organic sector by stimulating interaction and promoting organic farming and processing. Today NASA gathers about 80% of participants in this sector that are present in other related associations and organizations. A large number of members come from primary production, processing, trade, academic and other institutions.

With the support of MAFWM, in 2011 was established five Centers for the development of organic production (Selenča, Leskovac, Svilajnac, Valjevo and Negotin), and in 2013 the Centre was established in Uzice.

History of production and processing of organic food extends back for more than 20 years. This sector is still poorly organized, although there has been a development of a number of different, locally active associations, organizations, cooperatives and interest groups (Pejanović, 2012). By 2009, the Law on Associations restricted the formation of strong interest groups or associations, it did not allow associations to do business and create capital. Favorable conditions have emerged with the entry into force of the new Law on Associations (“Official Gazette of RS”, no. 51/09), which allowed associations to a certain extent, carried out business activities and create capital reserves. During October and November 2012 there have been amendments to the current Law on Organic Production (“Official Gazette of RS”, no. 33/10) in order to further align with EU regulations. However, the new Law has not been adopted.

### **Conclusion**

When we look at modern organic agriculture in relation to the ideas and activities of the pioneers of this production, we can conclude that many of the initial principles are relevant today. Organic production continues to potentiate the connection with the environment, the health of soil, plants, animals and people, both economically and socially sustainable agricultural production concept. However, organic production has changed and evolved over the decades, following the trends of scientific-technological achievements. As at its beginning nowadays it is also based on the latest achievements in science, which are applicable in practice and are contributing to the fundamental principles on which organic production is based. Niggli (2007) states that the development of organic agriculture in practice and science progressed surprisingly connected and in harmony.

In the beginning of organic production, market premium (in the form of premium prices) for conversion to organic production system did not exist. Due to this, the

motives for conversion were different compared to modern motives. Organic producers from this period have emphasized the animal health, problem of land and costs of chemical protection and land treatment as the main reasons for joining the process of conversion. The sixties have linked the organic movement with a broader movement of environmental protection. Rachel Carson (1962) in her book *Silent Spring* emphasized the danger - existing and expected –of the use of pesticides in agricultural production, which has made organic agriculture especially attractive. In this way, together with the production technology an entire social movement of organic agriculture was developed, which today continues its growth and development.

In Serbia, organic production is developing for about twenty years. In the beginning, producers and non-governmental sector were the initiators of the development. Later this production received the official support of government institutions, which was reflected primarily in the adoption of the Law on organic production and premiums and subsidies granted to producers who are in this system of production.

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## ISTORIJSKI RAZVOJ ORGANSKE PROIZVODNJE

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### Rezime

*Autori u radu razmatraju koncept organske proizvodnje, odnosno, njegove začetak i razvoj. Organska proizvodnja se razvijala u tri faze: faza nastanka (1924-1970), faza razvoja (1970-1990) i faza rasta (nakon 1990). U prvoj fazi organsku proizvodnju su pratili problemi u smislu njenog naučnog priznavanja, prihvatanja od strane proizvođača, članova šire društvene zajednice ali i prihvatanja na nacionalnom nivou. U drugoj fazi dolazi do postepenog širenja ovog sistema proizvodnje, osnivanja nevladinih organizacija, priznavanje i uspostavljanje prvih zakonodavnih okvira i usvajanje organskih praksi od strane sve većeg broja proizvođača. U trećoj fazi organska proizvodnja je prepoznata i priznata širom sveta. Danas Zakoni o organskoj proizvodnji postoje u gotovo svim razvijenim zemljama ali i u velikom delu zemalja u razvoju. Površine pod ovim sistemom se povećavaju, a države zvanično istupaju kao zagovornice organske proizvodnje, pružajući podršku ovom sistemu i u vidu različitih premija i subvencija za proizvođače.*

**Ključne reči:** *organska proizvodnja, nastanak, istorijat, razvoj.*

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