

PRODUCTION MANAGEMENT AND BUSINESS PERFORMANCE IN AGRI-FOOD INDUSTRY FROM IAȘI COUNTY-ROMANIA

Stejărel BREZULEANU¹

¹ University of Agricultural Sciences and Veterinary Medicine, 3 Mihail Sadoveanu Alley, 700490, Iași, Romania, Phone/Fax:0232/407516; E-mail: stejarel@uaiasi.ro

Corresponding author: stejarel@uaiasi.ro

Abstract

Solutions and development proposals for agriculture and for increasing of business performance must be sustained by an analysis of the factors involved in agriculture, of the causes which affects the development of agriculture in normal conditions, of the advantages offered by the natural and economical conditions. First of all must be analysed the possibility of agriculture development function of human resources involved in this sector. In establishing the research plan we have in mind the development level of agri-foods units from Romania and in the studied area, Iași County, Romania and also the strategic priorities of this domain in the context of creating of new jobs in rural areas. As gathering technique for the information presented in the current paper we utilised the explicative case study, because we wanted a deep and complex investigation at Societatea Agricola Moldova (Moldova Agricultural Society) from Țigănași village, Iași County. From the main indicators of the agricultural production were analysed for a period of three consecutive years the physical main production and merchandise production, and from economical indicators were analysed: turnover, added value, revenues, expenses and profit. Based on this system of indicators could be identified organizational structures, activity domains and products at which were recorded an unfavourable dynamics of profitability or a favourable dynamics, but which is not at the level of competitiveness degree requested by the domestic and foreign market, giving the possibility of applying of some measures for increasing of profitability of the whole economical-financial activity at a high level. At the end of the current study the conclusion is that the society have a profitable activity obtaining profit in all three analysed years, respectively 2010, 2011, 2012 resulting that the performance is a synthetic form of expressing the efficiency of the whole economical activity of the firm.

Key words: business, Iași County, performance, Romania, Societatea Agricola Moldova (Moldova Agricultural Society) Țigănași,

INTRODUCTION

Agriculture represents one of the most sensitive sectors of Romanian economy. To alleviate and correct the blockages which affect the development of agri-food industry to new standards must be made huge efforts by state institutions and business community [2].

Solutions and proposals for development of agriculture must be related to an analysis of factors involved in agriculture, of causes which affect the development of agriculture in performing conditions, of advantages determined by natural and commercial conditions. [6] First of all must be analysed the development possibility of agriculture function of the human resources involved in this sector. Analysing the evolution of the active population involved in agriculture after 1990 could be mainly observed the following

aspects [7]: active population in agriculture is elder, works with rudimentary equipments, generally it is not realised an agriculture which use new and modern technologies and equipment.

MATERIALS AND METHODS

The utilised research methods in the current study were structured in connection with the steps taken, starting with elaboration of a plan for analyse till drawing the conclusion and elaboration of solutions for this field of activity. Calculus of economical advantageousness indexes still has numerous lacks at the level of agricultural societies from Romania. This could be illustrated through the following aspects: in agricultural farms still exists a real carelessness for determination of advantageousness; nowadays, as a consequence of the deficiencies existed in

bookkeeping are missing the statistical data in the great majority of agricultural societies. So it is mandatory, that on the basis of operative and account data, to be realised a concretion of the indexes which to allow a general view regarding this aspect for the management board of society and implicitly, effectuation of profitability analysis because still exists the idea that important is the obtained quantity, for a immediate selling and obtaining a greater profit, no matter if this one is obtained or not in advantageousness conditions [3]

For elaborating the research plan we have in view the development level of agri-food societies in Romania and in the studied area, Iași County, Romania, and also the strategic priority of this field of activity in the context of creating new jobs in rural area. [10]

Were consulted data bases from Romania (National Institute of Statistics) and scientific papers or public institutions reports.

As collecting technique of obtained information in the current paper we utilised an explicative case study, because we aimed to realise a complete and profound investigation at Societatea Agricola Moldova from Țigănași community, Iași County.

Realization of a performing management in agriculture, as in any branch of the national economy, is possible only with a good knowing of the evolution of different economical-financial phenomenon during one year of activity, their variation face to prediction and dynamics and also the correct diagnosis of the period. [1]

Based on these data, could be establish the correction measures for the observed negative aspects and the extension of the positive ones, to improve the advantageousness of the whole economical-financial activity of agricultural exploitations, at the competitiveness level imposed by the market economy demands and exigencies [4]

RESULTS AND DISCUSSIONS

General data regarding agricultural exploitation

Societatea Agricola Moldova has the headquarters in Țigănași community, Iași County, being situated at 25 km from Iași

City. Unit is situated in the North-East part of county in the hydrographical basin of middle Prut representing the ending part of inter-river Jijia-Prut. Under the geo-morphological conditions the territory of society is placed in the South-East part of Moldova Plain.

Predominant relief is hilly and plain, maximal altitude being 142 meters and minimal 40.5 meters. Clime is specific to South-Eastern European hilly silvo-steppe area. Regarding soils, the analysed unit is placed in the area of levigate chernozems from a slightly more arid silvo-steppe.

In according with EC 1257/1999 regulation were delimited 3 types of unfavourable areas, Țigănași community being part of unfavourable area by specific natural conditions.

The main activity of society is cultivation of cereals (excluding rye), vegetables and plants with oleaginous seeds (CAEN 0111), and as secondary activities we could enumerate: joint exploitation of land, production of seeds and planting material for cereals and technical plants, animal rearing, processing and capitalization of agricultural products, handicrafts, production storage and keeping and technical-material supply.

Societatea Agricola Moldova is enrolled at Seed Control Inspectorate from Iași for seed production in according with Directive EEC 66/402 and Council Directive 2002/57/EC transposed in national legislation by Law 266/2002 regarding producing, processing, control and quality certification, capitalization of seeds and planting material, as also as enrolling of plants kinds and Orders nr. 1262, 1263, 1264/2005 for approving the rules and technical norms regarding producing for selling, control, quality certification and capitalization of cereals seeds, fodder plants, textile plants and modified oleaginous plants.

Nowadays society activity is organized in four vegetal farms, one animal farm, a unit for processing-conditioning of cereals' seeds and technical plants.

Indexes of agricultural production

From agricultural production indexes we calculate for a number of three consecutive years, primary physical production and commodity production (table 1).

Table 1. Dinamycs of production on crops during 2010-2012[9]

Crop	Cultivated area (ha)			Mean production per hectare			Total production (tons)			Deviations (+,-) tons
	2010	2011	2012	2010	2011	2012	2010	2011	2012	
Wheat	500	600	450	5000	4800	4850	2500	2880	2182.5	-317.5
Barley	200	300	300	5500	5200	5600	1100	1560	1680	+1580
Sun flower	600	400	250	2500	2650	2800	1500	1060	1540	+40
Rape	700	700	600	2100	2200	2100	1470	1540	1260	-210
Mustard	200	150	250	1900	2000	1950	380	300	487.5	+107,5
Peas	200	300	350	4300	4100	4000	860	1230	1400	+540
Two-row barley	300	250	300	5400	5100	5600	1620	1375	1680	+60

In table 1 are presented data regarding the dynamics of crop production Societatea Agricola Moldova Țigănași. From the table could be observed a major ascendant dynamics in 2012 face to 2010 only at barley and pea crops, at the other crops being recorded decreasing of production due to decrease of cultivated surfaces but especially due to natural causes (lack of precipitations during summer).

At Societatea Agricola Moldova Țigănași commodity production realised during the analysed three years is presented in table 2.

Table 2. Dynamics of commodity production during 2010-2012

Crops	Commodity production in analysed period (tons)			Recorded differences (tons)
	2010	2011	2012	
Wheat	2487	2876	2173.5	-313.5
Barley	1095	1553	1676.5	+581.5
Sun flower	1503.5	1059.5	1533	+29.5
Rape	1465	1535.5	1253	-212
Mustard	378.5	295	488	+109.5
Peas	849	1403.5	1398.5	+549.5
Two-row barley	1608	1374.5	1674.5	+66.5

Recorded differences in the analysed period in case of commodity production at Societatea Agricola Moldova Țigănași are due both to variations of inputs, quantity of agricultural products varying from year to year due to modifications of cultivated surfaces, natural causes and also due to stock variations, recorded losses and internal consumption of society.

Table 3. Utilization efficiency dynamics of fixed assets at Societatea Agricola Moldova Țigănași[9]

Indexes	Analysed period			Recorded differences	
	2010	2011	2012	2010/2011	2011/2012
Mean value of fixed assets (lei)	5,107,201	5,534,504	5,721,200	+427,303	+186,696
Turnover (lei)	18,519,949	20,351,370	21,237,158	+1,831,421	+885,788
Added value (lei)	5,279,840	5,173,342	5,098,201	-106,498	-75,141
Profit (lei)	1,737,938	1,388,855	1,678,935	-349,083	+290,080
Turnover for 1 leu fixed assets (lei)	3.626	3.677	3.712	+0.051	+0.035
Added value per 1 leu fixed assets (lei)	1.033	0.934	0.891	-0.099	-0.043
Profit per 1 leu fixed assets (lei)	0.340	0.250	0.293	-0.09	+0.043

Could be observed from the data presented in table 3 the accentuated dynamics of technical endowment of agricultural exploitation, but due to unfavourable economical conditions in which is at the moment Romanian agriculture and due to unfavourable natural conditions which had a negative influence on vegetal sector, a part of the analysed indexes had negative values. Societatea Agricola Moldova Țigănași, from own funds but also with support from EU, realised in the last years numerous investments regarding achievement of modern machines and equipments to be able to confront the concurrency.

Analysis of incomes and turnover

Turnover represents a fundamental synthetic indicator which defines the activity of an enterprise and expresses the totality of obtained incomes from ordinary commercial activities, measuring in this way the economical performances of enterprise. [5]

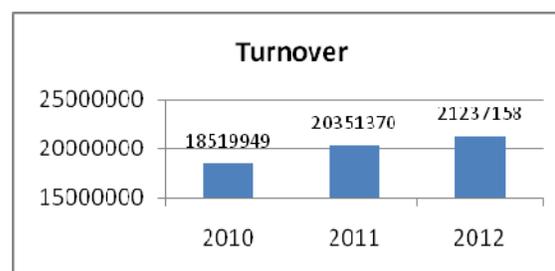


Fig. 1. Evolution of turnover during 2010-2012

Study of turnover on a long period of time offers information regarding enterprise activity and its tendencies by placing it or

activity domain in one of the products' life cycle: launch, growing, maturity and decline. From figure 1, could be observed an increase of turnover with 14.67% in 2012 face to year 2010, as a consequence of agricultural technological development for seed production.

Incomes of agricultural society represent the sums or values to be cashed, from: goods deliveries, realised works, services and from advantages which society consent to receive after realization of some legal or contractual obligations from thirds, exceptional incomes, which are not connected with the current activity and refer to management operations (chased damages and fines, donations, prescribed unclaimed wages and other incomes), or turnover operations (share-parts from subventions for investments, selling price or disposal of fixed assets disposed, excluding VAT, etc.) [8]

Incomes include both incomes from current activities and also the gains from any other sources. Incomes from current activities could be found on different names, such as selling, commission, interests, dividends, royalties and rents.

Exploitation incomes (VE) include turnover (CA), incomes from stored production (Vps), incomes from immobilized production (Vpi) and other incomes from exploitation (AVe).

$$VE = CA + Vps + Vpi + AVe$$

Turnover includes the value of sold products, realised works and services, at which are added (at firms with commercial activity) incomes from goods selling.

Stored production includes variation of stock of finished goods, semi-finished and unfinished products, at the end of a certain period of time face to its beginning.

Immobilized production includes the value of fixed assets realized by enterprise in direct labour operations, for own purposes. Stored production and immobilized production are evaluated in production costs, which means that incomes to be equal with related costs.

Financial incomes includes: interest received, incomes from participation and other financial investments, and also other financial incomes.

Exceptional incomes include those incomes which are not connected with the current

activities of enterprise.

Summing all these income categories for Societatea Agricola Moldova Țigănași total incomes recorded the values presented in table 4.

Table 4. Total incomes (RON)

Nr.	Denomination of indicators	Realizations		
		2010	2011	2012
	Total incomes, from which:	20,458,439	23,059,914	25,172,023
1.	-Exploitation incomes	18,237,342	21,023,438	24,043,527
2.	- Financial incomes	2,221,097	2,036,476	1,128,496
3.	-Exceptional incomes	0	0	0

Expenditure analysis

Expenditures are defined like decreases of recorded economical benefits during a certain accounted period under the form of exits or decreasing of share value or increasing of debts, which determine the decrease of own capital, others than the ones resulted by their distributions to stock-holders. Recognition of expenditures took place simultaneously with recognition of debts' increasing or reducing of assets (for example, wages or amortisement of fixed assets).

To obtain utilization values enterprise use material, human and financial resources, and their consumption is materialized through expenditures. So, expenditures of an enterprise reflects under a value form the whole consumption of production factors or material, human and financial resources, realised for processing and selling of production. The level, dynamics and structure of those expenditures reflect in a synthetic way the activity of industrial enterprises regarding the efficient utilisations of their own resources, and decreasing of their level must be a primordial target for all economical agents, for increasing the efficiency of the whole activity. Total expenditures of an enterprise (Ct) could be grouped on several criteria [8].

An important criterion, for grouping also in profit and losses account, is their nature. In according with this criterion total expenditures (Ct) include: exploitation expenditures (Ce), financial expenditures (Cf) and extraordinary expenditures (Cex).

$$Ct = Ce + Cf + Cex.$$

Exploitation expenditures represent the reflection in bookkeeping of the costs recorded by company after whole activities in according with activity domain.

Exploitation expenditures include: expenditures with raw materials and consumable materials, expenditures with energy and water, cost of sold merchandise, expenditures with external services, expenditures with taxations, fees and other assimilated taxes, expenditures with wages, adjustment of corporal immobilization value and current assets and also other exploitation expenditures.

Table 5. Exploitation expenditures - RON

Denomination of indicators	Realizations		
	2010	2011	2012
Total expenditures, from which:	18,389,456	21,440,260	22,538,472
Exploitation expenditures	17,642,472	19,281,396	20,297,142

Financial expenditures refer to that costs supported by a company in connection with decisions of funding, investment, exposure to fluctuations of exchange rate or supply.

Financial expenditures include: interests of loans contracted, losses from selling investment securities, adjustment of financial immobilization value, and other exploitation expenditures.

Table 6. Financial expenditures – RON

Denomination of indicators	Realizations		
	2010	2011	2012
Total expenditures, from which:	18,389,456	21,440,260	22,538,472
Financial expenditures	746,984	2,188,864	2,241,330

Extraordinary expenditures or exceptional represent the expenditures generated by situation with a low frequency during activity and/or are due to some unusual situations. In this category enters gains and losses from assets selling (when selling of those assets is not a part of society activity) or costs of “one-off” type (presumed not to repeat) such as significant depreciations of assets, restructuration costs. Exceptional expenditures include those costs which are not connected with the current activity of enterprise (calamity losses). In analysed period at Societatea Agricola Moldova Țigănași weren't recorded extraordinary expenditures.

Analysis of net return in period 2010-2012

Determination of profit in the analysed period could be graphically presented because permit a faster observation of total incomes and expenditures evolution during the analysed period.

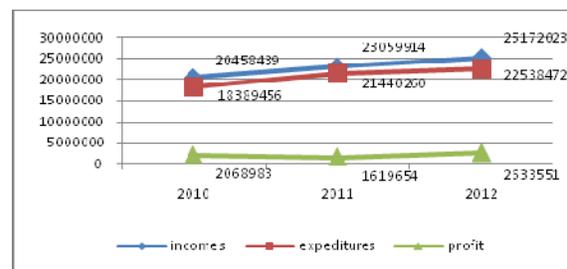


Fig. 2. Evolution of economical indicators during 2010-2012

Could be observed that 2011 wasn't a good year for enterprise activity, because in period 2010-2011 was recorded a decrease of gross profit with 449,329 RON and immediately in period 2011-2012 society recorded an increase of 1,013,897 RON, the highest value of gross profit being 2,633,551 RON in 2012.

Structural analysis of profit

To realise a structural analysis of profit we will need the incomes and expenditures values from all three activity domains during 2010-2012 period.

Result of exploitation – profit or losses from exploitation is determined as being the difference between exploitation incomes and exploitation expenditures.

Graphically the exploitation result is shown in figure 3.

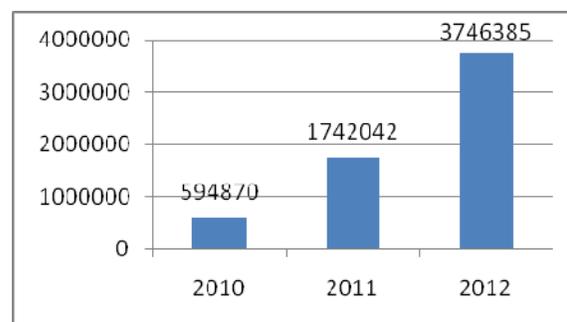


Fig. 3. Result of exploitation

It could be observed that society records profit from exploitation activities, the best value being recorded in 2012.

After the realised analysis the conclusion is that society had a rentable activity, obtain profit in all three analysed years, respectively 2010, 2011, 2012 resulting that return is a synthetic form of expression for the efficiency of the whole economical activity at Societatea Agricola Moldova Țigănași, Iași County.

CONCLUSIONS

To be able to have an efficient and competitive production, agricultural exploitations, no matter of their type, must enrol in the tendencies at the nowadays world agriculture, to promote qualitative factors such as knowledge development, managerial training, technical improvement, utilization of modern technologies, IT, etc.

For increasing the society performances is recommend achievement of new agricultural machines, optimization of fixed costs, accessing of new European funds and a better information on the new products launched on agricultural market (herbicides, pesticides, fertilizers, etc).

Also it is necessary a very good knowing of market for selling the products at advantageous prices and quite easy.

All those conditions could be realised only by implementation of a performing management system for agricultural exploitation.

All the successes and realizations of Societatea Agricola Moldova Țigănași, Iași County are presented with several occasions (interviews, participation at fairs and exhibitions) in mass-media by firm managers and this fact offers a credibility and a certain „weight” of the information.

We recommend the allowance of all the necessary resources for development, implementation, maintaining and continuous improvement of management system which coordinates production activity, environmental preservation, labour security and health.

REFERENCES

- [1] Alecu, I. et al., 2001, Managementul exploatațiilor agricole. Editura Ceres, București
[2] Brezuleanu, S., 2010, Sisteme de producție în agricultură. Editura Alfa, Iași

[3] Brezuleanu, S., 2009, Underlying the decision by the calculus of maximum economic effects for the optimization of some production processes. *Lucrări Științifice* 2009, Seria I, vol XI (2)

[4] Brezuleanu S., Brezuleanu Carmen Olguța, Iașco C., 2013, Fundamentatıon of human resources in agricultural exploitations on the basis of labour productivity indicators, *Environmental engineering and management journal*, April 2013, 4:763-767

[5] Cojocaru C.C., 2000, Analiza economico-financiară a exploatațiilor agricole și silvice. Editura Didactică și Pedagogică, București

[6] Elliott H., 1994, Applying the agricultural technology systems approach: Lessons from ISNAR's experience. In R. M. A. Loyns & F. Datepa-Mupondwa (Eds.), *Management for researchers*. Department of Agricultural Economics and Farm Management, University of Manitoba. Winnipeg, Manitoba: Friesen Printers

[7] Râmniceanu Irina, 2004, Problemele structurale ale agriculturii românești în perspectiva aderării la UE. Editura IER, București

[8] Vlad Mihaela Cristina, Toma Elena, 2007, Aspecte privind analiza tehnico-economică în exploatațiile agricole vegetale, Editura Cartea Universitară, București

[9] Database of SC Agricola Moldova Țigănași Iași

[10] www.pndr.ro, Programul Național de Dezvoltare Rurală