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CAP IMPLEMENTATION AND ITS INFLUENCE ON LAND USE AND AGRARIAN STRUCTURE IN BULGARIA

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The paper analyzes the dynamics of the agrarian structure, before and after the implementation of Common Agricultural Policy since Bulgarian membership in EU. As an EU member state the country has obligations to apply the CAP with all pros and cons which are going to occur in Bulgarian agriculture. The data used in this paper are from official sources and allow us to observe the dynamics and differences in Statistical areas in Bulgaria, so we have a clearer picture of development of agriculture.

Key words: agrarian structure, Bulgaria, dynamics, utilized agricultural area, Common Agricultural Policy, good agricultural and environmental condition

The development of agriculture, agrarian structure and environment-friendly production are a cornerstone in the progress of each country all over the world. Production factors – labor, land and capital have to be well organized for increasing of production output and boosting the economic growth.

After Bulgaria's accession to the EU there are new regulations which have to be implemented in our agriculture. Since the beginning of the twenty – first century the EU common agricultural policy (CAP) is more environment-friendly and the proof for this is so called GAEC (good agricultural and environmental condition). If a farmer by a member-state applies for a subsidy from CAP he is obliged to implement above mentioned GAEC.

In this paper I am trying to show the influence of CAP implementation in Bulgaria. For this purpose the collected data cover the period from 2004 (before our EU membership) to 2012 (the most recent data) considering the fact that these data are completely comparable because of unification of data collection among member-states. The provided data in tables 1 to 3 show the dynamics of agrarian structure in our six statistical areas [1, p. 5] and differences and similarity between regions. The research period is equally situated before and after 2007 – the year in which Bulgaria has become the 27th EU member-state and all agricultural regulations have to be implemented.

In table 1 are presented agricultural data, in particular – hectares with crops. These figures and author's calculations can lead to the following conclusions:

- The total cereals are concentrated in Central-North and North-East statistical areas with 58 % of total area;

- The total oilseed crops are mainly in Central-North and North-East statistical areas with 61 % of total area;
- The total industrial crops are harvested in North-East, South-East and South-Central statistical areas with 85 % of total area;
- The vegetables and flowers are concentrated in North-East, South-Central and South-West statistical areas with 75 % of total area;
- The meadows are located mainly in North-East, Central-North and South-Central statistical areas with 86 % of total area;
- The permanent grassland with 53 % of total area is obviously concentrated in South-Central and South-West statistical areas;
- The area of perennials is concentrated in North-East, South-East and South-Central statistical areas with 69 % of total area;
- The fallow land is mainly in two statistical areas North-West and South-Central with 51 % of total area.

In table 2 the agrarian structure of crop production in 2007 is shown. In this table we actually see our starting position in agriculture and the beginning of implementation of CAP with all pros and cons which may occur. The following conclusion may be made from upon the calculations:

- The first position of Central-North and North-East statistical areas remains unchanged in total cereals (60 %) and oilseed (59 %) crops of total area;
- North-East, South-East and South-Central statistical areas preserve their first position in total industrial crops with 87 % of total area;
- Vegetables and flowers are concentrated in North-East, South-Central and South-West statistical areas with 79 % of total area which leave them on the same place as in 2004th;
- Meadows continue to be mainly in North-East, South-Central and Central-North statistical areas with 79 % of total area;
- The permanent grassland with 53 % of total area continues to be concentrated in South-Central and South-West statistical areas;
- The area of perennials is concentrated in North-East, South-East and South-Central statistical areas with 73 % of total area;
- The fallow land is mainly in two statistical areas North-West and South-Central with 43 % of total area – the same as at 2004.

In table 3 the agrarian structure of crop production in 2012-th as our fifth year in the EU is shown. We can see some interesting changes in our areas for only five years of membership. The following conclusion may be made from calculations:

- The total cereals area is now concentrated 70 % in three regions Central-North, North-East and new statistical area is North-West;
- The oilseed crops are harvested mainly with 68 % in the three regions Central-North, North-East and new statistical area is North-West;
- The situation is changed in industrial crops too. The South-Central and South-East statistical areas now harvested 85 % of area;
- The vegetables and flowers are concentrated in Central-North /instead of North-East/, South-Central and South-West statistical areas with 70 % of total area;

- The meadows continue to be mainly in North-East, South-Central and Central-North statistical areas with 75 % of total area which is decreasing;
- The permanent grassland with 50 % of total area is obviously concentrated in South-Central and South-West statistical areas;
- The area of perennials is concentrated in North-East, South-East and South-Central statistical areas with 66 % of total area which decreases 23000 ha;
- The fallow land is situated mainly in two statistical areas North-West and South-Central with 50 % of total area but decreases with 162000 ha.

As we can see from the above information for a 5 year period of Bulgarian membership in the EU the total area of industrial crops, vegetables and flowers, meadows, permanent grassland, perennials and fallow land has decreased but the total area of cereals and oilseed crops has increased. Unfortunately this turns Bulgaria to monoculture agriculture although there are all necessary environmental conditions to harvest different crops at reasonable price but with strong competition from other member-states.

Table 4 is based on calculations and shows changes in each region and crops between 2004–2007 and 2007–2012. It can be seen that there are changes of cultivated crop area in different regions. The first years of CAP implementation lead to obligatory GAEC rules that consist of two components. In order to ensure that all agricultural land, especially land which is no longer used for production purposes, be maintained in good agricultural and environmental conditions, Member States shall define minimum requirements, at national or at regional level, on the basis of 5 issues and 15 standards (8 compulsory and 7 optional) described in Annex III of Council Regulation (EC) No 73/2009.

Minimum GAECs requirements should be defined for all «compulsory standards» and they should take into account the specific characteristics of the areas concerned, including soil and climate conditions, existing farming systems, land use, crop rotation, farming practices and farm structures. Minimum requirement can be defined at national or regional level.

The definition of minimum requirements for the «optional standards» is not compulsory for the Member State except where the Member State has already defined a minimum requirement for that standard before 1 January 2009 or/and national rules addressing that standard are applied in the Member State.

Member States shall not define minimum requirements which are not foreseen in the GAEC framework.

The implementation of the GAEC framework results in a high variety of minimum requirements throughout Europe and sometimes even within the MS when GAECs are defined at regional level.

GAEC framework is: Soil erosion: Protect soil through appropriate measures; Soil organic matter: Maintain soil organic matter levels through appropriate practices; Soil structure: Maintain soil structure through appropriate measures; Minimum level of maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats; Protection and management of water: Protect water against pollution and runoff, and manage the use of water.

All of the above mentioned requirements are well organized and structured in Bulgaria and are known as National standards for maintaining the agricultural land in good ecological condition. If a farmer does not confirm with the Standards he has to be fined.

Table 1

A structure of agriculture through Statistical areas in 2004 (hectares)

Main categories	Bulgaria	North-West	Central North	North-East	South-East	South Central	South-West
1	2	3	4	5	6	7	8
Wheat	1044006	102364	244298	310626	154951	186329	45441
Barley	333484	31752	79295	91791	69375	52547	8724
Rye and Triticosecale	17578	92	661	-	792	11722	4311
Oats	42467	9596	12336	9651	2292	5114	3478
Corn	415971	43923	103014	220991	11471	24474	12098
Other cereals	21249	-	-	6917	5123	9209	-
<u>Total cereals</u>	1874755	187724	439604	639976	244004	289395	74052
Sunflower	598203	63660	158449	202352	67395	82486	23861
Oilseed crops	20517	1623	1480	14828	1055	1531	-
<u>Total oilseeds</u>	618720	65283	159929	217180	68450	84017	23861
Fiber plants	3735	-	-	-	-	3735	-
Tobacco	48975	1794	354	2710	2308	30544	11264
Other industrial	97118	3170	4325	36352	42807	9627	836
<u>Total industrial</u>	149828	4964	4679	39063	45116	43906	12100
Potato	24562	199	1135	1402	268	13379	8179
Pea, Broad beans, Lentil, Beans, etc.	9676	-	1761	5419	696	1108	692
Fresh vegetables	37765	199	1455	11493	5265	17497	1856
Flowers, green-house, seed-bed	6796	367	1503	1807	972	1678	469
Family gardens	49122	4292	6329	6119	7859	11063	13460
<u>Total vegetable</u>	127921	5057	12183	26240	15060	44725	24656

les and flowers							
1	2	3	4	5	6	7	8
Total meadows	104975	3605	29229	42211	4117	18516	7297
Total permanent grassland	1805711	175873	292823	174725	211603	456018	494669
Vineyards	117041	12112	11488	23448	25220	38291	6482
Apricots, Peaches	14287	333	2572	8009	1726	1119	528
Cherries, Morelос	13672	333	1157	1725	1115	5201	4141
Plums	19703	775	5782	1300	1678	6351	3817
Apples	7350	389	110	2179	380	3705	587
Pears and other fruit trees	15291	-	3135	2738	691	7612	1115
Other perennials	23561	1489	1767	5462	3053	4537	7253
Total perennials	210905	15431	26011	44861	33863	66816	23923
Fallow land	437674	110342	66679	64204	37198	113093	46158
Utilized agricultural area	5330489	568279	1031137	1248460	659411	1116486	706716
Uncultivated land	455197	82257	66572	53694	65709	121510	65455
Total agricultural land	5785686	650536	1097709	1302154	725120	1237996	772171

Source [1]

Table 2

The structure of agriculture through Statistical areas in 2007 (hectares)

Main categories	Bulgaria	North-West	Central North	North-East	South-West	South Central	South-East
1	2	3	4	5	6	7	8
Wheat	1120510	123513	253588	377856	36378	166040	163135
Barley	193840	17998	57184	48855	4482	23976	41345
Rye and Triticosecale	12030	2645	-	294	1685	6631	775
Oats	25412	5262	6288	3468	4502	4099	1793
Corn	408880	51822	109281	203341	13170	20250	11016
Other cereals	11678	1125	-	775	99	6756	2923
Total cereals	1772350	202365	426341	634589	60316	227752	220897
Sunflower	686692	83322	174301	217677	12098	108782	90512
Oilseed crops	59389	7157	11018	35281	-	2036	3897
Total oilseeds	746081	90479	185319	252958	12098	110818	94409
Fiber plants	501	-	-	-	-	404	97
Tobacco	31144	409	301	2102	5558	21688	1086
Other industrial	40948	-	3010	5419	397	10071	22051
Total industrial	72593	409	3311	7521	5955	32163	23234
Potato	21890	-	599	579	8437	12081	194
Pea, Broad beans, Lentil, Beans, etc.	6692	-	1504	1714	1595	1201	678
Fresh vegetables	41088	614	399	16260	1023	18769	4023
Flowers, green - house, seed-bed	5645	200	1299	1099	594	1537	916
Family gardens	25790	2182	5202	5329	5696	4395	2986
Total vegetables and flowers	101105	2996	9003	24981	17345	37983	8797
Total meadows	101674	2706	25343	39417	4088	22372	7748
Total permanent grassland	1842141	186916	302776	169411	510564	457950	214524
Vineyards	103949	9754	8412	18091	6450	36859	24383
Apricots, Peaches	13333	-	2303	6995	298	1218	2519
Cherries, Morelos	15768	98	992	1209	4801	6618	2050
Plums	16264	490	2984	1514	3765	6523	988
Apples	5443	-	200	409	778	2953	1103
Pears and other fruit trees	12549	-	1403	3172	99	7381	494
Other perennials	21219	1488	1687	5245	5832	4272	2695
Total	188525	11830	17981	36635	22023	65824	34232

<u>perennials</u>							
Fallow land	291751	45101	42243	41423	42524	79464	40990
Utilized agricultural area	5116220	542808	1012317	1206935	674913	1034326	644921
Uncultivated land	550116	97338	67597	74327	71818	169992	69044
<u>Total agricultural land</u>	5666336	640146	1079914	1281262	746731	1204318	713965

Source [1]

Table 3

The structure of agriculture through Statistical areas in 2012 /hectares/

Main categories	Bulgaria	North-West	Central North	North-East	South-East	South-West	South Central
1	2	3	4	5	6	7	8
Wheat	1194141	256333	252044	281051	226916	54632	123165
Barley	176556	22591	32859	29495	68777	3076	19758
Rye and Triticum secale	24303	298	400	786	8452	4367	10000
Oats	16814	3286	1998	3110	2287	3378	2755
Corn	525412	191145	124700	156926	14720	15556	22755
Other cereals	16046	100	-	1827	3870	1083	9166
<u>Total cereals</u>	1953272	473753	412001	473195	325022	82092	187209
Sunflower	854738	187137	175539	216189	169010	25479	81384
Oilseed crops	144457	66567	24624	8661	29426	705	14474
<u>Total oilseed crops</u>	999195	253704	200163	224850	198436	26184	95858
Fiber plants	-	-	-	-	-	-	-
Tobacco	24857	103	1507	491	3302	3881	15573
Other industrial	40989	100	1779	1291	32495	510	4814
<u>Total industrial</u>	65846	203	3286	1782	35797	4391	20387
Potato	17465	-	197	579	302	9666	6721
Pea, Broad beans, Lentil, Beans, etc.	9395	-	3984	1010	2197	900	1304
Fresh	24778	407	4207	4123	4645	396	11000

vegetables							
Flowers, green-house, seed-bed	5828	601	988	894	1216	792	1337
Family gardens	22226	1898	5022	2518	3677	4551	4560
<u>Total vegetables and flowers</u>	79692	2906	14398	9124	12037	16305	24922
<u>Total meadows</u>	94524	10024	20979	21415	9542	4499	28065
<u>Total permanent grassland</u>	1646993	282289	146256	124094	272686	456784	364884
Vineyards	77341	9690	6298	10733	25159	4873	20588
Apricots, Peaches	10138	-	4975	618	2420	597	1528
Cherries, Morelos	16860	799	906	391	6376	4912	3476
Plums	14776	3489	1298	992	1499	1881	5617
Apples	5234	200	593	410	907	880	2244
Pears and other fruit trees	12872	405	1497	3793	3722	100	3355
1	2	3	4	5	6	7	8
Other perennials	18143	2384	1880	3139	2687	4489	3564
<u>Total perennials</u>	155364	16967	17447	20076	42770	17732	40372
Fallow land	128097	23312	7728	12253	22514	21260	41030
Utilized agricultural area	5122983	1063158	822258	886789	918804	629247	802727
Uncultivated land	358239	80366	35252	47810	64728	60701	69382

Total agricultural land	5481222	1143524	857510	934599	983532	689948	872109
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Source [1]

The following conclusions can be made:

First, Bulgarian structure of agriculture is still in transition.

Second, CAP lets Bulgarian farming to receive a considerable financial aid but Bulgaria was unable to spread it to as many farmers as possible.

Third, there are increases in agricultural activities which are mainly in cereals, oilseeds and decreases in uncultivated land, meadows, grassland, vegetables and industrial crops.

Fourth, there is a high possibility of abnormal crop rotation [3, p. 15] agriculture which is not the best possible solution from economic point of view for Bulgaria.

Fifth, there are obligatory environmental measures which have to be implemented by Bulgarian farmers and which could help maintain the fertility of agricultural land.

Bulgarian authorities have obligations to implement common agricultural policy since 2007. The CAP implementation is not enough to increase the competitiveness of agricultural sector. Bulgarian government has to convince the Commission of additional measures for supporting of rural areas, which will help diversifying the production and producing added value from the sector.

REFERENCES

1. Ministry of agriculture and food, Department «Agro statistics», Bulgarian Survey Monitoring of Agriculture and Economic Environment 2003–2012.
2. Ministry of agriculture and food, Department «Agro statistics», Agricultural census in Bulgaria 2003–2010.
3. Valchev N., Agrarian economics, Gorex Press, Sofia, 1998.
4. Europa EU // Official website of the European Union [Electronic database] / EU. – Access mode: <http://www.europa.eu>.

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РЕАЛІЗАЦІЯ САП ТА ЇЇ ВПЛИВ НА ЗЕМЛЕКОРИСТУВАННЯ ТА АГРАРНУ СТРУКТУРУ У БОЛГАРІЇ

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У статті аналізується динаміка аграрної структури, до і після реалізації Спільної аграрної політики, яка відбулася після членства Болгарії в ЄС. В якості держави-члена ЄС, країна має зобов'язання застосовувати САП з усіма плюсами і мінусами, які можливі в болгарському сільському господарстві. Дані, що використовуються в даному документі, є з офіційних джерел і дозволяють нам спостерігати динаміку і відмінності в статистичних районах в Болгарії, що дає нам більш чітке уявлення про розвиток сільського господарства.

Ключові слова: аграрна структура, Болгарія, динаміка, сільськогосподарські угідь, спільна сільськогосподарська політика, сприятливі сільськогосподарські та екологічні умови.

РЕАЛИЗАЦИЯ САП И ЕЕ ВЛИЯНИЕ НА ЗЕМЛЕПОЛЬЗОВАНИЯ И АГРАРНУЮ СТРУКТУРУ В БОЛГАРИИ

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В статье анализируется динамика аграрной структуры, до и после реализации Общей сельскохозяйственной политики, которая состоялась после членства Болгарии в ЕС. В качестве государства-члена ЕС, страна должна применять САП со всеми плюсами и минусами, которые возможны в болгарском сельском хозяйстве. Данные, используемые в данном документе, являются из официальных источников и позволяют нам наблюдать динамику и различия в статистических районах в Болгарии, что дает нам более четкое представление о развитии сельского хозяйства.

Ключевые слова: аграрная структура, Болгария, динамика, сельскохозяйственные угодья, общая сельскохозяйственная политика, благоприятные сельскохозяйственные и экологические условия.