



UNIVERSITY OF NOVI SAD
Technical faculty "Mihajlo Pupin"
Zrenjanin, Republic of Serbia

In cooperation with partners

*Industrial Engineering
and
Environmental Protection*

IIZS

conference

PROCEEDINGS

**VI International Conference –
Industrial Engineering And Environmental
Protection (IIZS 2016)**

Zrenjanin, 13-14th October 2016.



University of Novi Sad
Technical faculty "Mihajlo Pupin"
Zrenjanin, Republic of Serbia



VI International Conference Industrial Engineering and Environmental Protection (IIZS 2016)

Proceedings

Zrenjanin, 13 - 14th October 2016.

IN COOPERATION WITH PARTNERS:

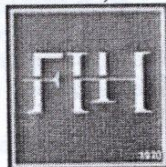
„AUREL VLAICU” UNIVERSITY OF ARAD, FACULTY OF ENGINEERING,
ARAD, ROMANIA



UNIVERSITY «St. KLIMENT OHRIDSKI», TECHNICAL FACULTY, BITOLA,
MACEDONIA



UNIVERSITY POLITEHNICA TIMISOARA, FACULTY OF ENGINEERING,
HUNEDOARA, ROMANIA



UNIVERSITY OF EAST SARAJEVO, FACULTY OF MECHANICAL
ENGINEERING EAST SARAJEVO, B&H, REPUBLIC OF SRPSKA



UNIVERSITY OF AGRICULTURE, FACULTY OF AGRICULTURAL
ENGINEERING, KRAKOW, POLAND



UNIERSYTET ROLNICZY
im. Hugona Kollataja w Krakowie

TECHNICAL UNIVERSITY-SOFIA, PLOVDIV BRANCH, THE FACULTY OF
MECHANICAL ENGINEERING, PLOVDIV, BULGARIA



UNIVERSITY OF NIŠ, FACULTY OF MECHANICAL ENGINEERING, NIŠ,
SERBIA



2 ORGANIC FOOD PRODUCTION AS A FACTOR FOR SUSTAINABLE DEVELOPMENT

1 Duško Brković¹, Milena Đurić¹, Milorad Krsmanović¹, Milena Mijajlović²
Brankica Luković²

¹University of Kragujevac, Faculty of Agronomy, Čačak,

²College of Applied Technology Studies, Arandelovac, Serbia

e-mail: duskobrkovic@gmail.com

Abstract: Serbia is rich in natural potentials which provide a good basis for the future development of organic farming, given the fact that natural resources are limited. The composition and structure of natural resources are highly suitable for organic production. The country's relatively unpolluted land, favourable climate, abundant water resources and preserved biodiversity are some of the main organic farming requirements satisfied. Organic production is not possible without at least a minimum level of preservation of natural resources in areas where organic farming is practiced; on the other hand, organic production itself has a positive effect on the preservation and improvement of environmental quality in these areas. Small plots of land can be advantageous for this production, particularly in upland areas, and used specifically for organic production as the conversion period is short. They can be used for vegetable farming because the soil is uncontaminated owing to distance from roads. Positive experience indicates that potatoes, rye, oats and root vegetables can be successfully grown in these areas. Another advantage is the wealth of indigenous cultivars of apples, pears and plums which are highly resistant to pathogenic pests and environmental conditions, and hence suitable for cultivation without the use of mineral fertilisers and chemical agents.

Key words: Serbia, organic farming, sustainable development

INTRODUCTION

Organic farming is a new concept of food production which originated in the 1980s in developed countries in response to increasing environmental pollution problems. This new concept of production is a chance for Serbia to use its potentials and resources to develop a competitive organic production sector. Over the years, there has been a steady increase in this sector in the number of consumers, consumption and land area under organic production, which indicates great potential for further growth.

Organic agriculture is a type of farming which relies on the use of crop rotation, manure, compost and biological control of harmful organisms to maintain soil productivity and control pests on farms. Organic farming avoids the use of synthetic fertilisers, pesticides, plant growth regulators, animal drugs, food additives and genetically modified organisms. There has been a rising demand for organic products on a global scale. The domestic organic market is small and undeveloped. All parts of the organic production chain are included, but they lack interconnection, and the sector is disorganised, resulting in lack of coordination and collaboration among projects, activities and stakeholders.

The development of the domestic market is retarded due to poorly organised production, distribution deficiencies and poor promotion through media channels. Farmers' associations are focused on production and are not strong enough to organise or promote the organic sector. Government is the main impetus in the development of organic farming.

ELABORATION AND DISCUSSION

The concept of sustainable development was first mentioned in 1982 at the Nairobi Conference. In 1983, the UN General Assembly passed a resolution on taking the initiative to establish the World Commission on Environment and Development. In 1987, the Commission published a report titled "Our Common Future" addressing issues concerning the negative impacts of uncontrolled demographic and economic growth, and stressing the need to define the concept of sustainable development. The term "sustainable development" was established in 1989 and officially proclaimed in the so-called Bergen Declaration (1990) at the Ministerial Conference in Bergen, Norway, organised by the Norwegian Government in collaboration with the UN Economic Commission for

