

DEVELOPMENT CAPABILITIES OF THE AGRICULTURAL POTENTIAL IN SC PETRE SRL PRODUCTION UNIT, TELEORMAN COUNTY

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Abstract

The rural areas from Romania have a substantial development capability for the agriculture. By comparison with other European countries, Romania has a more emphasized rural level, the rural population balance being larger with communities preserving the traditional way of life, strictly linked with the agricultural activity.

The restructuring and revitalizing of the agricultural economy can be important development arms, especially in the conditions where in Romania the agriculture's contribution to GDP were always high. The agriculture production activity must be supported by a series of measures designed to update the units by purchasing technical systems, implementation of some high performance technologies, and implicit an increase of the output.

This article wishes to analyze the production activity of a small-sized agricultural unit, recently established, that manages an area of about 100 ha, specialized in the cereal crops, and endowed itself with technical systems using its own resources for the second hand equipment, but also purchasing some new agricultural devices using the European Agricultural Fund for Rural Development (EAFRD). By means of the farm endowment with performing machineries, equipment, and devices, it is designed to implement competitive and "friendly" technologies for the environment that will provide a better recovery of the local agricultural resources.

The agricultural unit proposes itself: the initiation of new crops, costs reduction and increasing of the agricultural exploitation's incomes, hiring of more workers in order to use the equipment and devices, hiring of a competent expert who will perform the needed technical assistance to establish seed plots and to insure along the entire vegetative period the accurate implementation of the cropping technology, as well as for the calibration, treatments, certified seed packing, and, last but not least, the development of the company's incomes.

Keywords: tractors, agricultural equipment, finance, exploitations

1. INTRODUCTION

The agricultural unit SC Petre srl, from Pietrosani, Teleorman County has been established 2008, having as a main activity object the cropping of the cereals, leguminous and oleaginous crops.

The arable surface until 2008 is 93.33 ha, out of which 5ha cultivated with wheat for seeds. The beneficiary is settled as a company with a limited responsibility, according to the Law 31/1990, altered and with the subsequent addendum.

The company owns the seed production certificate No. 784 AOO, and an authorization for seeds processing No. TR 854 OBO, marketing authorization No. TR c58 OOC.

Placed at the conjunction of the Parallel 44 °N with the 25 °E Meridian, the territory of Teleorman County locates in the South, central zone of the Romanian Plain, being framed by the Arges and Dambovita Counties at the North, Giurgiu County at the East, Olt County

at the West, Danube River at the South, the 90 km long Romania's border with Bulgaria.

The county surface is 5,872 km², being considered as a middle sized county, and placed on the 19th position from this point of view at the national level.

The Munteniei de Vest Plain, also called the Teleormanului Central Plain, is a subunit of the Argesene Plain, framed between Olt and Arges, a geographic region well individualized, that begins in the North, at over 300 m altitude, descending bellow 100m at the terrace level.

The Danube alluvial plane is the lowest part of the region's relief, and it shows very different peculiarities comparing to the rest of the territory, the altitude being of 24m at Turnu Magurele and 20 m at the conjunction with Vedea. The broadness varies between 1 km near to the town Zimnicea and 6 Km near to Vanatori and the Suhaia Lake. The county's territory has very good pedoclimatic conditions for the irrigated agriculture. The agroclimatic resources are very favorable for wheat,

sunflower, alfalfa, tobacco, rape crops, and less favorable for potato, bean, and other aridity and drought sensitive crops.

Grounded on the pedologic data and the interpretation of parameters that directly act for the establishment of the assessment notice on the surfaces belonging to S.C.PETRE SRL, it results the assessment notice of 79 points for the whole surface of 93,33 ha, the assessment notice is enclosed in the II class of quality.

The completion of the nutrient demand (nitrogen, phosphorus, and potassium) it is performed by the administration of fertilizers and manure, depending on the specific consumption of each crop, and the existent concentration in the soil.

In conclusion the territory belonging to S.C. PETRE SRL it is good and very favorable for all crops.

2. MATERIAL AND METHOD

This article wants to emphasize the production activity in a unit placed in the South of the country, area having a high potential for the cereal cropping. At the company's settlement it was taken into account the agglomeration of a rented surface of 75% (the difference of 25% is owned as property), and the purchasing of agricultural equipment strictly necessary for the approached technologies and crops.

Subsequently it managed the integration of this endowment by earning an EAFRD project.

For the building up of this study they have been cropped primary data from the headquarters concerning: the crops structure, surfaces, harvests, endowment with agricultural equipment, supply, economic aspects. The data are shown in tables, associated among them for a better visualization and understanding.

3. RESULTS AND DISCUSSIONS

Having in view the activity object, in the first year of activity the agricultural unit had the following crop structure: wheat for consumption, wheat for seeds, corn, barley, and sunflower. The obtained harvests had relative low values due to the unfavorable climate conditions (Table 1).

Relative to the technical endowment, we mention both the number and their quantity provide the activity development in good conditions (Table 2).

By the acquisition of new equipment and respectively the machinery system addition needed for the unit, it is allowed:

- Improvement of the working conditions, concerning both the labor safety and the quality of the performed works. The tractors which will be purchased through the project have ergonomic commands, easy to drive and adjust, good visibility, the cab is endowed with air conditioned, well insulated, with a low level of noise from the engine. The equipment allow the sharp adjust of the ploughing depth and uniformity.

- Diversification of the production by the agency of new crops insertion: rape, the cropping area having a high potential, and the market request registering an increasing request.

- By the acquisition of equipment for conditioning, selected, certified seeds treatment, the expenses with the seeds needed for the new crops establishment will decrease, the certified seed demand will be accomplished inside the farm, 50% from the necessary raw material will be produce and use in the farm.

The agricultural unit has now, after one year of activity, the following supplying and delivery market (Tables 3 and 4).

It is assessed harvest's selling in this manner:

- Wheat harvest – out of the total value of RON 50750 to S.C.Cargill Agricultura SRL -100%
- Sunflower harvest – total harvest rating RON 63,994 to S.C.Cargill Agricultura SRL -100%
- Barley harvest – total harvest rating RON 67,200 to S.C.Cargill Agricultura SRL -100%

Concerning the previsions of the agricultural activity evolution, this aspect is emphasized in the Table 5. it is taken into account both the increasing of the cropped area and the insertion of new crops. Relative to the income prognosis in the first two years 2008 – 2009, the sold

quantities were established quarterly in this manner:

- Wheat, 100% in the 3rd trimester;
- Sunflower, corn, 100% in the 4th trimester;

The company gets incomes from subventions according to the assigned quota for the crops:

- Wheat - 200 RON/ha, and for the stated surface it gets EUR 117 from the European Union and Romanian Government 3,5547 RON/Euro according to ECB exchange rate.

The amounts were evaluated and written in the incomes prognosis at the ECB Euro/RON exchange rate of – 3.9430 from October 6th, 2008.

Table 1. Crops structure at SC Petre srl

Crt.	Crop	Surface	Obtained Harvest (kg/ha)	Reference Year
1	Wheat for consumption	50.33	2,600	2008-2009
2	Wheat for seeds	15.00	2,500	
3	Barley	5.00	4,000	
4	Corn	5.00	4,000-grain	
5	Sunflower	18.00	1,800	
		93.33		

Table 2. Endowment with technical systems of the SC Petre srl unit

Crt.	Technical systems from own financial sources		Technical systems purchased through the EAFDR program	
	Constructive type	Amount of equipment	Constructive type	Amount of equipment
1	U-650 M tractors (65 HP)	3	4x4 tractor	2
2	Agricultural trailers (5 t)	4	Plough with 3 bodies	2
3	Harvester (4.2 m)	1	Compressed-air conveyer	1
4	PP 3X30 ploughs	2	Plant remains shredder	1
5	GDU-3.4 disc harrow	1	Grader	1
6	CPGC-4 combiner	1	Seed treatment machine	1
7	CPU-6 cultivator	1		
8	SPC-6 sowing machine	1		
9	SUP-29 sowing machine	1		
10	MA-3,5 fertilizing machine	1		
11	MET-2500 weed killer machine	1		
12	Spiral seed cleaner	1		

Table 3. Supply Market

POTENTIAL SUPPLIERS OF THE APPLICANT				
Name of the raw materials/ accessory materials/ products/ services/ supplier	Address	Supplied product and approximate quantity	Approximate value -RON-	% of the whole acquisitions
Station of Agricultural Research and Development Teleorman	Draganesti Vlasca	Seed – Wheat – 128 t Barley – 6 t	293,006 10,560	56%
S.A.R.D. Teleorman	Draganesti Vlasca	Fertilizers – Pesticides -	9,070 3,000	33%
Petrom S.A, Peco Teleorman Branch	Alexandria, 69A, C-tin Brancoveanu St., TR	Fuels and lubricants 7000 l	23,800	11%
Total	x	x	339,436	100%

Table 4. Market

POTENTIAL CLIENTS OF THE APPLICANT			
crt	Client (name and address)	Value -RON -	% of sale
1	S.C. Cargill Agricultura SRL	181,944	100%

Table 5. Plan of Culture

Crop name	Surface Year 1 -ha	Surface Year 2 -ha	Surface Year 3 -ha	Surface Year 4 -ha	Surface Year 5 -ha
Wheat for consumption	25.00	20.00	20.00	20.00	20.00
Sunflower	33.33	15.00	10.00	10.00	10.00
Rape	-	10.00	15.00	15.00	15.00
Barley	30.00	43.33	43.33	43.33	43.33
Wheat for seeds	5.00	5.00	5.00	5.00	5.00
Total	93.33	93.33	93.33	93.33	93.33

4. CONCLUSIONS

1. The production activity from agriculture must be supported by a series of measures designed to concur for the units modernizing by purchasing technical systems, implementation of some performance technologies, and implicit by the harvest development.
2. By means of the farm endowment with new machines, devices, and equipment it is intended for the building-up the performance of a modern agricultural exploitation, where the farming is performed in good time.
3. At the elaboration of the devices demand it was taken into account the completion of the machines system with all th links of the technologic chain, quality improvement of the performed farming, performance in a good time of the farming with a high energy consumption (soil treatment).
4. The agricultural unit proposes itself: insertion of new crops, costs reduction and incomes development for the agricultural exploitation, employment of an additional amount of workers in order to use the machines and equipment, employment of a competent expert who will assist the necessary technical assistance to set up seed plots, and to survey along the whole vegetative period the observance of the crop technology.
5. Also, by the acquisition of agricultural devices there is the possibility to increase the farmed surface from about 100 ha to 150 ha.

5. REFERENCES

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