

EVOLUTIONS AND TENDENCIES OF AGRICULTURAL DEVELOPMENT IN BRAILA PLAIN

EVOLUȚII ȘI TENDINȚE DE DEZVOLTARE ALE AGRICULTURII CÂMPIA BRĂILEI

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Abstract: *The study has a diagnosis character and has in view the analysis of the evolutions of the main parameters of agriculture in the Brăila Plain on a significant period of 5 years, respectively the period 2002-2006. It is an important period which presents the main effects of applying the Law 1/2000 regarding the retrocession of the main agricultural properties, other than those given to the old owners according to the Law 18/1991. The agricultural surface of Brăila County was of 388.100 ha at the end of 2006, manifesting a tendency of fall of 0,09% in comparison to 2002. Not all the categories of use have shown falls in comparison to 2002. Thus, the arable land has increased with 3490 ha, in the detriment of areas occupied with vines, smaller with 3005 ha or areas occupied by orchards, smaller with 418 ha. Moreover, it should be mention that the areas occupied by woods have increased in the same period with almost 1500 ha.*

The paper presents other indicators such as the structure of the land fund, the structure of agricultural areas on categories of units and analytically, on the 44 localities; equipment with mechanic machines, ensuring fertilizers and manure, structure of areas occupied by field cultures, vines and orchards. The analysis is done dynamically (2002-2006) both for the total agriculture and separately on the two types of sectors: private one and mixed one. The evolutions of these indicators have allowed the identification of some tendencies of development with a view to the perspective which characterizes the whole development of the agricultural branch in the studied zone.

Rezumat: *Studiul întreprins are un caracter diagnostic și își propune analiza evoluțiilor principalilor parametri ai agriculturii din Câmpia Brăilei pe o perioadă semnificativă de 5 ani, respectiv perioada 2002-2006. Este o perioadă importantă care reflectă principalele efecte ale aplicării Legii 1/2000 privind retrocedarea principalelor proprietăți agricole, altele decât cele restituite proprietarilor în urma aplicării Legii 18/1991. Suprafața agricolă a județului Brăila a fost la sfârșitul anului 2006 de 388100 ha manifestând o tendință de scădere de 0,09% față de anul 2002. Nu la toate categoriile de folosință s-au înregistrat scăderi față de anul 2002. Astfel, terenul arabil a crescut cu 3490 ha, în detrimentul suprafețelor ocupate cu vii, mai mici cu 3005 ha, sau a suprafețelor ocupate cu livezi, mai mici cu 418 ha. Este de menționat faptul că suprafețele ocupate cu vegetație lemnoasă au crescut, în aceeași perioadă cu aproape 1500 ha.*

Lucrarea prezintă și alți indicatori, cum ar fi structura fondului funciar, structura suprafețelor agricole pe categorii de unități; și în mod analitic pe cele 44 de localități, dotarea cu mijloace mecanice, asigurarea cu îngrășăminte chimice și naturale, structura suprafețelor ocupate cu culturi de câmp, vii și livezi. Analiza este efectuată în dinamică (2002-2006) atât pentru total

agricultură, cât și separat pe cele două tipuri de sectoare: sectorul privat și cel cu capital de stat sau mixt. Evoluțiile acestor indicatori au permis identificarea unor tendințele de dezvoltare în perspectivă a indicatorilor ce caracterizează ansamblul dezvoltării ramurii agriculturii în arealul studiat.

MATERIAL AND METHODS

In order to accomplish the study, the data has been gathered both from direct investigation on field and the official statistic documents. The area of investigation refers to the Brăila Plain, which is situated in the South-Eastern Romania.

For the study there were used the following methods: the method of comparison, the monographic method, the specific index method and the graphic method. There were used the specific indicators and index of a diagnosis analysis with technical-economic character recommended by the specialized literature.

RESULTS AND DISCUSSIONS

The study has a diagnosis character and has in view the analysis of the evolution of the main parameters of agriculture from Brăila Plain on a significant period of 5 years, respectively the 2002-2006 period. We had in view the analysis of the effects of application of property laws: Law 18-1991 and Law 1/2000 regarding the retrocession of the main agricultural properties.

The total surface of Brăila Plain is of 476576 ha, of which the agricultural surface which represented in 2006 81,4%.

We mention the fact that, even if it is a typical plain territory, the studied area has a surface of 27919 ha (5,9%) occupied with forests. Also, there is a surface of almost 13%, with other uses than agriculture.

It is also to be mentioned the fact that the agricultural area manifested a tendency of dropping in 2006, in comparison to 2002 with 0,09%, under the conditions in which the arable surface raised with 3490 ha in the detriment of the areas occupied with vines, orchards and natural pastures.

A positive factor is represented by the fact that the surface occupied with forests increased with almost 1500 ha, an important aspect for the ecological development of the zone.

As regards the structure of surfaces on categories of units (*table 1*) results in the fact that the private sector has the comparative weight with the sector of state or mixed capital.

Table 1

The structure of surfaces on categories of units (2006)

Specification		The agricultural surface	Of which:			
			Arable	Meadows	Vines	Orchards
Total agriculture	ha	388100	349401	33144	4825	730
	%	100,0	100,0	100,0	100,0	100,0
- Units with state and mixed capital	ha	74079	72680	1399	-	-
	%	19,1	20,1	4,2	-	-
-Private Sector	ha	314021	276721	31745	4825	730
	%	80,9	79,9	95,8	100,0	100,0

Thus, the arable land in the private sector has 79,9%, meadows 95,8%, and the vines and orchards, are totally in the private sector. In comparison with 2002 the private sector has raised as products.

For example, in the case as the arable land, the surface of this sector has increased with 6176 ha, as a consequence of the process of retrocession of the lands to the old landowners.

From the administrative point of view, the Brăila Plain stretches on the territory of 40 communes, with a total area of 350936 ha, at which we can add 3 towns and Brăila municipiun which have 37164 haq. The average agricultural surface which belong to a commune is of 8773 ha and from the towns, Însurăței has 18334 ha followed by Ianca – 16610 ha.

The equipment with tractors and agricultural machines represents one of the main indicators of the agricultural production.

In 2006, in the studied area there were a number of 3685 tractors, whith almost 100 more than in 2002 (*table 2*).

For a tractor there belong 105 ha of agricultural land, thing that demonstrates the low level of equipment in agriculture in that area with energetic baze. And form the point of view of the number of machines, the precarious equipment, a plow being used for 130 ha and a seeding machine for 220 ha.

We also mention the fact that the machined for fertilization have disappeared, the aviation being very little used for this purpose.

Another analized indicator is represented by the quantities of chemical fertilizers used on the cultivated areas.

Table 2

The park of tractors and main agricultural machines (pieces)

Specification	Years				
	2002	2003	2004	2005	2006
Agricultural tractors – total	3598	3325	3509	3647	3685
Plows for tractors – total	2829	2673	2827	2964	2976
Mechanical cultivators– total	770	664	830	849	854
Mechanical seeding machines – total	1493	1435	1505	1742	1764
Combines for harvesting cereals - total	402	373	391	453	457
Combines for harvesting potatoes– total	18	18	12	7	7
Combines for harvesting forage – total	28	20	24	21	21
Machines for speading chemical fertilizers – total	242	217	215	-	-

The situation presented in the table 4 shows a concentering tendency of dropping the fertilizer quantities, especially the nitrogenuous ones.

Table 3

Chemical fertilizers used in agriculture (tones)

Specification	Years									
	2002		2003		2004		2005		2006	
	ha	%	Ha	%	ha	%	ha	%	ha	%
Applied chemical fertilizers – total	10728	100,0	7447	69,4	9026	84,1	8831	82,3	6633	61,8
Of which: - nitrogenous	7592	100,0	4702	61,9	6033	79,5	5397	71,1	3494	46,0
- phosphorous	3011	100,0	2593	86,1	2966	98,5	3348	111,1	3041	100,1
- potassium	125	100,0	152	121,6	27	21,6	86	68,8	98	78,4
On average per ha(kg/ha)										
- agricultural	28		19		23		23		17	
- arable	31		21		26		25		19	

In 2002 there were used on the whole area 10728 tones of chemical fertilizers, i.e. 28 kg per ha of agricultural area and 31 kg per ha of arable area. After four years, in 2006 these quantities have dropped substantially arriving to represent only 61,8% of those used in 2002.

Quantities of only 17kg/ha registered in 2006 shows the extremely low level of the degree of fertilization of the agricultural surfaces explaining the low efficiency per hectare at the main cultures.

A positive aspect is represented by the fact that there have increased the quantities of organic fertilizers per surface unit. If in 2002 there were used only 8 kg/ha, in 2006 these quantities reached 167 kg/ha.

As regards the structure of cultures (*table 4*), the weight is held by the grain cereals (54,2%) followed by the oil plants with 37,5%. There existed a tendency of increasing the surfaces occupied by oil plants from 88318 ha in 2002 to 110245 ha in 2006. this situation is explained through the high economic efficiency and the safety in exploitation.

Table 4

Area cultivated with main cultures (tones)

Specification	Years			
	2002		2006	
	Ha	%	Ha	%
Area cultivated – total	334350	100,0	294258	100,0
Of which:				
- Grain cereals	213234	63,8	159517	54,2
- Grain leguminious plants	1947	0,6	1282	0,4
- Oil plants	88318	26,4	110245	37,5
- Plants for other industrializations	888	0,3	308	0,1
- Potatoes – total	867	0,3	505	0,2
- Vegetables – total	3773	1,1	7248	2,5
- Green forage in arable field	21058	6,3	16513	5,6

The average productions obtained are relatively modest, far from the potential of the zone and the competition demands of the European Union. There are positive signs regarding the increase of efficiency per hectare to the sugar beet and potato cultures, but they do not change the whole negative image of this indicator.

The main restrictive factor is water and till the problem of irrigations is solved for all the cultures in the area, these cultures will not be competitive on the European market.

The sector that registered an obvious regression as regards the fruit-tree number in a relatively short period was the 2002-2006 period was the fruit-tree growing and viticultural sector (*table 5*). The total number of trees decreased with almost a quarter, from 602160 items in 2002 to 459096 items in 2006.

Table 5

Number of fruit trees on categories of use										
	2002		2003		2004		2005		2006	
	nr	%	nr	%	nr	%	nr	%	nr	%
Total fruit trees	602160	100,0	598011	99,3	489419	81,2	423463	70,3	459096	76,2
Plum trees	184540	100,0	202275	109,6	179267	97,1	167910	90,9	155058	84,0
Apple trees	113896	100,0	110433	96,9	99947	87,7	57165	50,2	107716	94,6
Pear trees	40227	100,0	37713	93,7	34700	86,3	34976	86,9	1232	52,8
Cherry and sour cherry trees	109010	100,0	112939	103,6	73982	67,9	63720	58,4	63451	58,2
Apricot trees	90869	100,0	82427	90,7	68211	75,1	51780	57,0	63651	70,0
Peach trees	26483	100,0	17884	67,5	18792	70,9	20070	75,8	22571	85,2

The largest falls were at the species of pear, cherry and sour-cherry trees, the tree number falling to almost a half. There were maintained at an almost constant level the species of apple and peach trees, existing some fluctuations from one year to another as regards their number.

It has to be mentioned the fact that from the total number of trees, the private sector had the largest part, 85,2%, this increasing from 2002, when it was of 76,5%.

If the tree number registered falls, it is different the situation of the total production volume which had a specatcular increase from 4128 tones in 2002 to 10608 in 2006. The cause is the beginning of friuts for the new fruit-tree growing plantations and the displacement of the old and low-productive trees with highly productive ones.

Finally, the last aspect analysed is represened by the situation of viticulture (*table 6*).

Table 6

Surface of fruitful vines and grape production

Specifica- tion	UM	2002		2003		2004		2005		2006	
vines total	ha	6735	100,0	6404	95,1	3897	57,9	4810	71,4	4631	68,7
	t	26154	100,0	18337	70,1	13789	52,7	11734	44,9	14363	54,9
Grafted native vines	ha	1175	100,0	1076	91,6	481	40,9	1065	90,6	834	70,9
	t	4552	100,0	1427	31,3	3348	73,6	2098	46,1	2158	47,4
hybrid vines	ha	5560	100,0	5328	95,8	3416	61,4	3745	67,4	3797	68,3
	t	21602	100,0	16910	78,3	10441	48,3	9223	42,7	11787	54,6

At this branch, both the areas and total productions registered significant decreases, by the reduction of areas of grafted native vines in paralel with the hybrid ones.

As they are not part of the traditional zone favourable for the development of vine, the decrease is normal, having in view the requests of the European Union regarding the abolishment of large areas of hybrid vines.

CONCLUSIONS

1. The Brăila Plain, which practially covers all the county of Brăila, has an important agricultural potential, both in the size of the areas and due to the quality of the existing soils.

2. Of the total area, the wheight id held by the arable land, over 80%, and from this, the grain cereals (54%) occupy the largest areas, followed by oil plants with 37%. The other cultures occupy smaller areas.

3. the cultures of vine and fruit-trees registered a significative fall as regards the number of fruit-trees and vines. It was noticed the fact that in the analysed period the fruit production increased, while the grape one registered significant falls.

4. the level of average productions is modest regardless the high potential of the soil. The causes are the low developemnt of irrigation network and the low level of fertilization with mineral fertilizers.

REFERENCES

1. Ciurea I.V., Brezuleanu S., Ungureanu G., 2005 - *Management*. Editura „Ion Ionescu de la Brad Iași.
2. *** - *Anuarul Statistic al județului Brăila – Agricultură și Silvicultură*.