DISPARITIES IN WHEAT PROFITABILITY ON ROMANIAN LOCAL AND REGIONAL AGRICULTURAL MARKETS

DISPARITĂȚI ALE PROFITABILITĂȚII GRÂULUI PE PIEȚE AGRICOLE LOCALE ŞI REGIONALE ROMÂNEŞTI

CAMELIA TOMA[1], CAMELIA GAVRILESCU[1], CRINA TURTOI[1]

[1]Institute of Agricultural Economics, INCE, Romanian Academy, Bucharest, Romania; cameliatoma2004@yahoo.fr

Abstract: *The research objective had been focused on studying the profitability level of the wheat production and its competitiveness on local and regional agricultural markets, affected to a greater or less degree by climatic conditions. The analysis was done on the data collected from farms in the frame of specific research projects crried out by the IEA. Standard methods and procedures were used for calculating the income and expenditure budget, and analysis was performed after the profit or loss recorded for wheat, as difference between the prices offered on different markets and the production costs. The results shown that the profitability of the farms cultivating cereals was higher in the central and northern regions of the country, compared with the regions known as traditional for this type of crops but affected by frequent droughts. Although the peasant market prices are higher than wholesale prices, only the small family farms have benefited of them, with modest offers, while great wheat producers sold their production, affected by drought, on wholesale markets.*

Key words: *profitability, wheat production, production cost, selling price, regional agricultural markets*

INTRODUCTION

Farm practice in our country shows that in the context of competitive market economy, for achieving high yields per hectare, for increasing labor productivity and overall economic efficiency of the production costs, aimed to obtain profitable and sustainable economic and financial results, there is a great dependency on: (i) farm size and structure, (ii) quality of technical and

material resources, but also their management with maximum efficiency, (iii) level of prices on different regional and local markets, (iv) need for mitigation or counteracting the oscillating environmental factors, which, on medium and long term, may financially affect even the most competitive farms [4, 5].

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MATERIALS AND METHODS

The analysed sample comprised 400 commercially oriented farms, from which there were selected, in the first stage, 277 farms growing wheat.

In the second stage, after repeated filtering, there were selected the farms from which it was collected information with regard to the harvested wheat production and its quantitative distribution, by destinations: (i) by wholesale to local and regional collectors and processors, with or without a contract, and (ii) individually sold at farm gate or on local fairs and markets.

In the third stage there were calculated the production costs based on variable and fixed production costs, related to the main production. In this case, it was used used the method of remaining value or remaining rest and the structure of the revenues and expenditures budget for crop production [2, 3].

In the fourth stage, the sample was analyzed based on gross profit or gross loss of the farms, on regional level.

REZULTS AND DISCUTIONS

Positive results (P+) were obtained by 34% of farms, which recorded gross profit, if comparing production costs with selling prices. The other ones obtained negative results, either due to costs higher than the selling prices, or due to unsold stocks. (Table 1)

At the time of investigation, but not in all cases, the quantities of unmarketed wheat should had automatically lead to negative results, because many of these farms were mixed farms and declared the creation of stocks as for animal feeding purpose. Part of the harvested production was to be used for the payments in kind of lease, and another part was intended for family consumption. However, even under allocation of financial

resources as for a normal climatic year and in areas favourable to wheat cultivation, there was registered a significant number of holdings that registered losses, and consequently extremely small crop (less than 1000 kg per hectare), due to calamities.

Table 1

Average areas cultivated with wheat per farm and total number of farms per regions

Specification	Unit measure	Results +/-	N-E	S-E	South	S-W	West	N-W	Centre	Buc-If	Average of sub-sample	Average of the sample
Wheat / farm	Ha	P+	123	148	274	18	511	3	73	49	320	108
		P-	24	164	152	4	28	18	20	212	77	
Farms	Units	P+	7	10	17	11	13	9	23	3	93	277
		P-	19	29	43	23	16	30	20	4	184	

Source: Authors calculations based on survey results

Graphical representation of the level of wheat production and production costs (Figure 1.) and their influence on the formation of the unitary production costs put in evidence that in regions where average yields ranged from 2300 to 3600 kg/ha (NW, Centre, NE, SE and West), farms with positive financial results had had a large supply of wheat on wholesale markets and for processing, in terms of pricing bids, which ranged between 0.57 and 0.72 RON/kg.

In the South, although yields were low due to drought, major grain producers have sold their product to whole sellers and processors, which maintained the price offers almost constant throughout the country. On the contrary, in the southern areas, small sized farms affected by drought, where average yields ranged from 1280 to 2260 kg/ha, have achieved positive

financial results because of their orientation towards peasant markets, where the price offers were on average higher (0.84 to 0.93 RON/kg).

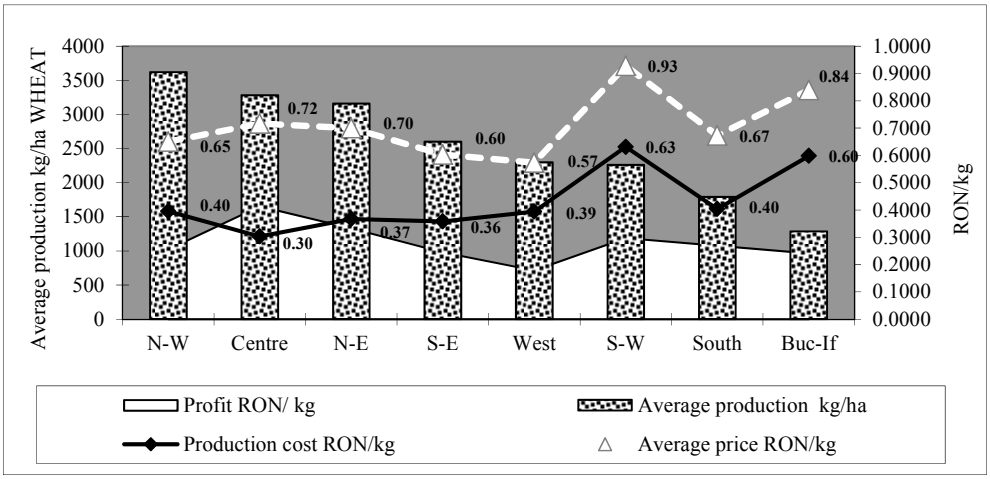


Figure 1. – Level of average productions, production cost and selling price/unit of product for profitable wheat crop (P+)

Influence of drought, which occurs frequently in some parts of Moldova, Dobrogea, Wallachia and Oltenia (Iasi, Bacau, Vaslui, Braila, Buzau, Tulcea, Calarasi, Ialomita, Giurgiu, Teleorman, Dolj, Ilfov, etc.) and lack of viable irrigation systems is determining a low crop productivity per hectare, especially for wheat, by 600-1500 kg/ha, even when, for normal climatic years, rational technologies and consumption are applied.

This causes waste of production costs, soil water and air pollution, with unused fertilizer plant, negative financial results and significant crop losses.

A lot of farms in these areas, frequently affected by drought and that incurred losses (P-), obtained large quantities of wheat, because of the large areas cultivated. However, as it was difficult to capitalize them on the peasant markets, where higher selling prices might have had compensated for some losses, they had to sell wheat on wholesale markets and directly to processors, with significant lower prices. (Figure 2.)

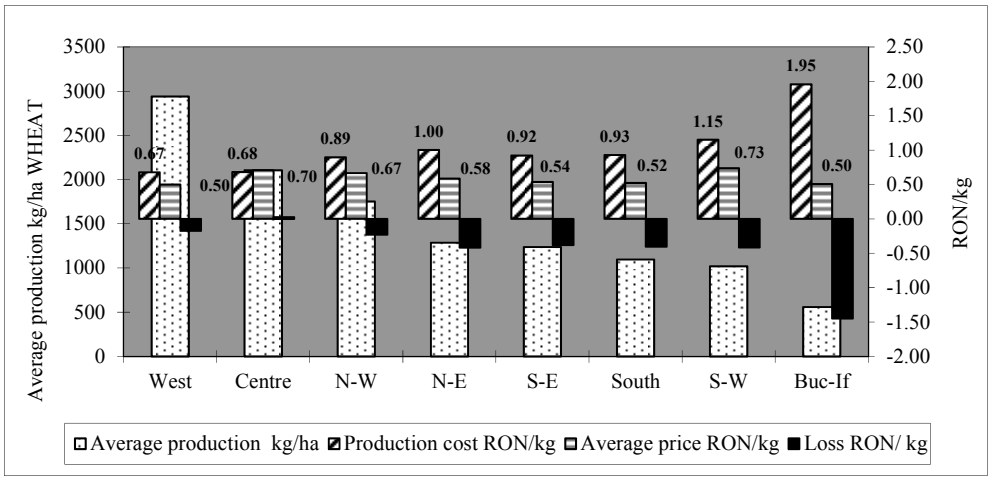


Figure 2. – Regional disparities for wheat yields, unitary production costs and average selling prices in the farms that registered losses (P-)

Only small family farms from the regions N-E, S-E, B-If and S-W, that marketed only small wheat quantities, easily to be absorbed by peasant market, benefited of higher prices. (Figure 3.)

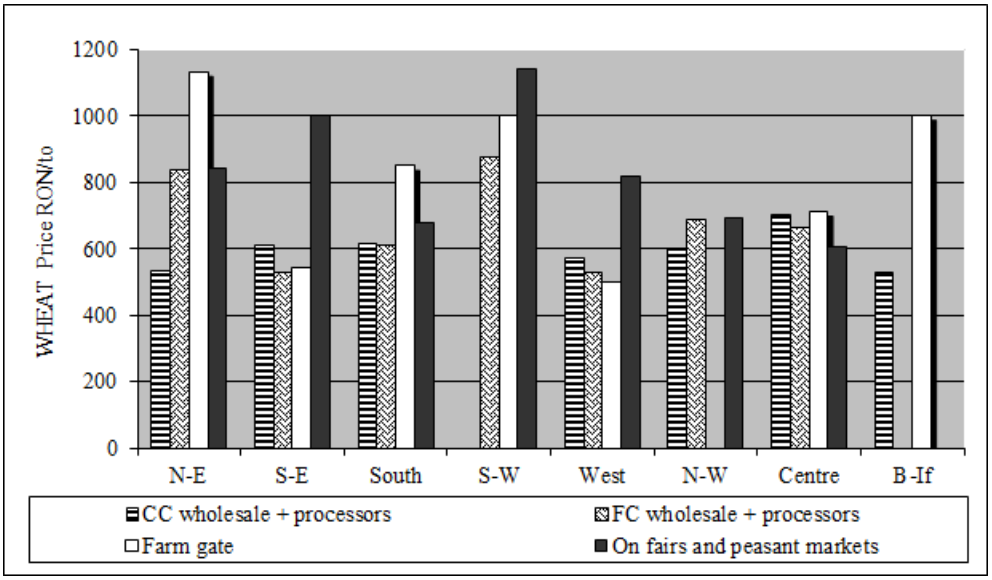


Figure 3. Level of low wheat market prices, with contract (CC) and without a contract (FC), on different types of regional markets

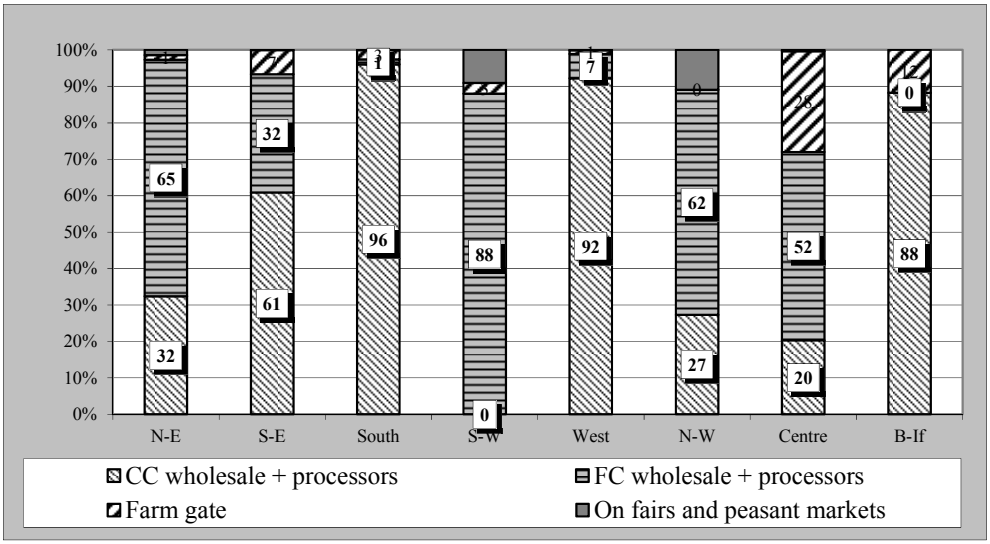


Figure 4. Share of Wheat quantities marketed on different types of markets, with contract (CC) and without contract (FC), grouped by regions

Trading under contract to large grain warehouses and processors was recorded for 60-96% of the quantities of wheat in the region, B-IF, West and South, while 50-65% of wheat quantities were purchased without agreement by deposits and processors from the regions: NE, NW and centre. The largest share was registered in the South-West region, where over 80% of wheat quantity was purchased without contract forms.

Individual farm gate marketing or marketing on fairs and peasant markets had a relatively small share from the quantitative point of view (1-7% in NE, SE, SW, and 12-28% in B-IF and in Centre), although, as number of holdings, the share of small farms marketing on these channels was larger.

The graphical representation of the efficiency indicators "Gross Profit Rate", respectively "Gross Loss Rate" (Figure 5.) is conclusive for all wheat profitability analysis, in terms of differentiated climate events by geographical regions or areas of the country.

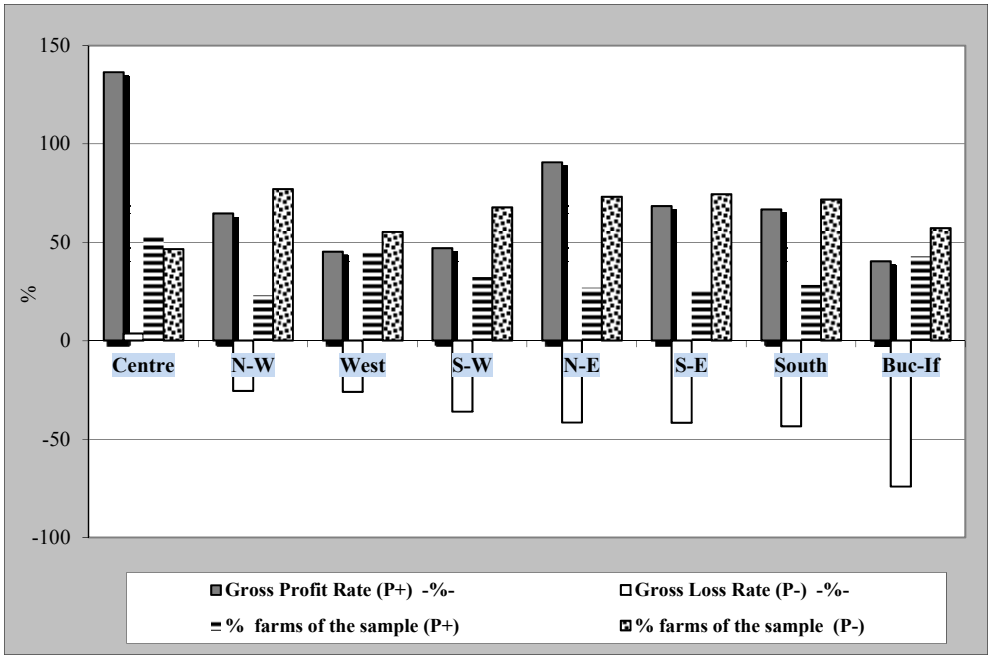


Figure 5 – Profit/Loss rate for wheat crop and share of farms with positive and negative results

CONCLUSIONS

The analysis of the data collected from the selected farms revealed that in the agricultural year when drought prevailed in the east and south part of the country, only one third of the farms obtained profit for wheat crops, while the remaining two thirds recorded negative results. The most profitable were the farms located in areas of lower favourability, but which benefited of good weather conditions.

The main causes for the registered losses were the extremely low yields (less than1000 kg per hectare) obtained in favourability areas of wheat cultivation, which were reflected finaly in the high unitary production costs that exceeded the relatively rigid prices from storage houses and processors.

Other causes determining the negative results resided in the behaviour of the small producers that chose to store the production, either for self consumption or in expectation of better selling prices.

Even if both larger farms and small ones that have been affected by drought registered great losses, given that almost all of them applied modern agro-technical measures and incurred production expenses were as for a normal year, both types of farms have obtained yields of 5-10 times lower compared with normal years. Only small family farms in regions NE, SE, B-IF and SW, who went on selling with smaller quantities of wheat, easily absorbable by peasant market, more sensitive to agricultural products deficit, have benefited of higher prices, which had covered some losses.

Without rehabilitation or setting up of new irrigation systems in order to mitigate or counteract the fluctuating environmental factors, accompanied by more consistent public policies for supporting agriculture, most competitive farms might be as well financially affected on medium and long term.

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