

## THE ESTABLISHMENT OF A ORGANIC FARM IN SIRET VALLARY

Andreea MORARIU\*, T. RUSU, A. D. MORARIU

*University of Agricultural Sciences and Veterinary Medicine, 3-5 Manastur St., 400372, Cluj-Napoca, Romania; Poieni, nr. 52, Cluj, [dumitriu90andreea@yahoo.com](mailto:dumitriu90andreea@yahoo.com)*

**Abstract.** *In order to test the reliability of the business plan for the establishment of a bio-farm in Veresti village, a market research and a bibliographical analysis were conducted. The farm will be in Veresti village, Suceava County. The village is situated at the crossroad of two important marketplaces Suceava and Botosani. Besides the advantage of the two marketplaces, there are also other advantages such as: the climate which offers the possibility of a profitable agricultural activity, the Siret River offers irrigation possibilities, the young and cheap labor, fertile soils, lack of competition, the farm owners that have agricultural studies, the support from local authorities. The farm will offer ecological certified products at affordable prices such as: green and dry onion, parsley leaf and root, dill, carrots, potatoes, green and red cabbage, spinach and cauliflower. The turnover of the farm is estimated, after conducting a financial statement, at a value more then 25000 Euro. After the analysis conducted and the presented facts I concluded that the business plan for the establishment of an Organic farm is viable and profitable.*

**Key words:** *Organic farm, agricultural products, business plan, profit*

### INTRODUCTION

Organic farming promotes sustainable agricultural system that provides healthy living and to protect natural resources for future generations. This process involves to respect the rules imposed by national and European legislation on organic farming. The farmers who are part of organic farming must promote green technology, to use organic fertilizers, to keep natural fertility of soil, to use organic methods to control weeds, diseases and pests.

In the paper we will present un business plan for a organic farm. The name of the farm will be ECO-Regio and encourages the development of organic farming systems in Suceava plateau.

### MATERIAL AND METHODS

In the present study we used bibliographic material, previously written by specialist about geography, economy, agriculture and marketing. In addition to bibliographic resources, methods such as swot and economic analyses, interviews, market and field studies.

### RESULTS AND DISCUSSIONS

ECO-Regio purpose is to produce large quantities of quality agricultural products in order to meet demand of Suceava and Botosani markets. Being the only organic certified farm, it encourages other farms in the area to produce their products according to the organic regulations. The objectives of the farm are:

- Promotes the development of organic farming systems in the area;
- Agricultural products are fresh, affordable for all social groups and high quality;
- Will apply a advanced technology which is friendly with the environment;
- Profits will be reinvested in modernizing the farm.
- To provide jobs for disadvantaged people in our community.

- To develop solid jobs in a clean and healthy environment for the whole community.
- To meet the quality requirements of organic products consumers.

The farm will be located in Corocăiești village, Verești area, Suceava county. Corocăiești village is situated in the central-eastern part of Suceava Plateau, about 16 km south-east of Suceava. The farm will have about 20 ha of arable land. The climate temperate-continental, with average temperature 7,8 ° C (minimum in January and maximum in July) and rainfall 619 mm, goes to the development of agriculture from the area.



Fig.1. Location of Verești area on the Romanian map  
(Referance: <http://www.eprimarii.ro/veresti/>)

In the way to the success we must be prepared for everything, to know which are the strengths, weaknesses, opportunities and threats from the area. We can identify the internal and external factors what is possible to affect my business. I will use swot analysis for identify the key points.

Table 1

Swot analysis

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> <li>• Possibilities of land irrigations</li> <li>• Support from local authorities</li> <li>• There are no other farms in the area with organic farming systems</li> <li>• No competition</li> <li>• Large area of arable land</li> <li>• Shareholders who have knowledge of the farm and persons responsible for the good conduct of business</li> <li>• Protecting the environment</li> </ul>	<ul style="list-style-type: none"> <li>• Big investment sources</li> <li>• Agricultural machinery insufficient</li> <li>• Crops susceptible at diseases and present of pests explained by the fact that the farm applies organic practices.</li> <li>• Higher labor costs because they require more maintenance due to using environmentally friendly methods.</li> <li>• High energy consumptions</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>• The existence of a compact area of 20 ha</li> <li>• The possibility of acquisition of an old factory warehouse.</li> <li>• Existence of young workforce.</li> </ul>	<ul style="list-style-type: none"> <li>• Climatic conditions</li> <li>• Quickly perishable goods, because they are not sprayed with chemicals</li> <li>• Low demand</li> </ul>

(Referance : Original)

The development strategys will be limited to increse the number of employees, to expand the activity, to buy more farmland, to build a refrigerated warehouse in order to store

the products and to keep them fresh up to the end consumer. To achieve this, senior partners will reinvest the profit achieved in the development of the farm and will try to obtain financial support from the European Union. Also, in the future, within available funds, senior partners will consider the possibility of setting up a marketplace selling its own agricultural products.

The products offered by ECO-Regio will be:

**Hybrid onions grown on the ECO-REGIO farm:** *Musica F1*- a productive variety which has a strong root system. Grows early Spring, matures in 90 days. It produces round bulbs of high quality.

**Hybrid onion bulbs grown on the ECO-REGIO farm:** *Sedona F1*- pairs well productivity, bulb colour and long-term preservation. Thanks to well-developed root system and thicker layer of boom on leaf. Perform well in less favorable growing conditions. It matures in 112 days.

(<http://journals.usamvcluj.ro/index.php/horticulture/article/download/3915/3991>)



Fig. 2. Musica F1 and Sedona F1 onion

**Parsley leaf variety grown on the ECO-REGIO farm:** *Comun3*- has a variety of large leaves, smooth, dark green. Supports repeated mechanical harvesting, with a high production potential. It can be harvested after 96 days from sowing.

**Parsley root variety grown on the ECO-REGIO farm:** *Halflange- Fakir*- has tapered root, long and smooth. It is recommended for fresh consumption and industrialization. The variety has good storage capacity. (<http://www.morami.ro/>)



Fig. 3. Comun3 and Halflange-Fakir parsley

**Dill variety grown on the ECO-REGIO farm:** *Common*- is grown for flavorful leaves and tender. It is productive.

**Hybrid carrot grown in ECO-REGIO farm:** *Napa F*- It is a production hybrid for Autumn-Winter. The roots are long and deep color. Very productive, it is recommended for temperate climates. It matures in 115 days from sowing.

**The potato variety grown on the ECO-REGIO farm:** *Red Lady*- is a semi-early variety with red skin, of high quality, cooking type B. It has very high productions with large tubers, long, oval and very attractive, yellow pulp. Resistant at race 1 and PCN Ro 1 common scab, leaf and tuber blight. ([http://www.seminteplante.ro/18\\_bejo-zaden](http://www.seminteplante.ro/18_bejo-zaden))



Fig.4. Common dill, Napa F carrot and Red Lady potato

**The hybrid green cabbage grown on the ECO-REGIO farm:** *Keautman F1*- It has a round loaf of dark green outer leaves and good internal structure. Keep in the field a long time without cracking. It can be used for pickling and fresh consumption. Matures after 100 days of cultivation.

**Hybrid red cabbage grown on the ECO-REGIO farm:** *Buscaro F1*- the semi variety, destined for fresh consumption and keeping short-term. Bulbs produce large, healthy internal and external color appealing. The approximate weight is 2.5-3 kg and matures in 105 days. ([www.agrolegvaro.ro](http://www.agrolegvaro.ro))



Fig. 5. Keautma F1 green cabbage and Buscaro F1 red cabbage

**Hybrid spinach grown on the ECO-REGIO farm:** *Springfield F1*- It is a hybrid vigorous with large leaves, smooth, dark green. Very productive, resistant to mildew and is recommended for fresh consumption and industrialization.

**Hybrid of cauliflower grown on the ECO-REGIO farm:** *Stargate F1*- It is a vigorous hybrid, which is recommended for early crop and Summer. The root system provide a good inflorescence protection. (<http://www.seminteplante.ro/seminte-conopida/2229-stargate-fl-1000-sem.html>)



Fig. 6. Springfield F1spinach and Stargate F1 cauliflower

Crop rotation is the most important method taken by farmers to obtain high yields and to control weeds, pests and diseases. Crop rotation in Eco-Regio will be:

Table 2

Crop rotation

Plot number	Crops – year I	Plot number	Crops – year II
Plot 1	Green onion	Plot 1	Green cabbage
Plot 2	Onion bulbs	Plot 2	Red cabbage
Plot 3	Parsley leaf	Plot 3	Spring cauliflower
Plot 4	Parsley root	Plot 4	Autumn Cauliflower
Plot 5	Dill	Plot 5	Spinach
Plot 6	Carrot	Plot 6	Potato
Plot 7	Potato	Plot 7	Carrot
Plot 8	Autumn cabbage	Plot 8	Green onions
Plot 9	Red cabbage	Plot 9	Onion bulbs
Plot 10	Spinach	Plot 10	Dill
Plot 11	Spring Cauliflower	Plot 11	Parsley leaf
Plot 12	Autumn Cauliflower	Plot 12	Parsley root
Plot number	Crops – year IV	Plot number	Crops – year IV
Plot 1	Parsley root	Plot 1	Spring Cauliflower
Plot 2	Parsley leaf	Plot 2	Autumn Cauliflower
Plot 3	Green onions	Plot 3	Dill
Plot 4	Onion bulbs	Plot 4	Potato
Plot 5	Spring Cauliflower	Plot 5	Autumn cabbage
Plot 6	Autumn cabbage	Plot 6	Parsley root
Plot 7	Red cabbage	Plot 7	Parsley leaf
Plot 8	Dill	Plot 8	Spinach
Plot 9	Autumn Cauliflower	Plot 9	Green onions
Plot 10	Carrot	Plot 10	Red cabbage
Plot 11	Spinach	Plot 11	Onion bulbs
Plot 12	Potato	Plot 12	Carrot

(Reference: Original)

When we talk about business it's necessary to analyze the expenses and income. This

is very important step to see how much is the net profit. In *Table 3* are presented the expenses and in *Table 4* the incomes.

*Table 3*

Expenses for farm ECO-Regio			
Chapter I	Employees Expenses		
Nr. Ctr.	Name	Units	Amount lei/an
1.	Manager	1	36000
2.	Tractor driver	2	48000
3.	Driver	2	30000
4.	Daily workers	10	960000
Chapter II	Expenditure on machinery (amortization over a period of 15 years)		
1.	Tractor	2	10666,6
2.	Vegetable seed	2	2666,6
3.	Carrot harvesting machine	1	1000
4.	Potato harvester	1	333,3
5.	Potato planting machine	1	166,6
6.	Cabbage harvester	1	5333,3
7.	Rotary molding field	1	5333,3
8.	Reversible plow	1	666,6
9.	Growing vegetables	1	416,6
10.	Harrow	1	166,6
11.	Irrigation system	1	13333,3
Chapter III	Material expenses		
1.	Carrot	19	19000
2.	Green onion (chives)	7	14000
3.	Parsley root	10	3750
4.	Parsley leaf	5	12500
5.	Autumn cabbage	7	1400
6.	Red cabbage	5	750
7.	Spinach	3	1500
8.	Potatoes	4	6000
9.	Cauliflower Spring	4	5000
10.	Cauliflower Autumn	4	5000
11.	Dill	3	750
12.	Onion bulbs	7	14000
13.	Fertilizers	-	35000
14.	Organic substance for control weeds, diseases and pests	-	400000
14.	Packing materials	-	6000
Chapter IV	Fuel costs		
1.	Diesel fuel	5000	30000
Chapter V	Equipment maintenance expenses		
1.	-	-	15000
2.	Unexpected expenses	-	20000
<b>TOTAL</b>	<b>1703733,1</b>		

Nr. Crt.	Objectives (Target Company)	U.M.	Year I
1.	Fiscal value	Lei	359359
2.	Of which export	Lei	100000
3.	Costs	Lei	173733,1
4.	Profit	Lei	185626,9
5.	Nr. of employees	people	15

### **CONCLUSIONS**

According to the business plan presented above we can emphasize the financial feasibility of the activity after the implementation of this project, the financial indicators fit within the positive parameters for this activity.

### **BIBLIOGRAPHY**

- COȘAR P, 1994, Studiu geografic al comunei Verești, Ed. Universitară, Suceava.
- GUȘ P., RUSU T., 2005, Dezvoltarea durabilă a agriculturii. Editura Risoprint ClujNapoca
- MARTINIUC C, BĂCĂUANU V, 1960, Contribuții la studiul geomorfologic al orașului Suceava și împrejurările sale, Ed. Universitatea A.I.I. Cuza, Iași.
- RUSU T., MORARU P., CACOVEAN H, 2011, Dezvoltare rurala. Editura Risoprint ClujNapoca
- URSULESCU N., 1980, Recunoașteri arheologice în comuna Verești, Ed. Muzeul județean de istorie, Suceava
- ÎNDRE D., APAHIDEAN A., APAHIDEAN M., MANUȚIU D., SIMA R., 2012 Cultura Legumelor, Editura Ceres, București.
- <http://laurentiumihai.ro/ghid-plan-de-afaceri/>
- (<http://www.seminteplante.ro/seminte-conopida/2229-stargate-f1-1000-sem.html>)
- (<http://www.morami.ro/>)
- <http://journals.usamvcluj.ro/index.php/horticulture/article/download/3915/3991>