

# Entrepreneurial process and risks in small and medium – sized organic agricultural holdings in Serbia

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# Presentation plan

- Introduction
- Methodology
- Results
- Conclusions

# Introduction

- The need for continuous planning and management in small and medium enterprises is important
- Emphasis in our paper is placed on the organization of small and medium – sized farms that are starting with organic vegetable production in greenhouses
- Great importance through the production, market is supplied with specific products during the autumn – winter

# Introduction

- Development of organic agriculture in Serbia:
  1. Could affect the quality of life in local communities
  2. In long-term reduce the gap between rich and poor regions
  3. Achieve stability in production
  4. Build awareness of the need of consuming organic food in function of health improvement
- Importance of this research: the lack of information in management of small and medium households

# Introduction

**Table 1: The organic producers in the region from 2011 until 2014**

<b>Year</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Increase from 2011 to 2014</b>
<b>Country</b>	<b>Producers</b>	<b>Producers</b>	<b>Producers</b>	<b>Producers</b>	<b>%</b>
Albania	146	39	39	39	-73
Bosnia and Herzegovina	25	25	24	24	-4
Bulgaria	1,562	2,754	3,854	3,893	149
Croatia	890	1,528	1,608	2,194	147
Hungary	1,433	1,560	1,673	1,672	17
Macedonia FYR	419	554	382	382	-9
Romania	9,471	15,315	14,901	14,159	49
Serbia	312	1,073	1,281	1,281	311
Slovenia	2,363	2,682	3,049	3,293	39

Source: <http://www.organicdatanetwork.net>

# Methodology

- Analysis of literature and statistical data in the field of management, agribusiness and organic production.
- Series of direct interviews with the producers, six farmers involved in organic production in the Republic of Serbia

# Results

- Entrepreneurial process in small and medium – sized organic agricultural holdings in Serbia:
  1. Management of production
  2. Finances management
  3. Human resources management
  4. Management of the process of organic certification
  5. Risk management

# Results

## 1. Management of production

- essential for rational logistic action and economic efficiency of reproduction cycle
- In agriculture refers to the planning of work, of labor, of sowing, harvesting
- In small households the most important are the following plans:
  - Plan of the required amounts of vegetables ,
  - Planting plans with precisely specified dates,
  - Plan of the area that is required for normal growth of vegetables,
  - Plan of rotation crops,
  - Plan of planting crops according to the seedbeds.

# Results

## 2. Finances management

- planning of investment and current spending, bill paying, book keeping, paying employees, payment of taxes
- In Serbia is missing free training in the field of book keeping for owners of small and medium – sized households (complexity of the fiscal system)
- For small and medium producers, the most important is to do book keeping that the inspectors require, such as:
  1. Plan of property,
  2. Extract from the register of holdings,
  3. Bills of purchase of seeds and other products and the like

# Results

## 3. Human resources management

- Human resources categories in agricultural production:
  1. **Family members:** knowledge, usually work without formal charges, dedicated
  2. **Local labor force:** proximity and the possibility of finding "trusted" people. Disadvantages: motivation, education, unwillingness to work intensively
  3. **Foreign labor force:** In Serbia mostly from Romania and Bulgaria. Advantage: extremely efficient and willing to work more hours. Disadvantages: necessity of providing shelter, food and language barriers

# Results

## 3. Human resources management

4. **Interns and students:** mandatory practice. Advantage: low cost (sometimes even unpaid work). Disadvantages: generally is available only for part of the season, and at least in August and September, when there is the most intensive work
5. **Woofers:** Mainly young people. Despite their popularity, in Serbia there is only one household registered as the host. Advantages: free labor force in exchange for food and accommodation, motivated, rich experience. Disadvantage: uncertainty, working hours shorter than the traditional seasonal work, language barriers

# Results

## 4. Management of the process of organic certification

- Logical sequence of events as a result of production plan, management of the household and financial resources
- depends on which regulations producers are applying
- in Serbia, necessary to provide spatial isolation of parcels and farms of the possible sources of pollution

# Results

## 5. Risk management

- Agricultural production is subject to many uncertainties
- In the future, it will be important to balance the known harm caused by our current, high-input agriculture system with the potential costs and benefits associated with a transition to alternatives
- Risks in agriculture are divided into basic and additional

# Results

## 5. Risk management

- Farmer has to manage risk in farming as part of the general management of the farming business
- To moderate some risks, they can do a diversification of the production, or they could make forward contracts with processors

# Results - The start – up of entrepreneurial process

- Reorientation on the organic type of production requires new investments in machinery and means of production
- In the growth phase there is a limitation of the resources, and the question of fixed assets is very significant in developing new ways of doing business

## Table 2: Material and investment for starting phase of production of 2.000 vegetable seedlings

<b>Infrastructure</b>	<b>Costs €</b>
Greenhouse of 0,3ha	2.000 (average cost)
System for heating greenhouse	1.000
Refrigerator	2.000
Extension for the preparation of seedlings	depends on the existing infrastructure
The main irrigation system	500
<b>Tools and equipment</b>	
Cultivator	2.000
Knapsack sprayers	50
Rakes, shovels, spades and wheelbarrows	70
Black foil	100
Crates, weighing	100
Trailer	200
<b>Total costs</b>	<b>8'020</b>

*Note: Costs are approximate for 2011 and they are variable in case of different suppliers*

**Table 3 Medium – term plan for production of 15.000 plants**

Infrastructure	Costs in €					
	2011	2012	2012	2013	2014	2015
Land	Bought in 2010					
Facilities	Bought in 2010					
Barn (76x22)	Bought in 2010					
Storage			1'000			
Refrigerator				2'000		
Greenhouse		2'000				
Certification			300	300	300	300
Workshop						3'000
Mechanization						
Tractor (30ks)		12'000				
Cultivator		2'000				
Equipment						
Tool for gardening		70		50		
Main system for irrigation		500				
System "drop by drop"			700			500
Other equipment			300			
Van for delivery			3'500		5'000	
<b>Investments per year</b>		<b>16'570</b>	<b>5'800</b>	<b>2'350</b>	<b>5'300</b>	<b>3'800</b>
<b>Trend in investments (year per year) %</b>		-	- 65	- 59	44	- 72

# The role of the State in entrepreneurial process

- Promotion of development of organic production resources provided from the budget of the Republic of Serbia, grants and other sources
- In Serbia's budget for 2015 it was envisaged to subsidize agriculture with nearly 4,5 million Euros
- The support through subsidies for live stock production, subsidized hectare and for certifying

# Conclusions

- Development of organic agricultural production implies many efforts
- In this area, as in other parts of Serbian economy, entrepreneurship gets more and more important role
- many interested producers and enough natural resources for this kind of production, but for entrepreneurial process it is important to include and manage all the elements presented in the paper

**THANK YOU FOR  
YOUR ATTENTION**