# EFFECT OF ACCESSION TO THE EUROPEAN UNION ON FARMS OF BÉKÉS COUNTY

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**Abstract.** The most significant problems of agricultural enterprises are the lack of equipment and assets, financing production and development as well as the low level of income achieved through agricultural activity. Subsidies from the government, favourable credit constructions and the European Union resources play a particularly important role in improving the farmers' financial status and in implementing investments and financing operating funds. During the last five years several national and from May 2004 the European Union subsidies or low-premium credit constructions could be applied for by farmers. In this study based of the National Country Development and Planning Information System the intensity of utilizing the European Union subsidies was examined in the South Plain region in Békés county, focused on the Agricultural and Rural Development Operative Programme.

Key words: agricultural financing, European Union subsidies, Gross Domestic Product

#### INTRODUCTION

The South Plain region consists of Békés, Csongrád and Bács-Kiskun county. These three counties can be found at the south and south-eastern borders of Hungary, they occupy 20% of area of the country. This region due to its favourable geographical conditions and the high quality of soil has an agricultural potential above the average. The importance of agriculture is reflected by its position taken in the structure of workforce, the high rate of workers in agriculture and of the area cultivated in agriculture, a competitive food industry even on international level [Kelle 2004]. In the county out of 2284 operating agricultural enterprises 72% were enterpreneurs, 15% limited companies, 8% deposit companies and 4% were cooperative societies in 2003. Concentration of works takes place in Békés county, too, which is marked by the reducing number of private enterprises, and the growth of works size on the basis of common agricultural and enterprise structure recordings.

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Before joining the EU during almost a decade, Hungary completed the harmonizing processes which were the conditions of becoming a member of the EU. Significant adaptation was needed especially in agriculture, within this the most important changes have been made in the supportive system. Agricultural producers of the member states have numerous opportunities along with direct financing which is supposed to improve the efficiency of production. The farmers in Hungary got acquainted with a supportive system differing from the previously familiar one during applying for resources of Pre-joining Funds which system is in connection with subsidies available from Structural Funds and Cohesive Funds resources [Pusztainé et al. 2005].

In spite of the consolidation and low-premium credit constructions, a considerable part of agricultural enterprises are in a critical financial status. It affects the competitiveness of our agriculture disadvantageously within the European Union. Involvement of enterprises is a symptom, the consequence of advanced reasons. The aim must be but one: ceasing the reasons of these consequences, or at least reducing them to an acceptable level. The average support level (PSE) of the Hungarian agriculture was 18.1% in 2004, which is considerably behind the over 30% average support level of EU-15's agriculture. In this situation, for the Hungarian farmers availing themselves of the community supportive opportunities in a greater extent is a matter of life and death. As the member of the EU new resources became available to the Hungarian agriculture. According to the contract of joining, the new members, among them Hungary, can not obtain direct susidies altogether but only gradually [Guba-Harza 2006]. Before joining the EU, after having a yearly announced and almost yearly varying agricultural supportive system, most of the farmers could adjust to the new, complex supportive system quite hard and slowly. In the new system, susidies do not come to the farmers by right of the subjects, they have to apply for them by right of different titles to the same area provided that the farmer can meet the requirements of each titles.

Since 2004 Hungarian farmers have had the opportunity to utilize resources, to apply for European Union subsidies. After joining, in agriculture SAPARD supportive system financed by the Pre-joining Funds expired and was replaced by Agricultural and Rural Development Operative Programme (ARDOP) operating between 2004 and 2006. SAPARD programme had double purposes: on one hand, to offer help to countries intending to join with taking over common law, on the other hand, it contributed to establish a sustainable and competitive agriculture. The elements and measures of SAPARD can be found among the measures of ARDOP extended with some others [Kelle 2006]. In the first phase of ARDOP (2004–2006) to finance the projects of winner tenders 75.8 billion HUF (i.e. 0.3 billion EUR) EU subsidies, 26.2 billion HUF (i.e. 0.1 billion EUR) national resourses were at disposal, 105 billion HUF (i.e. 0.4 billion EUR) altogether. During the years of the phase above, the rate of subsidy amounts were: 23.3, 33.3, 43.4%. One part of the experience on examining the accomplishment of aims shows more advantageous tendencies compared to the previous state (SAPARD). However, there are still lessons to take to heart. Most of the priorities (measures) among the aims of ARDOP enabled SAPARD tenders, dismissed because of lack of assets, to be reasserted. The tender notice of measures and the practice of judgement procedure considerably differ from the pre-joining programme mentioned above. It is embodied by the much greater number of submeasures which improved the choice of specializations to be developed, but crumbled up resources at disposal. The institutional and structural system judging claims on subsidies was reformed in the middle of 2004 and it established the preliminary decision-making work. Following the support quota at disposal consistently resulted in suspending measures, determining deadlines, and repeated announcement of these. Along with often altering tender conditions, it generated discontent among support claimants [Lengyel 2006].

In this paper based on data of the National Country Development and Planning Information System (NCDPIS) the intensity of utilizing the European Union subsidies was examined in the South Plain region in Békés county, paying a great attention to Agricultural and Rural Development Operative Programme.

#### MATERIAL AND METHODS

In this examination variation and intensity of utilizing the European Union subsidies in the South Plain region and in Békés county were analyzed. The analysis was carried out on the basis of database of the National Country Development and Planning Information System (NCDPIS in Hungarian). This system gives an overall picture of the state of society, economy, technical infrastructure and environment regarding different area units, based on the data and indexes representing specializations. The data in NCDPIS is based on those collected by the Central Statistics Office on one hand, and on data describing the environment, the state of nature, and characteristic features of it from regional point of view, along with some essential details of it from recordings at different specializations on the other hand. Indexes derived from data of the Valuation Office represent the income state of inhabitants in an area. From this database practically an unlimited number of indexes, diagrams and cartograms can be generated dinamically. In the Information System several documents and information on country development and planning can be viewed.

The data were examined by general and special statistical methods. The term examined covers the period from 1999 to 2006. In some cases data at disposal from the database cover shorter terms than this 7-year period.

During the analysis the next indexes were applied:

- Deviation of gross domestic product per capita from regional and national average (1000 HUF/capita);
- Gross added value per capita in agriculture, game and forest economy, fishery, national economic branches and their deviation from regional and national average (1000 HUF/capita);
- Value of the European Union subsidy per capita in Békés county (1000 HUF/capita);
- Value of average European Union subsidy in Békés county (1000 HUF/capita);
- Rate of Agricultural and Rural Development Operative Programme (ARDOP) within the European Union subsidies in Békés county (%);
- Efficiency ratio: claimed support amount for one tender/contracted support amount for one tender.

#### RESULTS AND DISCUSSION

In the economy of Békés county, the role of agriculture is admittedly significant, 6–7% of GDP in national agriculture is produced by farmers of the county, and the share of the South Plain region consisting our county is 22–24% in the national gross product (Table 1). Analysing the different periods, their share indicates a falling tendency. This process could also be considered favourable, as it indicates the increase of other national economy branches share which represents decline of the agrarian feature of our county and region.

Table 1. Gross added value per capita in agriculture, game and forest economy, fishery, national economic branches (million HUF)

Tabela 1. Wartość dodana brutto na osobę w rolnictwie, leśnictwie i w rybołówstwie (mln HUF)

Year	National GDP in agriculture	Regional GDP in agriculture	County GDP in agriculture	Ratio of Regional GDP in agriculture in National (%)	Ratio of County GDP in agriculture in National (%)	Ratio of County GDP in agriculture in Regional (%)	
2001	561 182	136 668	40 175	24.4	7.2	29.4	
2002	536 567	122 053	34 010	22.7	6.3	27.9	
2003	521 388	116 935	33 547	22.4	6.4	28.7	
2004	676 643	149 891	41 060	22.2	6.1	27.4	
2005*	707 092	156 636	42 908	22.2	6.1	27.4	
2006*	735 376	162 902	44 624	22.2	6.1	27.4	

\*Estimated values/wartości oszacowane

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

The change of gross domestic product per capita in Békés county and the South Plain region marks an unfavourable process. In the past 8 years the efficiency of the county continuously fell behind the national average (61–67% of average), but even behind the regional average (88–92% of it), although the latter one is also lower than the national average (Table 2). However, it would be observed that this region shown symptoms of fallback: the pace of growth was behind the national and even regional, therefore deviation increased in economic efficiency. One reason of it could be the higher rate of agriculture. Gross added value (GAV) per capita in agriculture is 56–82% higher than the national average, but this surplus is of falling tendency, too. The hectic changes year by year are the consequences of weather and market exposure of agriculture (Table 3).

Joining the European Union offered the hope that the regional differences shown before would decrease, or could be decreased by the help of the supportive system whose key priority is regional politics. Even though, its success depends upon the active applicants and the proficiency of applications. Application activity in the county, naturally due to alteration of resources, turned from national support tenders to the European Union tenders. The number of supported tenders decreased altogether, due to a dramatic decline of national resources primarily, at the same time tenders applying for union resources shown a dynamic increase. This increase stopped in 2006 though, the support amount for one tender and the enter value of projects grew significantly, the average value of them almost quadrupled. It also indicates the economic growth and increase of enterprises

Table 2. Deviation of gross domestic product per capita from regional and national average (1000 HUF/capita)

Tabela 2. Odchylenia produktu krajowego brutto na osobę od średniej regionalnej i krajowej (tys. HUF/osobę)

			National GDP	Difference	U	Difference	Change of difference		Ratio of
Year	County	Regional GDP		of County and	difference (previous	of County and	(previous	County GDP in	County GDP in
	GDP	GDP		Regional	year =	National	year =	Regional	National
				GDP	= 100%)	GDP	= 100%	GDP	GDP
1999	750	819	1 113	-69		-363		91.58	67.39
2000	856	929	1 300	-73	105.80	-444	122.31	92.14	65.85
2001	954	1 044	1 471	-90	123.29	-517	116.44	91.38	64.85
2002	1 034	1 150	1 665	-116	128.89	-631	122.05	89.91	62.10
2003	1 120	1 254	1 841	-134	115.52	-721	114.26	89.31	60.84
2004	1 235	1 395	2 021	-160	119.40	-786	109.02	88.53	61.11
2005*	1 291	1 458	2 112	-167	104.38	-821	104.45	88.55	61.13

<sup>\*</sup>Estimated values/wartości oszacowane

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 3. Gross added value per capita in agriculture, game and forest economy, fishery, national economic branches and its deviation from regional and national average

Tabela 3. Wartość dodana brutto na osobę w rolnictwie, leśnictwie i rybołówstwie oraz jej odchylenia od średniej regionalnej i krajowej

	County	Regional	National	Ratio	Ratio	Difference	Change	Difference	Change
Year	GAV per	GAV per	GAV per	of County	of County	from	of	from	of
icai	capita in	capita in	capita in	in	in	Regional	difference	National	difference
	agriculture	agriculture	agriculture	Regional	National		(%)		(%)
2001	99 958	99 007	55 016	100.96	181.69	+951		+43 991	
2002	85 225	88 883	52 735	95.89	161.61	-3 657	-384.62	+36 148	82.17
2003	84 687	85 537	51 407	99.01	164.74	-851	23.26	+34 130	-99.06
2004	104 520	110 197	66 883	94.85	156.27	-5 677	667.34	+43 313	126.91
2005*	109 223	115 155	69 893	94.85	156.27	-5 933	104.50	+45 262	-98.96
2006*	113 592	119 762	72 689	94.85	156.27	-6 170	104.00	+47 073	104.00

<sup>\*</sup>Estimated values/wartości oszacowane

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

(Table 4). Békés county takes the fourth-fifth place in the support amount per capita index in the ranking of counties according to NCDPIS data.

The supportive system after joining the Union secured the developmental resources through operative or credit programmes. During two and a half years out of 605 projects applying for the resources of the Agricultural and Rural Development Operative Programme and the Economic Competitiveness Operative Programme over 200 applications per programme received subsidies. Meanwhile, the average support amount was 16 or 24 million HUF. In respect of the county's development, projects implemented by Environment Protection and Infrastructure Operational Programme and Regional Development Operative Programme played the most significant role (Table 5). Utilizing national resources dropped.

Table 4. National and European Union subsidies in Békés county between 2002 and 2006 Tabela 4. Subsydia krajowe i unijne w Békés w latach 2002–2006

Year	Natio- nal (piece)	National subsidies (M HUF)	Average amount of subsidies (M HUF/project)	EU (piece)	EU subsidies (M HUF)	Average amount of subsidies (M HUF/project)	Total (pieces)	Total subsidies (M HUF)	Average amount of subsidies (M HUF/project)
2002	668	9 563	14.3	12	346	28.8	680	9 909	14.6
2003	784	8 555	10.9	12	974	81.2	796	9 529	12.0
2004	654	5 787	8.8	38	5 451	143.4	692	11 238	16.2
2005	172	5 076	29.5	314	16 441	52.4	486	21 517	44.3
2006	148	4 766	32.2	223	19 153	85.9	371	23 919	64.5

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 5. European Union subsidies in Békés county between 2002 and 2006 (on the base of programmes)

Tabela 5. Subsydia Unii Europejskiej w Békés w latach 2002–2006 (na podstawie programów)

Operative programme	Number of projects	Subsidies (M HUF)	Average subsidies (M HUF/project)
Environment Protection and Infrastructure OP	7	16 444	2349.1
Regional Development OP	25	8 069	322.8
Agricultural and Rural Development OP	243	5 940	24.4
Human Resources Development OP	62	4 322	69.7
Phare programme	42	4 083	97.2
Economic Competitiveness OP	226	3 608	16.0

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 6 represents among the European Union subsidies especially the distribution of ARDOP subsidies supporting agriculture and country development between 2002 and 2007. Farmers received the first ARDOP subsidies from 2005, the average support amount per project was more than 24 million HUF (i.e. 0.1 million EUR) which takes 35% of the average support amount for all European Union subsidies. In respect of the amount of ARDOP subsidy per capita a significant drop can be detected in Békés county from 2005 by 2006: the amount of subsidy in 2006 is less than half of the amount in 2005, while in case of all EU subsidies this amount increased in a small extent. Farmers in Békés county handed in more than 70% of all ARDOP applications in 2005 which was beyond 70% of all ARDOP subsidies amount.

In respect of the number of EU subsidies applied for between 2002 and 2006, it can be stated that Békés county received more than 3% of the national subsidies, and 6% of the support amount. Examining the support amount per one tender, it can be pointed out that in Békés county more than one and a half times higher support amount was given to one tender compared to the national average which demonstrates the application activity of the county (Table 7).

Regarding the efficiency of the European Union applications from 2004 it can be state that the efficiency ratio of Békés county was higher than the regional and national ratio

Table 6. European Union subsidies distribution in Békés county Tabela 6. Rozdysponowanie subsydiów unijnych w Békés

	Number of	Total	Value	Value	Average	Average	Value	Value
	ARDOP	number	of	of EU	amount	amount	of per capita	of per
Year	projects	of EU	ARDOP	subsidies	of ARDOP	of EU subsi-	subsidies	capita EU
	(piece)	porjects	subsidies	(M HUF)	subsidies	dies	ARDOP	subsidies
	<u> </u>	(piece)	(M HUF)		(M HUF)	(M HUP)	(M HUF)	(M HUF)
2002	0	12	0	346	0	28.8	0	867.0
2003	0	12	0	974	0	81.2	0	2 458.8
2004	0	38	0	5 451	0	143.4	0	13 875.7
2005	180	314	4 188	16 441	2.3	52.4	10 749.8	42 200.8
2006	57	223	1 652	19 153	29.0	85.9	4 281.5	49 638.9
2007	6	6	99	99	16.5	16.5	_	_
Total	243	605	5 940	42 465	24.4	70.2		

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 7. European Union support amount for one tender Tabela 7. Wartość wsparcia Unii Europejskiej na jeden wniosek

EU subsidies (2002–2006)	Békés county	Hungary	Ratio of Békés county in Hungary (%)
EU subsidies (piece)	599	16 197	3.7
EU subsidies (M HUF)	42 365	708 136	6.0
Total (piece)	3 025	93 120	3.2
Total (M HUF)	76 112	1 391 685	5.5
Amount of EU subsidies per project (M HUF)	70.7	43.7	161.8
Amount of total subsidies per project (M HUF)	25.2	14.9	168.4

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 8. EU subsidies and efficiency indexes of ARDOP (2004–2007) Tabela 8. Subsydia UE i wskaźniki efektywności ARDOP (2004–2007)

Subsidies	Claimed Obtained		Amount of projects (M HUF)		Efficiency ratio of		Claimed Obtained		Efficiency ratio per	
Subsidies	projects (piece)		claimed	obtained	subsidy amount (%)	projects (%)	projects subsidies per pr (%) (M HUF)		project t (%)	
National EU	40 558	15 624	1 576 388	670 852	42.6	38.5	38.867	42.937	110.5	
National ARDOP	11 019	4 059	197 133	105 489	53.5	36.8	17.890	25.989	145.3	
Regional EU	5 950	2 444	222 281	97 702	44.0	41.1	37.358	39.976	107.0	
Regional ARDOP	2 082	858	40 748	22 442	55.1	41.2	19.572	26.156	133.6	
County EU	1 358	563	70 334	38 382	54.6	41.5	51.792	68.174	131.6	
County ARDOP	533	243	10 463	5 940	56.8	45.6	19.630	24.444	124.5	

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

in case of both support amount and number of projects, and the same can be mentioned to the efficiency per one tender. In respect of the success of the ARDOP both efficiency indexes were also beyond the regional and national data, however, it was lower than those counting the support amount per one project (Table 8).

## **CONCLUSIONS**

Agrarian feature of the South Plain region and Békés county in it determines their economic advancement. The gross added value per capita in the agrarian sector of the county and region considerably exceeds the national average and the share of this sector in gross domestic production is well above the national average. It also brings some disadvantegous consequences though:

- The growth of economic production in the county and region fell behind the national growth, between values of GDP per capita there is a growing gap;
- The fallback of region can be stopped by proper activity and proficiency of applications:
- The county's share in tender resources has increased, the contracted amount for one tender has grown;
- The size of projects has increased considerably which indicates the applicants' economic increase:
- The county's application activity is high, it is in the first third of counties;
- During the judgement of subsidies judges preferred applications of higher cost price (more complex).
- Applicants in Békés county took part in tenders for the EU subsidies with an efficiency well above the national and regional average;
- At the same time it is disadvantageous that the support amount per one project (and consequently the total cost of projects) in case of developments financed by ARDOP is lower than the national or regional average which is reflected by smaller individual developments;
- The efficiency of application indicates that the region and the county in it is prepared to take part in the EU tenders successfully, and it could be profitable in the period of 2007–2013: it will support the economy of the county to fall into line and the development of agrarian production, processing industry based on it.

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# WPŁYW AKCESJI DO UNII EUROPEJSKIEJ NA GOSPODARSTWA ROLNE W GMINIE BÉKÉS

Streszczenie. Do najważniejszych problemów przedsiębiorstw rolniczych należy zaliczyć brak wyposażenia i aktywów, finansujących produkcję i rozwój, jak również niski poziom dochodów uzyskiwanych z działalności rolniczej. Rządowe subsydia, kredyty preferencyjne i środki Unii Europejskiej odgrywają znaczące role w poprawie sytuacji finansowej rolników i we wprowadzaniu inwestycji. W ostatnich pięciu latach rolnicy mogą korzystać z krajowych, a od maja 2004 roku także z unijnych subsydiów oraz niskooprocentowanych kredytów. Na podstawie Narodowego Systemu Informacyjnego Rozwoju Kraju i Planowania w artykule ukazano intensywność wykorzystania subsydiów unijnych w regionie South Plain – Békés, koncentrując się na Programie Operacyjnym Rozwoju Rolnictwa i Obszarów Wiejskich.

Słowa kluczowe: finansowanie rolnictwa, subsydia Unii Europejskiej, produkt krajowy brutto

Accepted for print – Zaakceptowano do druku: 10.08.2007