# ECONOMIC AND FINANCIAL INDICATORS IN THE VEGETABLE SECTOR FOR THE LOCALITY POTCOAVA, OLT COUNTY

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## ABSTRACT

The paper aims to present the indicators of economic efficiency, crops of winter wheat, sunflower and rapeseed in the specific conditions of the village Potcoava, Olt County. Descriptive models used highlight specific situation of indicators revenues, expenses and profitability from the three cultures.

The crude product ranged from 2960 euro / ha for wheat to the 4010 lei / ha for the culture of sunflowers. Total gross product structure, regardless of culture is dominated by primary production value sold, while subsidies have - usually a weight of under 22%. Total expenditure was 2468.45 lei 2437.40 lei and 2062.75 lei for wheat, sunflower and rapeseed respectively. In the expenditure structure, prevailing variable expenses (from 61.96% in rapeseed to 67.65% to wheat), while fixed costs have held shares below 40% (from 38.04% to rape up to 32 35% wheat). The cost of production ranged from 588.7 lei / t for wheat to 870.5 lei / t from the sunflower crop. Gross margin ranged from 1290 lei / ha for wheat up to 2370 lei / ha to the sunflower and net profit ranged from 491.55 lei / ha for wheat and 1572.60 lei / ha for sunflower and net profit ranged from 412.90 lei / ha wheat crop to 1320.98 lei / ha for sunflower crop. The gross profit rate was between 19.91 and 64.52% for wheat and sunflower respectively, and net profit rate ranged from 16.72% for wheat up to 54.19% for sunflower crop.

### INTRODUCTION

The locality Potcoava is located on both sides of the river valley Plapcea, a tributary on the right side of the river Vedea in northern plain Boianului in contact with the platform Cotmeana presenting characteristics of high plains with fields extend and smooth, separated by valleys shallow oriented southeast and a slight incline between 218 m and 145 m to the north, south to a length of 16 km, stretching as common.

From the administrative point of view is located in the eastern county of Olt, about 30 km from the city of Slatina.

Based on the information that was gathered economic and financial indicators are presented in a palette of three crops in the locality Potcoava: winter wheat, sunflower and rapeseed.

It should be noted that data presented refers to an annual average (2011 -2013), all values by reference to productive unit - hectare.

### METHOD AND MATERIAL

For this work were determined after the recommended methodology and interpreted indicators, grouped into three categories:

- income indicators average production (main product byproduct), the selling price (produced mainly byproduct), crude production capitalized, subsidies, total crude;
- Indicators of expenditures:
  - variable expenses expenses for materials and supplies (seeds, fertilizers, herbicides, pesticides, insecticides, irrigation water),

mechanical work expenses, crop insurance, labor expenditures seasonal expenditures supply;

- o fixed expenditures: labor expenditures permanently engaged, overheads, interest expense on loans, amortization expenses;
- total expenses:
- > indicators of profitability: gross margin, gross profit, gross profit rate, income tax, net profit, net profit rate.

### **RESULTS AND DISCUSSIONS**

A. Winter wheat. Table 1 shows indicators of income, which highlights the main production preponderance in the constitution of the crude product - 78.04% ie 2310 lei, a crude product 2960 lei. In these circumstances subsidies accounted for 21.96% of the crude product - 650 lei / ha. \_ . . .

			Table 1.	
Indicators of income				
Specification	U.M.	Value	Structure %	
Average production	kg	4200	-	
Market price	lei/t	550	-	
The production value	lei	2310	78,04	
- of which the main production	lei	2310	78,04	
Subsides	lei	650	21,96	
The crude product	lei	2960	100	

Spending indicators are presented in Table 2.

Indicators of spending			
Specification	U.M.	Value	Structure %
I. VARIABLE COSTS	lei	1670	67,65
1. Raw materials and materials	lei	1150	46,59
<ul> <li>seed and seedlings</li> </ul>	lei	450	18,23
- fertilizers	lei	450	18,23
- herbicide	lei	65	2,63
- fungicide	lei	100	4,05
- insecticide	lei	85	3,45
2. Expenditure mechanical works	lei	480	19,44
3. Insurances	lei	40	1,62
II. FIXED EXPENSES	lei	798,45	32,35
- Permanent labor expenses	lei	300	12,15
- General and management expenses	lei	58,45	2,37
- Lease	lei	440	17,83
TOTAL EXPENSES	lei	2468,45	100
PRINCIPAL OUTPUT	kg	4200	-
COST OF PRODUCTION	lei/kg	0,5877	-

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Table 2.

It can be seen that the total expenditure structure is based on variable expenses -67.65% - 1670 lei and fixed costs holding 32.35% of the total (798.45 compared to 2468.45 lei). As important category appears raw material expenses and materials expenses - 1150 lei (46.59% of total).

On items of calculation, there are the following percentage rates of participation: 1.62% Insurance - 40 lei; 2.37% general expenses and management - 58.45 lei; 2.63% herbicide - 65 lei; 3.45% insecticide - 85 lei; 4.05% fungicides - 100 lei; 12.15% permanent labor expenses - 300 lei; 17.83% Lease - 440 lei; 18.23% seed and fertilizers - 450 lei; 19.44% mechanical work - 480 lei (Fig. 1).

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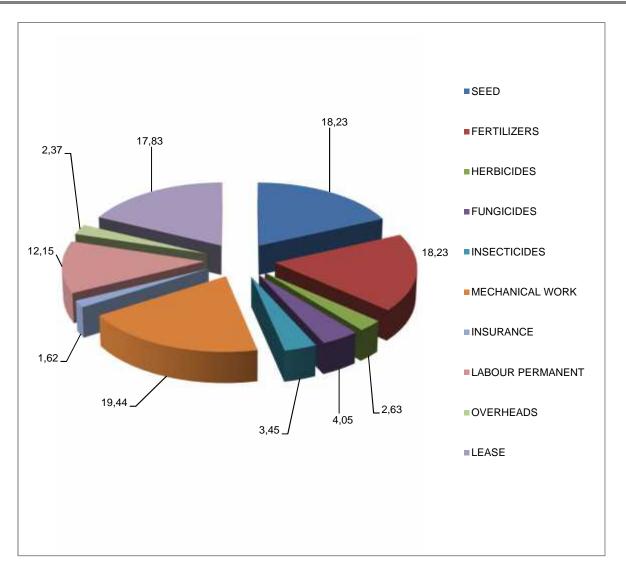


Fig. 1. Winter Wheat - total expenditure structure (%)

The production cost was 0.5877 lei / kg, compared with a selling price of 0.55 lei / kg does not ensure a profit margin in this sense the decisive factor being the subsidy (0.1548 lei / kg).

Profitability indicators are presented in Table 3.

Profitability indicators			
No.	Specification	Value	
		(Lei, %)	
1.	Crude product	2960	
2.	Variable expenses	1670	
3.	Gross margin	1290	
4.	Fixed expenses	798,45	
5.	Gross profit	491,55	
6.	Total expenses	2468,45	
7	The gross profit rate (%)	19,91	
8.	Income tax	78,65	
9.	Net income	412,90	
10	Net profit rate (%)	16,72	

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We can observe a 1290 lei gross margin, resulting in a level of 491.55 lei gross profit and a gross profit rate of 19.91%.

Tax on profit was 78.65 lei, so reach 412.90 lei net profit and net profit rate stands at share of 16.72%.

**B. Sunflower.** Data on income indicators are presented in Table 4 it appears that the crude product structure consists of: 83.79% recoverable and 16.21% value of production subsidy amount.

Indicators of	incon		Table 4.
Indicators of	Incon	le	
Specification	U.M.	Value	Structure %
Average production	kg	2800	-
Market price	lei/t	1200	-
Production value	lei	3360	83,79
- of which the main production	lei	3360	83,79
Subsidies	lei	650	16,21
The crude product	lei	4010	100

If we look at total expenditure situation can be observed (Table 5), a general level of 2437.40 lei, of which 67.28% are variable costs and fixed costs 32.72%. It is also distinguished materials and supplies costs - 1 030 lei (42.25%). Cost of production level reach 0.8705 lei / kg, convenient level compared to the selling price of 1.2 lei / kg.

Table F

			Table 5.	
Indicators of spending				
Specification	U.M.	Value	Structure	
opecilication	0.101.	Value	%	
I. VARIABLE COSTS	lei	1640	67,28	
1. Raw materials and materials	lei	1030	42,25	
- seed and seedlings	lei	280	11,48	
- fertilizers	lei	450	18,46	
- herbicides	lei	300	12,31	
2. Expenditure on mechanical works	lei	570	23,39	
3. Insurances	lei	40	1,64	
II. FIXED EXPENSES	lei	797,40	32,72	
- Permanent labor expenses	lei	300	12,31	
- General and management expenses	lei	57,40	2,36	
- Lease	lei	440	18,05	
TOTAL EXPENSES	lei	2437,40	100	
PRIMARY PRODUCTION	kg	2800	-	
COST OF PRODUCTION	lei/kg	0,8705	-	

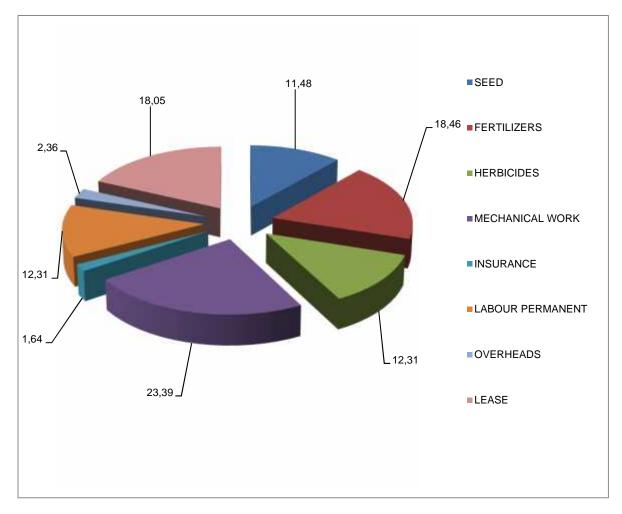
Total expenditure structure includes: 1.64% Insurance - 40 lei; 2.36% general expenses and management - 57.40 lei; 11.48% seed - 280 lei; 12.31% each herbicides and permanent labor costs - 300 lei; 18.05% Lease - 440 lei; 18.46% fertilizer - 450 lei; 23.39% mechanical work - 570 lei (fig. 2).

Table 6 shows the profit-related indicators.

In conditions of obtain some revenue and expenditure aforementioned achieve a gross margin 2370 lei, 1572.60 lei gross income and gross profit rate of 64.52%.

Following this situation is estimated a profit of 251.62 lei tax, which requires the achievement of a net profit of 1320.98 lei and a rate of 54.19% in net profit.

**C. Rapeseed.** Regarding the indicators of income, Table 7 reveals the total gross product structure: production value 80.57% - 19.43% in 2695 lei and grants - 650 lei.



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Fig. 2. Sunflowers - total expenditure structure (%)

Profitability indicators			
No.	Specification	Value	
		(Lei, %)	
1.	Crude product	4010	
2.	Variable expenses	1640	
3.	Gross margin	2370	
4.	Fixed expenses	797,40	
5.	Gross profit	1572,60	
6.	Total expenses	2437,40	
7	The gross profit rate (%)	64,52	
8.	Income tax	251,62	
9.	Net income	1320,98	
10	Net profit rate (%)	54,19	

#### Table 6.

### Table 7.

Indicators of income				
Specification	U.M.	Value	Structure %	
The average production	kg	2450	-	
Market price	lei/t	1100	-	
Production value	lei	2695	80,57	
- of which the main production	lei	2695	80,57	
Subsidies	lei	650	19,43	
The crude product	lei	3345	100	

In terms amount of costs incurred, it appears that they have reached 2062.75 lei / ha, of which 61.96% variable expenses - 1278 lei and 38.04% fixed expenses - 784.75 lei. A special category of expenditures is related to raw materials and materials used - 818 lei, ie 39.66% of the total expenditure incurred (Table 8).

			Table 8.
Indicators of exp	enditu	re	
Specification	U.M.	Value	Structure %
I. VARIABLE COSTS	lei	1278	61,96
1. Raw materials and materials	lei	818	39,66
- seed and seedlings	lei	160	7,76
- fertilizers	lei	375	18,19
- herbicides	lei	175	8,48
- insecticides	lei	108	5,23
2. Expenditure on mechanical works	lei	420	20,36
3. Insurances	lei	40	1,94
II. FIXED EXPENSES	lei	784,75	38,04
- Permanent labor expenses	lei	300	14,54
- General and management expenses	lei	44,75	2,17
- Lease	lei	440	21,33
TOTAL EXPENSES	lei	2062,75	100
PRIMARY PRODUCTION	kg	2450	-
COST OF PRODUCTION	lei/kg	0,8419	-

Structure of total expenses include the following items (fig. 3): 21.33% Lease - 440 lei; 20.36% mechanical work - 420 lei; 18.19% fertilizer - 375 lei; 14.54% permanent labor expenses - 300 lei; 8.48% herbicide - 175 lei; 7.76% seed - 160 lei; 5.23% insecticide - 108 lei; 2.17% general expenses and management - 44.75 lei; 1.94% Insurance - 40 lei.

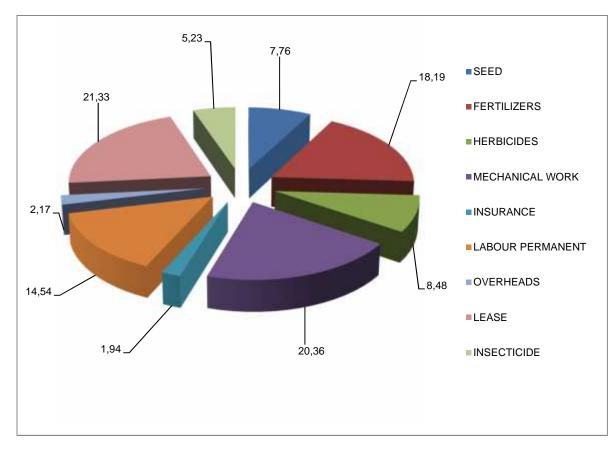


Fig. 3. Rapeseed – Total expenditure structure (%)

Profit related indicators are shown in Table 9.

RAPESEED – Profitability indicators			
No.	Specification	Value	
		(Lei, %)	
1.	Crude product	3345	
2.	Variable expenses	1278	
3.	Gross margin	2067	
4.	Fixed expenses	784,75	
5.	Gross profit	1282,25	
6.	Total expenses	2062,75	
7	The gross profit rate (%)	62,16	
8.	Income tax	205,16	
9.	Net income	1077,9	
10	Net profit rate (%)	52,21	

#### Table 9.

It highlights the obtaining of a gross margin of 2067 lei, gross profit of 1282.25 lei and a gross profit rate of 62.16%.

In conditions of profit tax deduction (205.16 lei), are recorded a net profit of 1077.90 lei and a rate of 52.21% in net profit.

### CONCLUSIONS

- crops that have led to economic efficiency indicators are representative of local culture;
- the crude product ranged from 2960 lei / ha for wheat to the 4010 lei / ha for the cultivation of sunflowers;
- total expenses were 2468.45 lei, 2437.40 lei and 2062.75 lei for wheat, sunflower and rapeseed respectively. In the expenditure structure prevailing variable expenses (from 61.96% in rapeseed to 67.65% for wheat), while fixed costs have held shares below 40% (from 38.04% to rape up to 32,35% for wheat). Material costs ranged from 39.66% for rapeseed to 46.59% on wheat, all the important elements are present: mechanical works (from 19.44% to wheat 23.39% for sunflower crop), fertilizers (from 18.19% to rapeseed crop to 18.46% for maize), lease (from 17.83% in the wheat crop to 21.33% for rapeseed). The cost of production ranged from 588.7 lei / t for wheat to 870.5 lei / t level sunflower crop;
- gross margin ranged from 1290 lei / ha for wheat up to 2370 lei / ha to the sunflower crop, gross profit ranged from 491.55 lei / ha for wheat and 1572.60 lei / ha for sunflower and net profit ranged from 412.90 lei / ha wheat crop to 1320.98 lei / ha for sunflower crop. The gross profit rate ranged between 19.91 for wheat and 64.52% for sunflower, and net profit rate ranged from 16.72% for wheat up to 54.19% for sunflower crop;
- is need for better management of expenditure items, but it is also the need for appropriate policies from the state to support agricultural activity of medium size companies.

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