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IALOMITA COUNTY GRAIN SECTOR DEVELOPMENT

ELENA SOARE, ELENA COFAS

University of Agronomic Sciences and Veterinary Medicine of Bucharest

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Abstract

The main economic activity in Ialomita County is the argriculture, because there is a number of factors that support this sector. On some significant parts from the agriculture surface is grown: wheat, rye, barley, two-row barley, oats and corn. In the analyzed period, the areas planted, yields and total yields per hectare have suffered modifications and not always in the desired direction. The development of this sector is linked with the subventions given by state.

INTRODUCTION

Production of cereals in Ialomita County agriculture is a tradition for this county. In time, the culture surfaces have increased, but grain production was an uneven trend over the period, due mainly to climatic conditions, germinating quality of the material, non-compliance culture, etc., technologies. Although there are many problems in the grain sector, the county level there is a tradition in the cultivation of cereals, just as there is demand for cereal consumption.

MATERIAL AND METHODS

Demand and consumption of cereal food consumption is based on tradition in Romania. In this study the Ialomita have used statistical data provided by National Statistical Institute for years 2005-2009. We studied the dynamics of the following indicators: land cultivated with cereals, total production, yields per hectare and inputs for cereal production.

RESULTS AND DISCUSSION

The agricultural surface of Ialomita county is 373,690 ha (83.92%) of which 348,767 hectares of arable land (93.33% from the total agricultural area) and 2.5% of the total country surface. A significant portion of the land area is cultivated with cereal grains. Evolution of grain surface is presented in Table 1.

Table 1

Area planted with major crops Ialomita county level*

No.	Main cultures	2005 (ha)	2006 (ha)	2007 (ha)	2008 (ha)	2009 (ha)	2009/2005 (%)
1	Total	344059	317213	358935	342854	347439	100.98
2	Cereal grains	202229	168789	197033	209963	215923	106.77
3	Rye	-	-	-	-	-	-
4	Wheat	104667	83454	92409	106286	109082	104.22
5	Barley and two-row barley	20766	9003	15611	22255	32714	157.54
6	Oat	761	959	658	514	550	72.27
7	Corn	74474	72941	86317	77867	68881	92.49

**Not covered area of familial gardens, greenhouses and tanning beds, intercropping and succession crops*

The area planted with cereal grains in the county increased by 6.7% in 2009 compared to 2005. Ialomita County recorded an increase of areas on the main cereal crops, as follows: for wheat by 4.2% in 2009 compared to 2005, two-row barley and barley with 57.5% in 2009 compared to 2005. For oats and maize crops, cultivated areas have dropped compared to 2005, with 27.7% to 7.6% in oats and maize.

In 2005-2009, total grain production was a decreasing trend for wheat, oats, corn and recorded a positive train for two-row barley and barley. Cereal grain production in Ialomita county decreased by 18.1% in 2009 compared to 2005. Dynamics of grain production is presented in Table 2.

Table 2

Total cereal production in Ialomita county

No.	Main cultures	2005 (t)	2006 (t)	2007 (t)	2008 (t)	2009 (t)	2009/2005 (%)
1	Cereal grains	660096	506680	171977	729384	540738	81.92
2	Rye	-	-	-	-	-	-
3	Wheat	302625	206785	111323	395985	229969	75.99
4	Barley and two-row barley	31176	23694	15341	86779	71462	229.22
5	Oat	1285	1240	75	1270	921	71.67
6	Corn	319376	265128	36826	232917	217170	68.00

Source: Statistics Ialomita County in 2010, National Statistical Institute, Bucharest

Total production decreased even that the area planted with cereal grains has increased during the period under review. This can be explained due to lower yields on the one hand, and on the other hand, adverse climatic conditions. This

negative trend is maintained for the cultivation of wheat (-24.1%), oats (-28.4%), maize (-32%). Production of barley and two-row barley has increased by 129.2% during 2005-2009, the increase being due to the growing attraction of a large area and increase yield per hectare. Yields per hectare in Ialomita county experienced significant declines in the 2005-2009 for crops of wheat, oats, maize. Cultures that have made an exception is barley and two-row barley, this have recorded a cumulative grow of 45.5% (Table 3).

Table 3

Average yields per hectare, the main crops, Ialomita County

No.	Main crops	2005 (kg/ha)	2006 (kg/ha)	2007 (kg/ha)	2008 (kg/ha)	2009 (kg/ha)	2009/2005 (%)
1	Cereals grains	3264	3002	873	3474	2504	76.72
2	Rye	-	-	-	-	-	-
3	Wheat	2891	2478	1205	3726	2108	72.92
4	Barley and two-row barley	1501	2632	983	3899	2184	145.50
5	Oat	1689	1293	114	2471	1675	99.17
6	Corn	4288	3635	427	2991	3153	73.52

Source: Statistics Ialomita county in 2010, National Statistical Institute, Bucharest

An important aspect which must take into account agricultural producers - in order to increase productivity - regards directly the quantity of natural and chemical fertilizers allocated to cereals. This should not be overlooked, because studies have shown that the efficiency of manure is significant if taken together with mineral fertilizers, especially those with phosphate.

Thus, the chemical fertilizers used, it occupies the largest percentage of areas that have been applied fertilizer nitrogen (79.53% of total land with chemical fertilizer applications in 2005, 71.26% in 2006, 67, 18% in 2007, 63.05% in 2008 and 70.75% in 2009), followed by areas that have been applied phosphatic fertilizer (24.95% of the area in 2005, 26.45% In 2006, 30.27% in 2007, 34.23% in 2008 and 27.41% in 2009) and areas that have been applied potassic fertilizers (3.60% of the area in 2005 2.24% in 2006, 2.53% in 2007, 2.70% in 2008 and 3.89% in 2009) (Table 4).

In Ialomita county, the total surface with chemical and naturally fertilizers applied has declined at a rate of 16% in 2006 compared to 2005 to record a significant increase of 80% in 2007 compared to 2006, and increase of 31% in 2008 compared to 2007 to record a decrease of 16% in 2009 compared to 2008. In the period 2005-2009, cereal production has been supported by state subsidies especially on land area. This support was not uniform over the reporting period, ascertained the differences from one year to another.

Table 4

The area on which chemical and natural fertilizers applied in Ialomita county

Type of fertilizer used	2005	2006	2007	2008	2009
Chemistry, of which:	123569	104852	190021	249865	209785
Nitrogenous	88737	68219	116506	141699	130976
Phosphate	26286	30371	60105	90775	68876
Potassium	8546	6262	13410	17391	9933
Phosphate	878	834	400	360	823
Total area	124446	105686	190421	250225	210608

In 2005, the total production supported for wheat and rye crops was 725,000 tonnes. Direct support of the MAFRD budget was 400 billion. In 2006, the support for farmers in the vegetable sector has been directed towards supporting and achieving competitive agricultural products traded with EU quotas. It was also intended to adapt the forms of support to the European system of payments. For cereal crops, farmers have sought loans for production and have received support from public funds between 5 and 15%. Grant for two-row barleyde worth 200 lei granted in a single step, by awarding coupons. The values were used to purchase seeds, seedlings, fertilizers, pesticides, diesel, polyethylene film, water for irrigation etc.

In 2007 the plant farmers have benefited from grants ranging between 400 and 500 lei (eg for a hectare of wheat has been awarded a grant of 500 million) for the purchase of diesel fuel, seed and fertilizer required for the creation wheat, rapeseed and other produced in autumn this year. The total amount allocated to subsidize oil and/or biodiesel, certified seeds, fertilizers and pesticides needed autumn crops amounted to 1.32 billion. Financial support was granted until September 30, 2007, by awarding nominal free coupons, and aimed to reduce the effects of excessive and prolonged drought that affected large areas of crop established in autumn 2006 and spring 2007. Grants were awarded only for insured crops and worked with modern technology. Another requirement was that the farmer put seeds in the ground to be certified by a quality paper. About 2.8 million hectares of wheat, rye, triticale, barley, two-row barley (winter and spring) and rapeseed, about 1.7 million hectares were affected by natural disasters, affected by drought, according to data centralized on 20 June 2007. Drought effects were visible in the harvest of wheat. The crop was around 2.6 million tonnes, twice less than in 2006. In 2008, for wheat, barley, oats, maize (conventional cultivation), other cereal grains, other arable crops, have been applied to single area payment scheme and schedule of additional payments decoupled from production of 47 euro/ha (according to GD 1574/2007). For crops of maize at the single area payment scheme for 50 euro/ha

has added complementary national payments scheme for 47 euro/ha for crops payment scheme 45 euro/ha (according HG 1574/2007).

Activities for which the farmers was financial supported in 2008 were: subsidizing diesel and/or biodiesel, for work in agriculture and other resource materials (seeds and/or pesticides and/or fertilizer) needed for crops; grant of a leu/liter for mechanical work to establish crops in 2008, ie 39 liters per hectare for all crops in the spring and 39 liters per hectare for winter crops (according to the Order 174/2008).

In 2009 were granted 1389 lei/ha from EU of funds: the single payment area - 227.28 euro/ha; from the state budget: complementary national direct payment of 174.76 euro/ha; diesel reduced rate - 31.4 lei ha; minimis aid scheme - 200 lei/ha; agricultural credit for production - 717 lei/ha (30%). For crops of maize were awarded - 1328 lei per hectare (ha) - community Funds: single payment area - 227.28 Euro/ha; crops payment - 168.30 euro/ha and from state budget: 174.76 lei complementary national direct payments per hectare, subsidized diesel 39 lei/ha, agricultural credit for production - 718 lei/ha (30%).

Table 5

Evolution of subsidies on products Ialomita county level (U.S. $ million)

Specify	Year 2005	Year 2006	Year 2007	Year 2008
Cereals (including seeds)	86.88	10.74	-	211.8
Wheat	86.22	-	-	181.76
Barley and two-row barley	-	-	-	18.32

Source: MARD, 2009

At the county level total cereal subsidy was 211.8 million RON in 2008 (an increase of 143% compared with year 2005).

CONCLUSIONS

1. Agricultural activity in Ialomita County is a priority area in the county's economy, due to location in a area with high agricultural potential, high soil and favorable climate, high skilled human resources, available and affordable labor and the existing tradition in the area for this type of activity.
2. At county level, the grain sector is presented, on the one hand, as a sector representative, helping to meet the consumption needs of the population, and on the other hand it creates favorable conditions for livestock sector development.
3. Grain acreage has increased in 2005-2009. This increase in area planted was not reflected in direct and significant impact on production results obtained.

For wheat crops (-24.1%), oats (-28.4%) and maize (-32%) has recorded a negative trend. Barley crop has seen a significant increase of 129.2% in analyzed time period.

4. Negative trend for some cereal crops was mainly due to declining yields per hectare, although they have been applied to natural and chemical fertilizers. In the period studied cereal production has been supported by state subsidies especially on land area. This support was not uniform over the reporting period, which was directly reflected in the outcomes production. After implementing the analysis of grain production in the Ialomita county found that output is below the productive potential of the area, which contributes to the achievement of low income farmers.

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