THE EVOLUTION OF THE AGRICULTURAL SYSTME OF THE SECUSIGIU COMMUNE DURING 2013-2015

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Abstract: *Agriculture represents a strong economic-social factor, with an important market for the development of the local as well as the national economy. Every year, the evolution of agriculture is influenced by a multitude of factors, which can either increase or reduce agricultural production. The production process is carried out in time and space, expenditures occurring during the entire agricultural year, the investment being recovered at the end of the production cycle. The production is either capitalized directly, or processed in a way as to maximize the final product value. Usually, the production process of soil cultivation is carried out according to a certain system, which involves a series of steps, so as to maximize the final product value.*

Key words*:agricultural system, chemical fertilisers, agricultural production*

INTRODUCTION

The Secusigiu commune is situated in the north-western part of the Vingai Plain and covers a surface of 17202 ha. It comprises four villages: Secusigiu – commune residence, situated at a 31 km distance from the city of Arad, Munar, Satu Mare, and Sânpetru German.

The climate is temperate – continental, with slight Mediterranean influences, characterized by mild winters and not so hot summers, with an annual average temperature of 10.8° C, and a multiannual average precipitation value of 536.3 mm (Sânnicolau Mare station). [1]

Land situation:

Usage	Surface(ha)
Tillable	10060
Pastures	898
Hayland	166
Vineyards	0
Orchards	0
Agricultural total	**11124**

MATERIALS AND METHODS

For the elaboration of this paper, data resulting from own observations were used, data from the Romanian Statistical Directory, from M.A.D.R. and I.N.S.S.E and from the Secusigiu locality mayor hall. The agricultural production manifested very diverse specific dynamics, from a sector point of view (vegetal and animal), as well as from a regional point of view, depending on the diversity of agri-climatic usability conditions, as well as the production factor usage degree. [2,3]

RESEARCH RESULTS

Grain cereals in 2013: [4,5]

Crop	**Total**	
	Surface	**Production**
Common wheat	3850	19250
Triticale	150	675
Spring two-row barley	93	260
Autumn two-row barley	265	1378
Barley	150	350
Oat	50	100
Corn	2509	11290

Oleaginous and technical plants in 2013

Crop	**Total**	
	Surface	**Yield**
Sunflower	2000	4400
Raps	120	312
Sugar beet	400	2000
Potatoes	250	2800

Vegetable crops in 2013

Crop	**Total**	
	Surface	**Yield**
Tomatoes	30	300
Onion	30	240
Garlic	20	160
Cabbage	20	500
Pepper	10	160
Cucumbers	5	30
Root vegetables	90	900
Peas	10	6
Beans	10	6
Eggplant	3	18
Cauliflower	2	16

Chemical fertilisers (active substance) depending on substance and crop, for the production of the agricultural year 2013:

Application	**Nitrogenous**		**Phosphorous**		**Potassic**	
	Surface	**Quantity**	**Surface**	**Quantity**	**Surface**	**Quantity**
Wheat and rye	900	45	900	22	900	23
Corn	879	44	879	21	879	23
Sunflower	1290	64	1290	31	1290	33
Potatoes	247	12	247	6	247	6
Vegetables	250	13	250	6	250	7
Other crops	785	39	785	19	785	20

Grain cereals cultivated in 2015

Crop	**Total**	
	Surface	**Production**
Common wheat	1890	9072
Triticale	100	620
Spring two-row barley	150	750
Autumn two-row barley	150	525
Barley	150	300
Oat	100	100
Corn	4835	25150

Oleaginous and technical plants in 2015

Crop	**Total**	
	Surface	**Yield**
Sunflower	800	4160
Raps	420	880
Sugar beet	400	24000
Potatoes	250	2500

Vegetable crops in 2015

Crop	**Total**	
	Surface	**Yield**
Tomatoes	50	100
Onion	30	250
Garlic	20	200
Cabbage	20	200
Pepper	10	150
Cucumbers	5	50
Root vegetables	80	800
Peas	10	6
Beans	10	7
Eggplant	3	45
Cauliflower	2	30

Chemical fertilisers (active substance) depending on substance and crop, for the production of the agricultural year 2015

Application	**Nitrogenous**		**Phosphorous**	
	Surface	**Quantity**	**Surface**	**Quantity**
Wheat and rye	880	23	880	21
Corn	1800	47	1800	43
Sunflower	250	7	250	6
Potatoes	250	7	250	6
Vegetables	250	7	250	6
Fodder	570	16	570	15

The park situation regarding the main equipment on 31.12.2015

Equipment	**Piece no.**
Tractors	210
Strawy crop harvesters	14
Ploughs	195
Disc harrows	140
Straw crop seeders	65
Hoeing cereal seeders	65
Baling presses	16
Towed attachment	240

Crops surface and production between 2013 - 2015

	2013			**2015**		
Crop	**ha**	**Production**	**Prod. t/ha**	**ha**	**Production**	**Prod. t/ha**
Wheat	3850	19250	5 t/ha	1890	9072	4,8t/ha
Triticale	150	675	4,5 t/ha	100	620	6,2 t/ha
Corn	2509	11290	4,4 t/ha	4835	25150	5,2 t/ha
Sunflower	2000	4400	2,2t/ha	800	4160	5,2 t/ha
Barley	150	350	2,3 t/ha	150	300	0,5t /ha
Autumn two-row barley	265	1378	5,2 t/ha	150	526	3,5 t/ha
Spring two-row barley	93	260	2,8 t/ha	150	750	5 t /ha
Barley	50	100	2 t/ha	100	100	1 t/ha
Raps	120	312	2,6t /ha	420	2400	5,7 t/ha
Potatoes	250	2800	11,2t/ha	250	2500	10 t/ha
Vegetables	230	2336	10,1 t/ha	240	1838	7,6 t/ha
Sugar beet	400	2000	5 t/ha	400	2400	6 t/ha

CONCLUSIONS

The first and foremost particularity of agriculture is that the soil sis the main element of the agricultural capital, functioning as work object and work means at the same time.

A part of the agricultural production is insured by trading companies with agricultural profile, while the other part is insured by individual agricultural exploitations.

Governmental programs aiding agriculture positively influence the economy of the Secusigiu locality.

The soil, as the object of the economic analysis, represents a particular real estate good, non-reproducible, heterogeneous, indivisible, displaying multiple impartible characteristics (form, surface, position), simultaneously carrying out various functions (production, consume, value - shelter, speculation).

The agricultural system from the Secusigiu locality area is an agricultural one.

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