

**UNIVERSITY OF DEBRECEN**  
**Centre of Agricultural Sciences**  
Faculty of Agricultural Sciences  
Department of Land Use and Regional Development

**INTERDISCIPLINARY AGRICULTURAL AND NATURAL SCIENCES  
DOCTORAL SCHOOL**

Head of Doctoral School:  
Prof. Dr. János Nagy D.Sc.

Consultant:  
Prof. Dr. Botond Sinóros Szabó D.Sc.

**DOCTORAL (Ph.D.) THESIS**

**THE REGIONAL ASSISTANCE SYSTEM OF THE EU AND THE NORTH GREAT  
PLAIN REGION**

Prepared by:  
**Dr. Attila János Nagy**

Debrecen  
2005

## 1. INTRODUCTION

The regional (structural) funding policy of the EU is decisively significant for the member states of the European Union. The possibility of development and cohesion of regions with various levels of development (the so-called NUTS 2 level regional units within specific states) primarily depends on it, which is also one of the most important objective and essence of EU funding policy in the „Europe of Regions”. The stake is enormous especially for the underdeveloped regions of Hungary, which can expect significant development funds as a result of EU regional funding policy, since currently about 40% of the European Union’s budget is aimed at eliminating underdevelopment. The various development funds, first and foremost the Structural Funds and the Cohesion Fund are already supporting the regional funding system from this year.

During the development of my dissertation I relied primarily on professional publications, various written sources about the history of the European Union and the issues of funding policies, library and press releases, official documents, statistical databases and extensive internet resources as well as my recent practical experiences I gained while working in Brussels.

More than a year after the EU accession we can say that an important period has started for agriculture, villages and rural areas. The common agricultural policy of the EU considers sustainable development and environmental protection to be the most important. Hungary is poor in minerals which set back significant industrial development. The conditions of agricultural development are good, but great differences can be detected in the natural soil fertility, soil water cycles and climatic conditions in various geographic regions. After the structural change in ownership, land use and production structure only partly fits growing site conditions. Natural conditions allow the production of unique, Hungarian products in a number of agricultural regions.

Agriculture plays an important role in preserving the values of the country, in the sustainable development of rural areas, in shaping rural societies and reducing social problems and regional differences. Economic development and the consolidation of market conditions after the regime change in Hungary took place differently in the specific regions, therefore regional differences increased. The North Great Plain region from the seven regions in Hungary is one of the most underdeveloped regions on the basis of various statistical data. In my dissertation I am going to examine the condition of the region along with development possibilities from the aspect of reducing underdevelopment and ensuring sustainable development.

I am going to review regional policy objectives of the European Union and Hungary as well as some of the early results, while providing a survey and evaluation of regional peculiarities in the second year of Hungary’s EU accession. I will also

analyse regional disparities in Hungary and especially in the North Great Plain region to find ways of sustaining development.

I wish to examine whether the objectives outlined in regulation XXI of 1996 about Regional development and management, aimed at balancing regional development differences, have been fulfilled and whether the social and economic conditions of the region have improved based on the regional statistics of the Hungarian Central Statistical Office.

It is my objective to reveal development possibilities and methods by assessing the conditions, agricultural land use and regional development concepts of the North Great Plain region, especially in Hajdú-Bihar county. I consider it important to examine whether the regional development and other funding allocated to this region have contributed to economic development.

## **2. MATERIALS AND METHOD OF RESEARCH**

### **2.1. Principles of structural fund utilization**

Since the beginning of their operation, the signing of the Treaty of Rome, Structural Funds *have been utilized according to the following most important principles:*

*Principle of utilization according to comprehensive objective system*

This means, that structural policy aims to reduce problems in specific priority areas according to a comprehensive objective system based on the coordination of different funds. The five principles that have to be followed during the utilization of EU funding programs are:

- partnership
- programming
- additionality (co-financing)
- concentration
- and project monitoring

*Principle of complimentarity and partnership*

*Partnership* is the institutional coordination of decisions that have an impact on the regional development of organisations from different sectors, ownership and activity backgrounds. Partnership includes also includes complimentarity and contribution by the Community to the success of national action programs. Regional and local governments, other competent organisations, economic and social partners as well as other interested organisations participate in the partnership between member states and the Community. Partners cooperate in all

phases of programming, planning, financing, implementation and monitoring. The recipients of funds are usually not governments of member states, but regions, local governments with the ability to implement programs through institutional system.

*Principle of programming and coordination*

Programming is a bottom-up strategic and operative planning, development priorities and funds conformed to legitimized strategies where individual project financing was replaced by the funding of complex programs. Programming is an organising, decision making and financing process which contains the implementation phases throughout many years of cooperation between member states and the Community. Member states prepare Comprehensive Development Plans according to objectives. This is a documentation which contains development strategies, priorities of planned actions as well as related objectives and planned financial sources through the evaluation of current situations, considering community objectives and priorities. These are submitted to the European Commission; that decides about the Community Funds which is the approved version of the development plan proposed by the member state. It contains strategies and priorities of the action programs, along with special objectives and the contribution from Structural Funds. The Operation Program, which is approved by the Community Fund Committee, contains those actions which are to be implemented on the basis of accepted priorities and programs of many years, as well as the finance forms of funds provided by Structural Funds. The Community Funds and the Operation Programs are published jointly in the Simple Programming Document, which is also approved by the Commission.

*Principle of additionality (co-financing)*

*Concentration and additionality:* clearly distinguished development categories, combined funding and not community finance assigned to sectoral priorities serving economic growth and structural transformation. Additionality, within this, means that applying organisations and individuals also have to be aware that EU programs do not provide full financing for any type of project. A significant portion of the expenses have to be financed from own sources, bank loan or other resources of the beneficiary state, end user organisation or private entrepreneur. In other words, funding from the European Union is additional. They are aimed at helping those who are willing to help themselves and make efforts expected from them. Additional sources in the EU mean „own contribution” in addition to the funding from the European Union.

This principle means, that Structural Funds cannot replace the structural policy expenditures of member states. The community and member states have to

concentrate their resources to regions that belong to objective 1. during the whole programming period. In the case of regions that belong to objectives 2. and 3., expenditures have to be directed to active workforce market policy. Member states cannot reduce their expenditures from previous fiscal periods on structural operations. Checking of additionality happens three times during the fiscal period. Firstly during the pre-evaluation of programming documents, secondly during mid-term until December 31<sup>st</sup>, 2003 and finally at the end of 2005 within the framework of the final evaluation and control. It has to be mentioned that according to the principle of compatibility, Structural Funds have to be in accordance with the founding document of the EU and the applied instruments of other EU institutions.

#### *The principle of concentration*

During the compilation of complex sectoral and regional plans, a large number of various problems and possible development objectives have to be taken into consideration. Some of the objectives are going to be in conflict with each other and often various alternatives occur to solve the problem. It is quite common that the available development funds in a given period only cover a part of the requirements.

Therefore, it is necessary to concentrate our efforts regionally according to sectors. The complex development programs always have to be established on a clear objective hierarchy. The order of importance among different objectives has to be reflected in the sequence of actions and size of allocated funds. *The principle of concentration refers to the assignment of objectives, instruments, activities and resources to each other including the setting of priorities and the ability of efficient decision making.*

#### **2.2 Obligations of monitoring and supervision**

The preparation and implementation of EU programs is strictly monitored all along by the government and the authorised organisations (different monitoring committees, National Monitoring Office, National Audit Office, the European Committee, the European Audit Office and external auditors on the basis of ad hoc engagement agreement) of the EU. The method of program implementation is precisely defined in the financial memorandum. The strict regulations of fund utilization are defined in international agreements and laws set by the EU. Governments are fully accountable for the use and expenditure of funds as well as for the program implementation according to original objectives. The additional principle from 2000 is the *principle of efficiency*.

The establishment of monitoring system for the utilization of specific financial funds by the European Union is defined in the government decree 124/2003.

(VIII.15.). It determined the monitoring organisations for EU domestic funds. The *Central Monitoring Committee* (CMC) was established to track and evaluate international aids and to initiate actions in the interest of coordinated and efficient implementation. It is the global monitoring, coordination and evaluation organisation of complex funding systems. *Joint Monitoring Committee*: organisation established for joint monitoring activities to be carried out by European Union and Hungarian experts, which supervises and coordinates the implementing processes of objectives within funding programs financed by the European Union (PHARE, ISPA, SAPARD). The *Guiding authority* in the case of SAPARD is the Ministry of Agricultural and Rural Development, while in the case of Structural and Cohesion Funds these are organisations appointed by the Government. The guiding authority appointed by the member state is a public or private organisation, regional or local authority that manages funds provided by the European Union.

### **2.3. Databases of the research and methods of analysis**

The data and information base of my research comes from annual agricultural reports, the regional development regulation of 1996, the related Parliamentary Decisions and implementation decrees, the National Development Plan and Operative programs. The data have been collected from Regional Statistical Annuals of Hungarian Central Statistical Office (HCSO), Agricultural Statistic Annuals and other publications about land use and regional data. The general agricultural census database (ÁMO 2000) compiled by HCSO containing data up to March 31. 2000. on the basis of the XLVI. regulation of 1999. also played an important role in my evaluations. This provides a detailed survey about the number of farms, structure of plots, average size, the method of land use according to planning-statistical regions and counties as areal units and statistical small regions.

I have also used surveys by Agricultural Research Institute (ARI) and studies of DU CAS Department of Land Use and Regional Development beyond the statistical publications when evaluating agricultural results and characterising the North Plain region. Parliamentary decisions and evaluations by the HCSO provided assistance when examining regional development differences. On the basis of the region's regional development concept, I wanted to find out whether the various, utilized regional development funds served the interest of social-economic, agricultural and rural development endeavours according to the data provided Regional Agencies and county Development Agencies. I used different statistical methods during the analysis of the database. The data of areal sequences were analysed by comparative figures, while the inner structure of various

multitudes were evaluated with the help of distribution analysis and used statistical figures to display the results.

### 3. UTILIZATION OF EUROPEAN FINANCIAL FUNDS

#### 3.1. Financing of the structural policy

The strategic importance of structural policy is reflected by the fact that community expenditures for this purpose made up 4.8% of the total budget in 1975, 8.1% in 1998 and representing a third of the total budget by the end of the nineties. The differences in agricultural supports and regional policy funding decreased from 10:1 to 1.3:1 over the course of twenty years (*table 1*).

*Table 1. EU funding expenditure*

Task	1994-1999		2000-2006		Annual average	
	billion ECU	%	billion ECU	%	billion ECU	%
Agricultural policy	220.3	47.8	329.2	44.1	42.3	45.6
Structural operations	155.1	33.7	275.0	36.9	33.1	35.7
Domestic policy	27.6	6.0	51.0	6.8	6.1	6.6
Foreign policy	28.5	6.2	49.9	6.7	6.0	6.5
Administration	22.2	4.8	35.6	4.8	4.4	4.7
Reserves	6.7	1.5	4.8	0.7	0.9	0.9
<i>Total</i>	<i>460.4</i>	<i>100.0</i>	<i>745.5</i>	<i>100.0</i>	<i>92.8</i>	<i>100.0</i>

*Source:* Annual Report of the CEC Agenda 2000.

#### 3.2. Recipient regions and the comprehensive objective system

The Council has outlined those objectives, on the basis of a comprehensive objective system, that can be financed from Structural Funds in a given financial period. The objectives that made up the utilization system of Structural Funds were determined during the 1988 Structural Fund reform, which were in effect until Agenda 2000 was launched. These six objectives were the following:

##### ***Objective no. 1: Supporting underdeveloped regions***

The regions where the ratio of GDP per capita measured on spending power parity does not reach 75% of the community average in the last three years belong to this group. This essentially includes Greece, Spain, Ireland, most of Portugal, Italy, Northern Ireland, Belgium, Austria, France, and few provinces of the Netherlands

naturally the eastern part of Germany. About 73% of the funds were used for this objective until 1999.

The Commission has classified a total 62 regions to objective no. 1 since January 1 2000, which remains in place for seven years. An additional 12 regions received the classification which temporarily qualifies them to access the highest funding until the end of 2005. It is typical that the Community still insisted on keeping the threshold limit at 75%.

***Objective no. 2: Funding for regions especially affected by declining industrial production***

Regions with underdeveloped industrial structure, generally with traditional heavy industry belong in this category. The funding was aimed at economic and structural transformation. 7 – 9% of the funds were spent on these objectives until the end 1999. The Community, even following the reforms, is still making tremendous efforts to concentrate funding on the most severe problems and smallest geographical areas. During selection, in the assessment of structural problems, the total unemployment and long term unemployment rate are the most important factors. The active participation of member states in compiling the list of severely affected regions is also regarded as essential.

The basic criteria of identification is that only NUTS III Level regions can belong in this objective, furthermore the population of regions listed under objective no. 2 cannot exceed 18% of the total EU population. The objective set for 2006 is to have 8.5 - 9% of the population in the current 15 member states living in regions listed under objective no. 2.

Naturally, there are exceptions here too. Neighbouring regions can also be included in this list if the economic and social problems of their agricultural areas are increasing due to the ageing population, or the rate of unemployment has an increasing tendency due to ongoing or planned transformations in crucially important industrial, agricultural, or service sectors.

A region can only belong to either objective no.1 or objective no. 2. Progressing regions that belonged to this category in 1999 were eligible to receive this temporary funding until 2003.

***Objective no. 3: Funding programmes for fighting long term and youth unemployment***

About 5-6% of the funds were used for this purpose until 1999. Currently, one criterion is set for this objective, namely that only those countries can be listed in this category that do not belong to objective no. 1.



***Objective no. 4: Funding for retraining employees, assisting adaptation to changes***

Made up 5-6% of the funds, clearly directly funding actions aimed at avoiding unemployment.

***Objective no. 5: Modernising various sectors of agricultural production and fishery***

Aimed at assisting structural adaptation of agriculture, in parallel with the development of areas where employment in agriculture is high. 4-5% of the funds were devoted to these target groups until 1999.

***Objective no. 6: Funding for areas with low population density***

Mostly aimed developing low population density areas of Finland and Sweden, making up 0.5-1% of the funding.

### **3.3. Structural Funds**

#### *3.3.1. European Regional Development Fund*

The task of the European Regional Development Fund is to support economic and social cohesion through eliminating regional disparities in the development of regions and through involvement in the transformation. On the basis of Article 130/c of the founding document it supports:

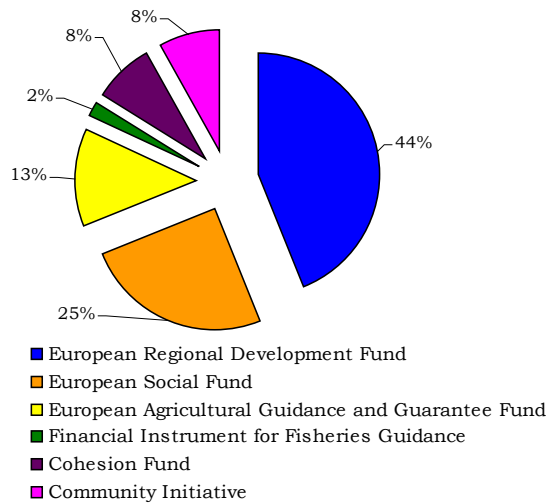
- investments creating permanent workplaces,
- development of infrastructure in regions that belong to objective no.1, as long as it increases the economic potential, development and structural adaptation of the region. It promotes the sustainability of employment and contributes to the development of Trans-European networks in the fields of energy, telecommunications and transportation, as well as infrastructural developments in regions that belong to objective category no. 1 and 2 as long as it contributes to the revitalisation of depressed urban regions, development of rural areas, improves access in order to facilitate investments,
- development of inner growth potentials through supporting local developments, motivating employment, small- and medium size enterprises,
- financing technology transfers and the application of innovative solutions,
- assisting capital access of enterprises,
- participating in the investments of enterprises,
- developing local infrastructure,
- services creating new workplaces,
- investments in health care and education in regions that belong to objective category no.1.

### 3.3.2. European Social Fund

The transformation of funding system objectives brought significant changes after the closure of the 1999 financial period (*figure 1*). The following aspects were highlighted after the objectives were re-evaluated:

- increasing the multiplication effect in education efficiency rather than the increasing the funding for employment,
- quality assurance for programmes, this means that the utilization of educational funding is most efficient when the knowledge of trained employees fits the requirements of national economy and the community,
- increasing cost efficiency, which means that such programmes should be compiled that are most likely to produce the highest output in the long term.

Through the changes in objectives and the funding structure it can be seen that problems of deteriorated heavy industry dominating crisis areas is a thing of the past. Presently, funds have to be targeted at modernisation, the development of information society and training employees to receive the required qualifications.



**Figure 1. Distribution of regional development funds, % (1999)**

*Source: European Commission Brussels, 1999*

### *3.3.3. The Orientation section of the European Agricultural and Guarantee Fund*

During the 1988 reform of the Structural Funds, objectives related to changing agricultural structures and rural development, listed in objectives no.1, 5 and 6 were included among the priorities. The Orientation section of the EAGGF makes up 15% of the total EAGGF budget, which funds the following objectives:

- diversification, transformation, reorganisation of agricultural production, quality improvement in the agricultural sector including production and processing activities,
- strengthening structure in forestry, forest development,
- reducing the agricultural effects of unfavourable natural conditions through income supports,
- restructuring plots for improving the efficiency of ownership structure, - developing consultation service,
- improving vocational training,
- research-development, innovation in agriculture,
- local or regional product quality labelling and related investments,
- financial tools and consultation for companies involved in processing agricultural and forestry products,
- supporting beginner farmers,
- transforming production potential, diversification, redirection, modification including the production of non-food agricultural products.

### *3.3.4. Financial Instruments of the Fishery Orientation*

The FIGG as a Structural Fund was created to solve a very unique problem in regions where structural changes in fishery is required. It is outstanding not because of its budget size but rather because of its objective and method. The basic problem was essentially the rate of over-fishing in the coastal waters of the Community. The situation was complicated by the fact that the Treaty of Rome declared joint ownership of the coastal waters of the member states in the Community, including the entire North Sea. Interestingly, Austria and Luxemburg can also receive funds, even though these are not coastal countries, which can be promising for Hungary as far as activities related to fishery at Lake Balaton are concerned.

### 3.4. The Cohesion Fund

The budget deficit, expressed in the ratio of GNP, of the beneficiary member state cannot exceed the limit set by the Community is a *precondition for accessing these funds*. The investment sources of financed projects have to be compiled in a way that prevents budget deficit increases. This means that ongoing, funded projects have to be completed according to plan, however the member state cannot launch new projects from the Fund.

Basic principles of the Fund:

- aimed at a sustainable development,
- applies the principle of *who pollutes pays*,
- emphasis on environmentally friendly transportation system based on sustainable development,
- expenditures of environmental protection activities also have to be included,
- environmental impact examinations have to be carried out with all projects.

During its activity, the Fund adapts to the transportation development policy, environmental protection action programme and Stability and Growth Pact of the Community.

The allocation of funding from the Cohesion Fund among member states is determined on the basis of population number, GNP per capita, size of dry land and other economic and social factors. 15.150 million ECU funding was approved between 1994-1999, 55% of which was received by Spain, 18% by Greece and Portugal, 9% by Ireland.

The total budget provided by the Cohesion Fund for the 2000-2006 period was 21 billion Euro. 3 billion Euro can be used annually. Every year, the commission evaluates the utilization of funds and the fulfilment conditions.

45% of the expenditures is spent on funding environmental protection and 55% on transportation projects.

In the field of environmental protection such projects can be funded that fit into the environmental protection policy of the Community and are in accordance with the existing priorities of the environmental protection action programme.

In the field of transportation, those projects can be funded that are part of the development directives of regulation no. 1996/11692 of the European Council about Trans-European networks. Due to the lack of eligible projects, the provided funding was not always fully exploited, despite the large ratio of community funding. The ratio of funds through the Cohesion Fund can reach 80% of the sources provided by the public sector, and 85% within the investment expenditures of projects. These funding ratios can be reduced where income is produced as a result of investments. These investments can be such infrastructural projects where direct payment is required upon use, or production investments in

the environmental protection sector, where the "who pollutes pays" principle is applied.

The coordination of community sources, Structural Funds and European Investment Bank has to be ensured in the case of funded projects. The ratio of community funding, in the case of Cohesion Fund projects can reach 90% of the investment expenses. The funded projects have to be significant enough to produce measurable improvement, therefore the lower limit of the funded projects is 10 million Euro.

### 3.5. Pre-accession Funds for EU enlargement

*Pre-Accession Funds*: community funding for candidate countries, aimed at supporting preparation for the accession: PHARE, ISPA and SAPARD. *Pre-accession Strategy*: it was created at the Assembly of the European Council in 1994 in Essen to provide assistance for the preparation of candidate countries. Components: European Agreements, structured dialogue, the PHARE and the White Book given to candidates at the Cannes summit in 1995 about the tasks of internal market regulations.

The PHARE, ISPA and SAPARD programmes of the European Union were created for the following main objectives: strengthening regional cooperation, introduction of EU Structural funds, preparation of target regions, implementation of planning, introduction of monitoring system, constructing partnership among governmental, local and civil organisations, practice of decision making mechanisms to be applied when receiving various funds, implementing decentralised decision making processes and complex testing of the entire planning-financing-monitoring process (*table 2*).

*Table 2. The budget of Pre-Accession Funds (million Euro 2000–2006 )*

Funds	2000	2001	2002	2003	2004	2005	2006
SAPARD	520	520	520	520	520	520	520
ISPA	1040	1040	1040	1040	1040	1040	1040
PHARE	1560	1560	1560	1560	1560	1560	1560
<i>Total:</i>	<i>3120</i>	<i>3120</i>	<i>3120</i>	<i>3120</i>	<i>3120</i>	<i>3120</i>	<i>3120</i>

Source: [www.europa.eu/int/comm/council](http://www.europa.eu/int/comm/council)

### 3.6. The PHARE Programme

Decisions on funding are made by the EU Commission based on the suggestions by the beneficiary country and the PHARE Management Committee in Brussels. Funding and other commitments regarding the launch of specific assistance programmes are made in the so-called financial memorandums of the Commission. These memorandums contain the programme budgets, name of

implementing organisation, programme objectives, content of specific development programmes, detailed expenditures and regulations on implementation, monitoring and evaluation.

Accordingly, the new objective system of the PHARE Programme set the centralisation of decision making, fund concentration and the improvement of project preparation as objectives.

Professional tasks of the programme, such as programme planning, issuing tenders, became the tasks of beneficiary organisations. Only those beneficiary organisations are involved in administrative tasks that essentially require the establishment and maintenance of these functions in order to request and manage various pre- and post-accession funds.

A few outstanding programmes are:

- The SPP programme for the preparation of Structural Funds, with a budget of 60 million ECU for seven years,
- The horizontal fund, that can be accessed through application for infrastructural developments, with an annual budget of 150 million ECU,
- The horizontal fund for small enterprises, with approximately 50 million ECU per year.
- Hungary received 798.5 million ECU of non-refundable funding through the PHARE Programme until 1998.

When examining the distribution of funding objectives according to objectives and sectors, the following important data can be found:

- Privatisation and related company structure transformation are priority areas of economic development and structural transformation with a sum of 81 million ECU. Consultation and assistance are the most common form of support, but there were also examples of investments through supported financial constructions.
- The development of small- and medium size enterprise sector also received 69 million ECU, partly in the form of information and consultation services and partly through complemented and supported loans.
- The 78.5 million ECU of funding for agricultural development was aimed at assisting the reform of the agricultural sector, institutional development required for transition to market economy, modernisation of the monitoring system and expanding the loan sources of agricultural producers.
- The 25 million ECU provided for regional development was used for establishing development policies, the institutional and regulation system as well as for complementing the local and central budget of development programmes in specific regions.

- Funding for infrastructural development and environmental protection includes consultancy and assistance for establishing development policies for the energy sector, transportation, water management and environmental protection as well as providing co-financing for energy saving programmes and various transportation, waste water management and border control investments.
- The 68 million ECU funding for environmental protection complemented the investments by local governments and enterprises.
- 105.5 million ECU of funding was provided for the development of social and health care systems, but support granted for human resource development, public administration, education and vocational training was also significant.
- PHARE funding in the service sector primarily supported the modernisation of the sector, improvement of research and development conditions and development of the customs and statistical systems.

### 3.7. ISPA

The PHARE Programme was complemented with the ISPA (Instrument for Structural Policies for Pre-Accession) and SAPARD (Special Action Programme for Aid to Agricultural and Rural Development) funds in 1999.

The task of ISPA is identical with that of the *Cohesion Fund* provided for EU member states. So its objective is to assist the implementation of pre-accession strategies for countries participating in accession partnership in the fields of transportation development and environmental protection. It applies to Bulgaria, the Czech Republic, Estonia, Poland, Latvia, Lithuania, Hungary, Romania, Slovakia and Slovenia (*table 3*).

*Principles of fund operation:*

- supports sustainable development,
- supports the implementation of a transportation system that is more environmentally friendly than current ones,
- enforce environmental protection costs in the expenditures of infrastructural developments,
- compulsory environmental impact assessment with all projects.

*Table 3. The allocation of ISPA funds among the countries*

Country	Minimum rate	Maximum rate
Bulgaria	8.0%	12.0%
Czech Republic	5.5%	8.0%
Estonia	2.0%	3.5%
Poland	30.0%	37.0%
Latvia	3.5%	5.5%
Lithuania	4.0%	6.0%
Hungary	7.0%	10.0%
Romania	20.0%	26.0%
Slovakia	3.5%	5.5%
Slovenia	1.0%	2.0%

Source: CEC: Inforegio News

The allocation of funds from ISPA is determined on the basis of population, the GNP per capita, the size of dry land and other economic and social factors. The implemented ISPA projects from the previous year are also evaluated, as well as the deficiencies in transportation infrastructure and environmental protection. The total budget of ISPA for the 2000-2006 financial period was set for 7.28 billion Euros, calculated with the rates of 1999, with an accessible 1.04 billion Euro for each year. The Commission evaluates the experiences of fund utilization each year, after it made a decision on the allocation of ISPA among the countries on 20<sup>th</sup> July, 1999.

45% of the funds are devoted to environmental protection and 55% to finance transportation projects. Funds are aimed at financing projects that fit into the environmental protection policy of the Community and are in accordance with the current priorities of the environmental protection action programme while serving the adaptation and implementation of the EU's environmental protection regulations in beneficiary countries.

The lower limit of the funded projects is 5 million Euro. Projects must reach the critical size, which results in significant improvements in the funded project area.

*A separate commission has to be established for monitoring where members include the beneficiary country, the Commission, the European Investment Bank and representatives of local and regional governments where necessary. Monitoring is aimed at determining the suitable physical and financial indicators to measure the efficiency and results of projects. The comparative analysis of indicators regarding the implemented actions and original plans and objectives has to be carried out in all cases. The process of project implementation has to be*



examined from the aspect of various problems and management as well. The aim of the evaluation is to examine the efficiency and effects of applied resources from the aspect of implementation and management including those factors that could result in the deficiency of results

### **3.8. The agricultural and rural development policy of the EU, the SAPARD programme**

The European Rural Development Conference in Cork called the attention to the importance of rural areas and sustainable rural development, while it also defined those principles, objectives and methods that could provide a basis for rural development. "Sustainable rural development must be put at the top the agenda of the European Union and become the fundamental principle which underpins all rural policy in the immediate future and after enlargement."

*The objectives of rural development according to the Cork Declaration:*

- preventing migration from rural areas,
- combating poverty,
- stimulating employment,
- providing equal opportunities and
- responding to growing requests for more quality, health, safety, personal development, leisure and improving rural well-being.

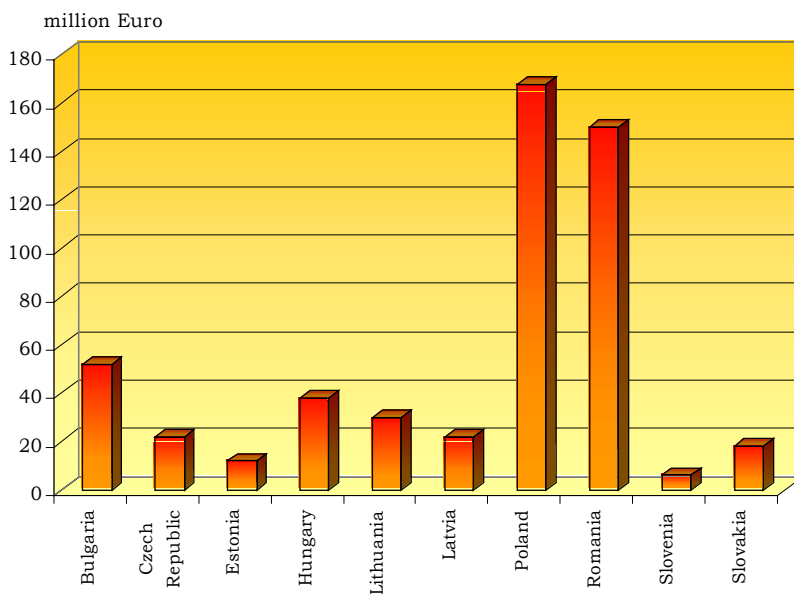
The need to preserve and improve the quality of the rural environment must be integrated into all Community policies that relate to rural development. There must be a fairer balance of public spending, infrastructure investments, and educational, health and communications services between rural and urban areas. A growing share of available resources should be used for promoting rural development and securing environmental objectives. During the later refinement of the objective system in the Common Agricultural Policy market policy, trade policies and social policies received an increased emphasis.

At the 1997 Luxemburg summit, ministers of the European Union made the document entitled Agenda 2000 public, which contained decisions on new funds to be granted to candidate states complementing the existing PHARE assistance programme. Ministers at the 1999 Berlin summit approved the so-called pre-accession assistance programmes, one of which is the SAPARD programme, that provides funding for 10 central and eastern European candidate countries in the fields of agriculture and rural development for the preparation period.

Programme objectives:

- Increase agricultural competitiveness;
- Reduce harmful environmental impacts of agricultural activities;
- Assist the adaptation ability of rural areas;
- Stimulate and preserve employment;
- Preparation of candidate countries for accepting structural funds.

All affected countries have to follow a seven year (2000-2006) national agricultural and rural development plan, considering the Common Agricultural Policy of the European Union. A justification, based on current national conditions (agricultural strategy, medium term development plans), has to be developed to explain why and how much funding is requested for a specific period and what it will be spent on through the SAPARD programme. The SAPARD Plan contains the introduction of participating organisations and the financial tables of the programme. The European Union has outlined a 520 million Euro budget for the SAPARD programme annually for the ten candidate countries (*figure 2*).



**Figure 2. Funds of the SAPARD Programme annually in million Euro, (prices of 1999)**

The allocation of funds for specific candidate countries is determined on the basis of the following objective criteria:

- Gross domestic product per capita expressed in spending;
- Number of people employed in agriculture;
- Size of land used for agricultural purposes;
- Regional peculiarities.

The above mentioned 9.5 billion HUF (38 million Euro), provided by the European Union, has to be complemented with 3 billion HUF on behalf of the Hungarian Government from its own budget as a condition of co-financing. Altogether, Hungary can spend around 12.5 billion HUF annually through the SAPARD Programme, according to the specific measures (*figure 3*).

The amount of funding changes according to actions:

*In the case of funding investments for agricultural enterprises*, the funding rate for machinery procurement is 40% of the historical cost, and 50% for building developments. Total funding per project cannot exceed 150 million HUF, the maximum historical cost of the investment can be 310 million HUF.

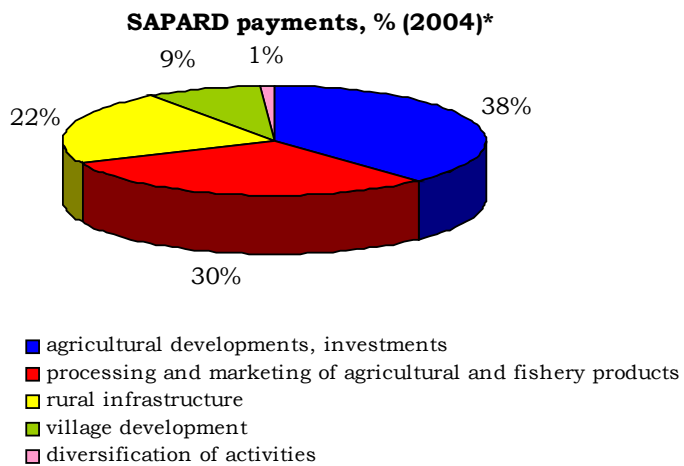
*In the case of the development of agricultural and fishery product processing and marketing*, the rate of funding is 40% of the historical cost and total funding cannot exceed 250 million HUF.

*In the case of village development and restoration, protection and preservation of heritage* the rate of funding is 75% of the historical cost, but total funding per projects is limited to 50 million HUF.

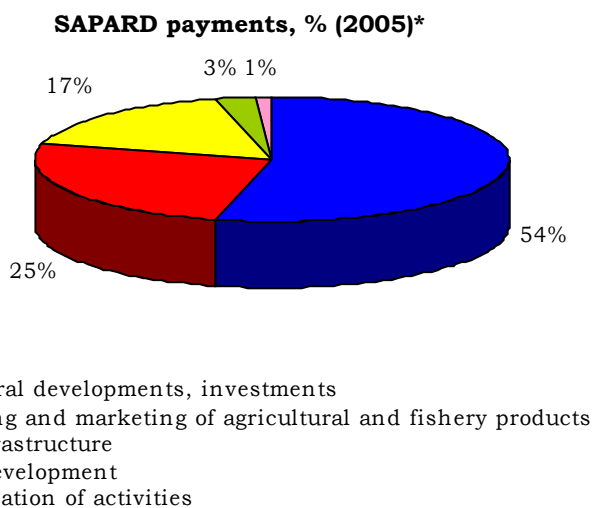
*In the case of diversification of activities, development of economic activities for providing alternative incomes* the rate of funding is 50% of the historical cost. The upper limit of investments per project is 40 million HUF and total funding cannot exceed 15 million HUF.

The rate of funding for the development and improvement of rural infrastructures is 75% of the historical cost (excluding the establishment of local markets: 50%). The upper limit of funding per project is included in the specific project call.

As Hungary became a member of the European Union, it became eligible for accessing EU development funds which are provided by the structural funds and the Cohesion Fund. However, a national strategy has to be developed for accessing the funds, which is essentially the National Development Plan (NDP). Five operative programmes are connected to this plan, one of which is the Agricultural and Rural Development Operative Programme (AVOP). The main objective of AVOP is the development of agriculture, food processing and rural areas which are all connected to the specific objectives such as improving economic competitiveness, improved utilization of human resources, environmental improvement and promoting a balanced regional development as defined in the NDP. A programme document of the AVOP, similarly to SAPARD, contains development strategies, objectives and a brief summary of the content.



\* Total amount of payments: 65,580 million HUF

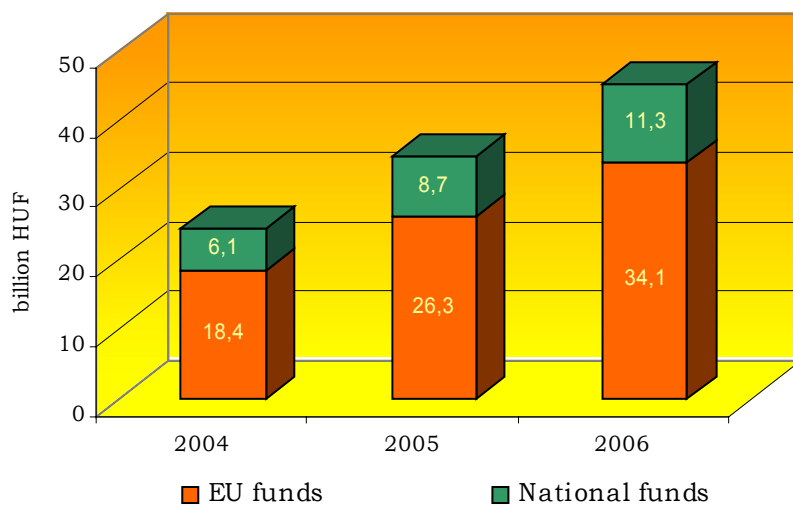


\* Total amount of payments until 15.08.2005: 20,052 million HUF

**Figure 3. SAPARD payments %, (2004, 2005)**

Within the framework of the Agricultural- and Rural Development Operative Programme, applications to eight measures can be submitted from 3<sup>rd</sup> May, 2004 (figure 4):

- Funding for agricultural investments;
- Structural funding for the fishery sector;
- Funding for start up farmers;
- Development of agricultural product processing and retail;
- Support for vocational post-training and re-training;
- Village development and preserving the intellectual and material heritage rural areas;
- Expanding the opportunities of rural employment;
- Developing agricultural infrastructure.



**Figure 4. Funds provided through AVOP, (2004-2006)**

The regulation of agricultural markets gradually became a part of community authority with the development of CAP (table 4). Joint agricultural market organisations were established which are responsible for implementing price regulations, supports, activities related to storage, import and export.

Table 4. Expenditures of Common Agricultural Policy 2000–2006  
(billion euro, price levels of 1999)

Title	2000	2001	2002	2003	2004	2005	2006
Total CAP expenditures	40.9	42.8	43.9	43.8	42.8	41.9	41.7
Market regulation activities	36.6	38.5	39.6	39.4	38.4	37.6	37.3
Rural development	4.30	4.32	4.33	4.34	4.35	4.36	4.37

Source: EC Directorate-General of Agriculture Newsletter

### 3.9. Opportunities and prospects of Hungary following the accession

An important change that occurred in regional funding policy was the reduction of target areas and objectives in structural funds from six to three since 2000. These are the following:

- Objective 1: aimed at supporting underdeveloped regions, where the GDP is below 75 percent of the community average.
- Objective 2: assists the economic and social transformation of regions struggling with structural change (decaying agriculture, fishery etc.).
- Objective 3: supports the establishment and modernisation of education, training and employment systems.

Presently, *the most important target area for Hungary is the 1<sup>st</sup> objective*: Regions where the GDP is below 75% of the EU average. For the time being, Brussels accepted this classification for the Central region of Budapest and Pest county until 2007, although the region can already produce 98 percent. *Parts of Pest county can still be classified into objective 2 and receive funds, as these areas are struggling with structural changes (table 5).*

The proof of EU trust in the Hungarian regional system, irrespectively of federal or unitarian developments, is that accessible funds were 1.030 billion Euro for 2004, 1.180 billion for 2005 and 1.464 billion for 2006. Hungary is treated as a single region by the EU for this transitional period.

The regional differences are well indicated in the table, the difference between the North Great Plain and the most developed Central Hungarian region is well over twofold.

*Table 5. GDP per capita in the Hungarian regions, 2000*

Regions	Thousand HUF	In percentage of the national average	In percentage of EU 15 average	In percentage of EU 25 average
Central Hungary	1998	155	77	83
Central Transdanubia	1303	101	47	55
Western Transdanubia	1462	114	58	62
South Transdanubia	956	74	39	41
Northern Hungary	823	64	34	36
North Great Plain	809	63	33	35
South Great Plain	913	71	38	40
Hungary	1288	100	51	55

*Source:* Horváth, Gy. – Szaló, P.: Regional Statistical Annual, HCSO 2002.

### *3.9.1. Results of accession negotiations*

- Hungary accepted the implementation of economic and social cohesion policy and the utilization of funds according to EU regulations.
- The EU appraised the preparation of the National Development Plan, social discussions and the fact that Hungary had a brief but focused and transparent programme from the accession to 2006.
- The single national regional operative programme also had a favourable reception as Hungary, after considering the EU proposal, decided to implement regional development tasks through this programme. The success of the regional programme will also determine whether Hungarian regions can submit individual operative programmes in the new financial period starting in 2006.
- The favourable opinion was reinforced by the fact that Hungary had an established regional-statistical (NUTS) system.

- According to the joint decision, all Hungarian regions are classified into support category 1 (underdeveloped) until the end of 2006.
- Hungary, on the basis of development and other indicators, can expect 12.2 percent of the structural funds allocated for the ten accessing countries between 2004 and 2006, and 13 percent from the Cohesion Fund. Hungary will be able to access 690 billion HUF of new development funds, which makes up about 1.2 percent of the gross annual domestic product (*table 6*).

*Table 6. Funds to be allocated for Hungary  
(2004-2006, million euro at price levels of 1999)*

Source	2004	2005	2006	Total
Structural Funds	448	620	786	1854
Cohesion Funds	340	280	374	994
Total	788	900	1159	2847

*Source: Horváth, Gy. – Szaló, P.: Information by the European Commission 2003.*

### *3.9.2. Regional policy and prospects in Hungary*

Beneficiary regions, distribution among regions and applicable funding rates are determined for a seven year period ahead within the framework of EU regional funding policy and development programming. The new financial period starts at 1 January, 2007, but newly accessing states can receive funds prior to this, in fact they can benefit from the so-called pre-accession funds (PHARE, ISPA, SAPARD) that will „run out” by the end of 2006. The seven year cycle is highly important from a planning aspect, since the affected regions can calculate with the entitlement and funding rate well ahead and, therefore development plans and concepts can be worked out and implemented with relative certainty.

The opportunities of newly accessing countries are likely to improve even further since the future of structural policy after 2006 is still forming, while the European Commission can count on the opinions and recommendations of new member states.

The North Great Plain region, as the most underdeveloped Hungarian region, can still continually access increasing development funds to make economic and infrastructural developments and to facilitate new, innovative activities. The economic organisation of the region will strengthen, all-round relationships will be established with European regions and this will ultimately attract knowledge, technology and workplaces to the regions.



The competitiveness of cities, in the beginning primarily county seats (Debrecen, Nyíregyháza, Szolnok) will improve as new sectors, knowledge centres and interregional relationships strengthen. Intensive relationships can establish along the inner borders of the EU, historical ties of regions and settlements along the border can renew and revitalize which will affect cultural and social life as a whole. Cross border relationships are also likely to strengthen.

The efficient utilization of funds, according to strict community regulations and the requirements of sustainable development, will greatly reduce environmental impacts, positively affecting environmental conditions and indirectly improving living conditions of habitants. This new, post-accession situation will lead to a more decentralised way of life and, with active local governments regions, including the North Great Plain region, will be able to implement development concepts that are more fitted to their conditions and environment. Ultimately, this could reduce differences between the specific region and the capital, diminishing cultural and income differences.

Over the long term, as a result of EU structural policy and regional funding system, cohesion will strengthen along with local patriotism, regional identity and initiatives from various regions.

#### **4. REGIONAL DIFFERENCES IN HUNGARY AND THE NORTH GREAT PLAIN REGION**

Regional differences are connected to economic processes: social processes did not essentially modify existing disparities. Differences are most apparent between the capital and rural areas, between western and eastern Hungary and along the border.

When examining economic development, public incomes and unemployment characteristics we find that the western-eastern division is very significant. The contrast is especially sharp between the efficient structural change of western and central Transdanubia and the dragging stabilization of north and east Hungary. This is apparent in the increased entrepreneurial activity, more significant presence of foreign capital and concentration of machine industry providing export west of the Balassagyarmat-Békéscsaba line.

Being located along the border meant a peripheral situation in the country, which was re-evaluated after the political regime change and economic system transformation. The western border region of the country became a zone of dynamic change, while South Transdanubia and the border regions North Hungary are characterised by underdevelopment. The existence of underdeveloped areas can be explained partly by historical and settlement structural (small village types) reasons. The consequences of social degradation

due to migration and the increasing number of elderly people were aggravated by infrastructural deficiencies.

The dimensions of the above mentioned disparities resulted in the formation of small regions with different levels of social and economic development with a mosaic like structure. The economic map shows a number of growth axes with spectacular activity but also indicates a number of stagnating, "grey" areas. The elements of development are also present in the eastern part of the country in the form of large industrial plants, representing up-to-date technology. At the same time, even the developed Transdanubian regions have so-called inner peripheries. It can be concluded that the least developed regions are more proportioned and show greater regional differences. The ratio of foreign capital is typically high in dynamically developing regions along with entrepreneurial activity and usually have a low rate of unemployment. Regions with a favourable geographical situation such as the western border region and the dynamic centres (the capital and its surroundings, the larger cities), dynamic axes along motorways have a priority advantage in the new economic structure.

Developing regions had mostly agricultural features, but with the infiltration of foreign capital and the increased entrepreneurial activity local economy transformed and showed signs of improvement. Revitalised regions, which were crisis areas but their industry renewed by now, represented a separate group.

Regions that are considered stagnating and underdeveloped from a social-economic point of view are characterised by worse than average unemployment and income conditions with a low ratio of foreign capital and entrepreneurial activity. The agricultural features, being located at country or regional borders, can all be reasons for this along with lack of a dominant regional centre.

Social-cultural differences originating from geographical location, proximity to borders and central-periphery, have a decisive impact on the state of human resources, living conditions of the population while the historical past can provide explanations to the underdevelopment or development of specific regions through transportation, settlement and geographical features. Natural conditions and human resources collectively determine development differences within regions, regional characteristics and future prospects.

Considering the inner conditions of the North Great Plain, almost half of the region's population lives in stagnating or underdeveloped areas, where unemployment and income conditions are worse than average and activity of foreign capital and entrepreneurs is very low. Again, the agricultural feature of the region, location at country and county borders and lack of a dominant centre can explain these. The typical settlement structure of the Great Plain is mixed with small village structure. Large settlements with a large number of population are

typical mainly in the central and northern part of the region, however in the eastern, border parts of the region a small village type settlement structure dominates.

Its population is reducing at a lower rate than the national average, the ratio of live-births is the highest in the nation. The ratio of socially disadvantaged groups (people with reduced ability to work, Roma) is high, their social-economic reintegration is dragging. The mortality rate is better than the national average. The quality of outpatient treatment shows great differences in the various small regions; access to health care is limited in the villages of the region due to deficiencies in transportation infrastructure. Migration, which mostly affects the more educated groups, is the greatest nationally therefore the level of education is the lowest in the country.

As the economy of the region is relatively underdeveloped, only 32.7% of the total population is employed which is the lowest ratio among the regions. The income per capita is also the lowest here. Entrepreneurial willingness is low and the cooperation among companies is not satisfactory either. Market, production, financing and supply relationships are weak.

Compared to other regions of the country, this agricultural region plays an important role in national agriculture, providing a third of the domestic fruit production and half of the apple production.

It is remote from important economic centres due to its transportation conditions and geographical location, therefore the economic vitalisation of foreign capital is insignificant. A few larger industrial plants are present in the region, the dynamic development of the industry has not started yet (the processing industry, food industry, machinery and textile industry are dominant in the region, the role of high tech is relatively insignificant). The ratio of enterprises is still below the national average but the development of business services corresponds with the Hungarian average.

Access to the region, due to a long, single traffic line and lack of freeways is the worst in the country. The outward relationships of its western areas, due to the economic impact of the Central Hungarian region, are stronger than the ones directed towards Debrecen.

Tourism is diverse but, with a few exceptions, does not represent competitive magnetism in an international context: it has more of a domestic attraction. The most dominant tourist attractions of the region are the Hortobágy National Park, The river Tisza and Tisza-lake as well as health tourism.

The university and college institutions, offering high level training, are also important. The IT higher education and R+D can be a break-out point of the region. An existing problem is that education (both secondary and higher education) has not yet adapted to changing market demands. After the Central

Hungarian region, the North Great Plain region has the most significant R+D institutional network, which is an important basis for higher education institutes. A serious problem is that relationship of R+D and the economy is still not sufficient. The most severe environmental problems of the region are the deficiencies in waste water and waste management, along with the decaying soil quality in the form of salination. Floodwaters and excess waters have been causing severe damages in expansive areas of the North Great Plain.

The region is relatively poor in natural resources. Ploughland can be regarded as the most important natural resource, with significant natural gas reserves, carbon dioxide, thermal water and clay resources.

The economic structure of the region shows a few peculiar features. Industry contributes the GDP to the greatest extent, this followed by agriculture with its 11.2% contribution to GDP which is twice as much as the national average. Agriculture is the most dominant in rural areas, while industrial production is concentrated in the larger cities. Agriculture has a strong tradition in the region; the conditions of agricultural production and processing are outstanding (there are a number of high quality agricultural products).

The population retaining role of agriculture in the North Great Plain is more powerful than in other regions and this can be maintained over the long term. In fact, considering EU tendencies, it could even gain strength. However, increasing employment in agriculture cannot be expected. The development of knowledge and labour intensive sectoral structure depends primarily on external sources and the self-organisation of employees in the agricultural sector.

The North Great Plain is a significant processing and production base in Hungary, with well developed food processing capacities and good quality agricultural products typical of this region.

The agriculture of the region represents about 11% in the total GDP of the region, while 11.5% of the active working population is employed in the sector. The GDP in forest and game management is somewhat higher than the national average.

## **5. THE MOST IMPORTANT FEATURES OF EU AND HUNGARIAN AGRICULTURE**

World economic growth increased in 2004. Growth in GDP reached 5%, which is considered to be the highest since the seventies. The rate of economic growth in the EU was „only” 2.3% in 2004. Low inflation, suitable financial conditions, great profit opportunities and structural reform processes were responsible for this.

The agricultural export of the European Union was relatively stable in 2004, though export quantities varied with each product. The export of meat and animal products increased significantly, while the greatest decrease affected crops, sugar

and related products, as well as vegetables. Due to high yields of 2004 and the low global market prices, the crop intervention stock in 2004 reached 10 million tonnes compared to 3.6 million tonnes in 2003. The sowing area of crop increased by 2.5% in the EU-25 countries and reached 52.6 million hectares by 2004/05. 37.1 million hectares was located in old member states. The growing area of most crops increased, especially that of rye (+8%), wheat (+6%), durum wheat (+4.2%), maize (+2.7%).

However, the growing area of barley (-1.8%) and oats (-5.7%) has decreased. The greatest expansion of crop growing area could be observed in new member states. *The total estimated crop yield was 288.9 million tonnes, this is a 21% increase (about 50 million tonnes) compared to 2003/04.* Crop production in the old member states was about 220 million tonnes (+18%) and 61 million tons in the new member states (+30%). This is partly due to good and in some places excellent climatic conditions which characterised the whole of Europe.

All crops produced greater yields than in previous years. The average crop yield was 5.33 tonnes per hectare, this exceeded yields of 2003/04 by 19%. Yield increase was 28% for rye, 25% for maize, 25% for durum wheat, 22% for triticale, 18% for wheat and 12% for barley. France still leads in crop production, with 69 million tonnes (25%), followed by Germany with 50 million tonnes (27%), then Poland with 28 million tonnes (19%). Hungary almost doubled its production in the years of 2004/05. Only the Netherlands produced less (0.5%).

Agricultural production prices increased in most EU member states in 2004. The biggest increases were in Latvia (+20.9%), the Czech Republic (+6.9%), Luxemburg (+4.4%), the United Kingdom (+4%), Finland (+3.2%), Ireland (+2.3%), Austria (+2.2%), Denmark (+1.7%) and Lithuania (+1.1%).

Crop prices in the first months of 2004 exceeded the prices of the same period in 2003 (bread wheat 168 Euro/t, maize 175 Euro/t, forage wheat and barley 165 Euro/t.) Prices started to decrease from the May-June period as a result of forecasts of strengthening yields for 2004. The prices of all crops have dropped significantly from the summer season and the price of bread wheat was 117 Euro/t, forage wheat and maize was 100 Euro/t and barley was 125 Euro/t by the end of the year. Only the price of quality durum wheat stayed relatively stable, reaching the price of 165 Euro/t by the end of the year.

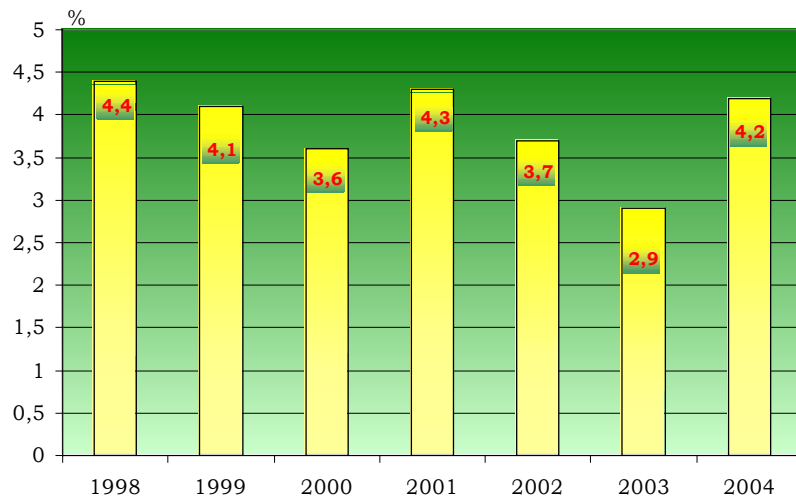
According to the first forecast of Eurostat for 2004, there was a 3.3% increase in agricultural incomes on the basis of data provided by European Union member states. The rate of change was 53.8% in new member states and 0.8% in old member states. There was an increase in 19 member states, the greatest extent in new member states. The accession had the most positive impact on agricultural incomes in the Czech Republic (+107.8%), Poland (+73.5%), Estonia (+55.9%), Latvia (+46.6%) and Lithuania (+41.8%). The greatest increase in old member

states was in Germany (+16.6%), Denmark (+12.2%) and Luxemburg (+7.8%). Agricultural incomes declined most significantly in Belgium (+8.8%) and the Netherlands (+11.5%).

The main factors of income growth compared to 2003 were increased agricultural output, and land-based supports and funding in the case of new member states.

The number of people employed in agriculture decreased by 1.5% in the EU. The greatest decrease occurred in the Czech Republic (-6.1%), Slovenia (-5.9%) and Estonia (-5%).

The **share of Hungarian agricultural production** in gross domestic product is low. This ratio fluctuated significantly between 1998 and 2004, the 3.6% and 4.4% value stayed low constantly. Of course, the role of agriculture in the national economy and society is a lot more significant (*figure 5*).



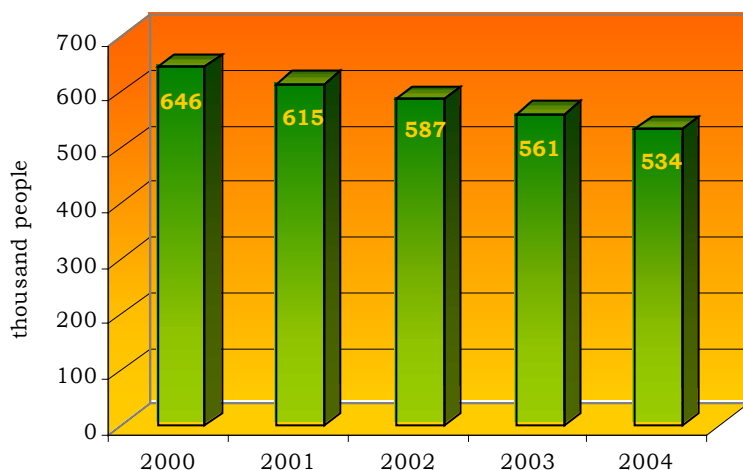
**Figure 5. The share of agriculture and forest management in gross domestic product, % (1998-2004)**

Economic growth in Hungary, which was more apparent than in the previous year, can be partly explained by the favourable formation of export and investments. Consumer demand increased slower, opposed to the previous three years, than the GDP in 2004. The slow growth was related to the income policy aimed at re-establishing the balance.

Investments grew by 8% compared to the previous year. The growth dynamics were primarily determined by the three dominant sectors (processing industry and transportation: 15-15%, real estate business and economic services: 13%).

Developments in the processing industry, which play a decisive role in export growth, increased above average (17%) even in 2003. Processing enterprises increased their investments in developments significantly (35%) over the course of two years, establishing those production capacities that allowed the exploitation of economic prosperity. Investments of the transportation sector were primarily motivated by road construction, real estate businesses while economic services were motivated by housing developments. Agricultural investments decreased significantly, by 25% in 2004, primarily due to changes in the support system.

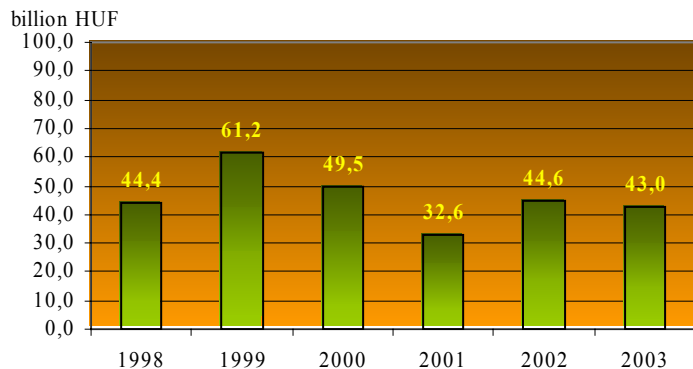
The number of **employed** people at agricultural businesses employing at least 5 people was 107,600 in 2003, showing a constant small-scale tendency to decline. The number of employed people indicated by workforce balances was 241,000. In reality, a lot more people were employed in agricultural production, therefore it is better to accept the statistical method that calculates the so-called workforce utilization. The basis of the calculation is the total working time demand of agricultural production, where an annual 1,800 hours are considered as one work unit or one person. The formation of this is indicated by the following numbers which show that, although the number decreased, there are about 561,000 people working in agriculture. The role of agriculture in our society is more apparent from this aspect (*figure 6*).



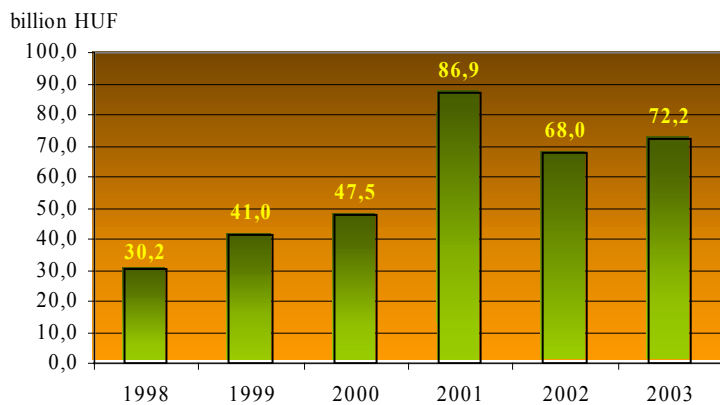
**Figure 6. Calculated workforce utilisation of agriculture, thousand people (2000-2004)**

### 5.1. Agricultural assistance

Agricultural production received a significant amount of **funds**. The two basic methods of assistance provided from the budget until 2003 were the so-called market accession and agricultural production assistance. The total budget of these increased from the annual 74.6 billion HUF in 1998 to 115.2 billion HUF in 2003 (*figure 7*).



*Market accession assistance*



*Agricultural production assistance*

**Figure 7. The basic funding budget of agriculture, billion HUF (1998-2003)**



Five entitled target areas in 2004 were funded from so-called directives: forestry tasks, quality protection of soils, animal husbandry, fishery and game management. The directives were financed from own sources (subsidiaries, administrative fees, membership fees, fines etc.) which cover these expenditures. The original funding directives of the five target groups were raised at the beginning of the year. This increase was possible due to remaining funds from 2003 (table 7).

Table 7. Funds financed from directives in 2004 (million HUF)

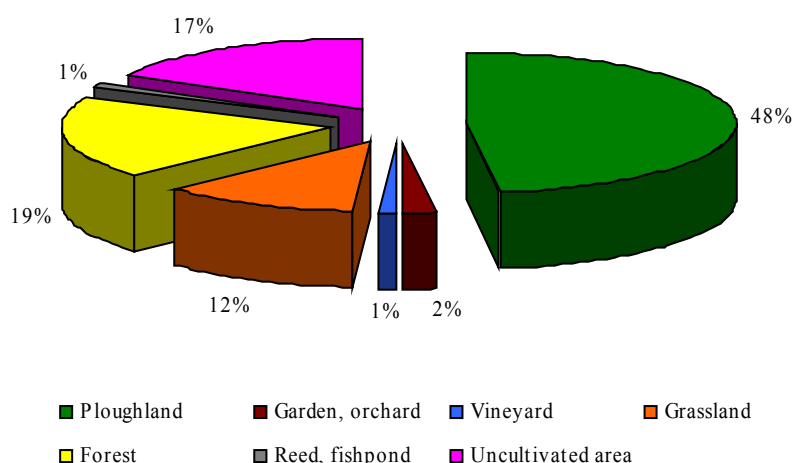
Title	Funding directives
Forestry	5,014
Quality protection, utilization of soil	1,611
Animal husbandry, support for breeding organisation	967
Funds for fisheries	204
Funds for game management	791
<b>Total</b>	<b>8,587</b>

Source: MARD Finance Department

However, agricultural support is not limited to the funding mentioned above, but it is significantly complemented by other types of funds defined in the agricultural budget section.

The total funding directive was 217.020 million HUF in 2003, which also means that 381,900 HUF per capita was the share for an agricultural producer (calculated in workforce balance) bringing the **direct funding to 890,000 HUF**. The rate of funding compared to the value of agricultural output (production) is 15-16%. As a result of the EU accession, the funding system has totally transformed in 2004. The so-called running budget funding and the national funding that included development funding replaced market accession and production funding. Professional assistance shrank to an insignificant rate and the role of funding planned in the National Development Plan to be complemented with EU funds and funds in the framework of separate agricultural sector budgets. The total amount of funds in the budget excluding the EU funds was 155.9 billion HUF.

A typical tendency of recent years in Hungary is that the slow decrease of agricultural **land area** continued. Cultivated land area was 6,193 thousand hectares in 1998 and this reduced to 5,867 thousand hectares or by 5.3% by the end of 2002. Ploughland also reduced to 4,516 thousand hectares from 4,710 thousand hectares; the rate of decrease was 4.1%. According to 2004 statistical data the area occupied by forest favourably increased to 19% and unfortunately the percentage of uncultivated area increased to 17% (figure 8). An important and severe problem in our agriculture is the **scattered** nature of agricultural land.



**Figure 8. Land use in Hungary, % (2004)\***

\*total land in 2004: 9,303 thousand ha

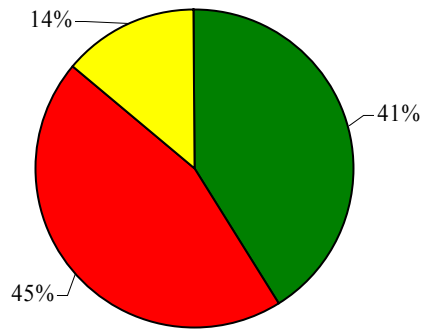
Fortunately, the number of legal entity and non-legal entity organisations increased between 1998 and 2004, and accordingly the number of private enterprises has decreased. This is a movement towards production concentration. At the same time, this is not reflected in the ratio of land areas, since in the same period the area of land cultivated by economic organisations has decreased considerably. The size of land owned by private farmers also decreased but to a smaller extent.

As for ploughland, 60% of it is cultivated by private farmers in underdeveloped conditions (*figure 9*).

## 5.2. Agricultural investments and production

We cannot be satisfied with the formation of agricultural **investments** by any means. The ratio between agricultural investments and total investments in the national economy has fluctuated significantly throughout the years, altogether the volume increase of investments was 39.4% between 1998 and 2003, which also means that it is below the price index, therefore the real value of investments has clearly decreased (*table 8*).

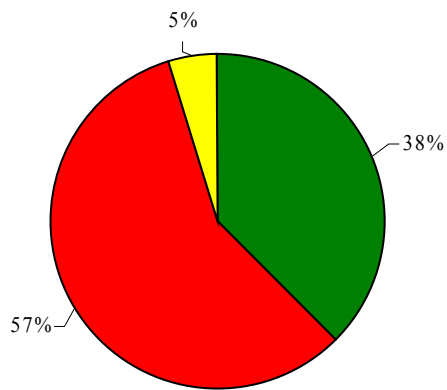
*Land use according to farming types, % (2004)\**



■ Economic organisations    ■ Private farmers    ■ Other

\*total land area 9303 thousand ha

*Utilisation forms of agricultural areas, % (2004)\**



■ Economic organisations    ■ Private farmers    ■ Other

\*total land area 5863 thousand ha

**Figure 9. Land use and utilisation forms of agricultural areas according to farming types, % (2004)**

Table 8. Agricultural investments, billion HUF (1998 – 2003)

Year	Billion HUF	Ratio %
1998	76.7	3.6
1999	79.4	3.3
2000	76.8	2.7
2001	92.5	3.0
2002	96.5	2.9
2003	106.9	2.6

Source: MARD Finance Department

The actual directive for development funds in 2004 was 26.767 billion HUF, 80% of which, 21.6 billion HUF is the determination. The actual determination according to data of September 30 2004 was greater than estimated at the beginning of the year, 24.027 billion HUF were paid based on previous entitlements.

The development type funds of 2004 were almost all used to fulfil determinations and this situation will still remain unchanged in 2005, since pervasive obligations can be estimated at 18,9 billion HUF. The main funded areas included: funds for the establishment of plantations and construction investments (for the expenditures of construction and food industry investments related to animal husbandry and plant production launched in the previous year for the phase of 2005), funds for machinery (for financing leasing fees, interest subsidies of machinery procurements of previous years and for technological equipment), for the reconstruction of water damage prevention facilities, for melioration and funds for irrigation system developments. Funds for new developments can be accessed by applying through SAPARD, the National Rural Development Plan and AVOP in 2005 (table 9).

The financial department switched to so-called zero based planning regarding the professional directives and central investments in 2005. This means that a sixth of total budget expenditures, about 1000 billion HUF, is not distributed on basis aspects but through „applications”. The change was made in the interest of reducing demands for surplus expenditure. Tasks were re-evaluated so that unnecessary activities could be eliminated and parallels could be avoided and through internal regrouping savings could be made. Altogether the objective was to ensure economic development according to the development plan of the 2004 convergence programme.

The agricultural budget proposal of 2005 contains national funds, the domestic and EU payments to finance the NVT and AVOP, the spreading payments of SAPARD contracts for the next year (new contracts cannot be made), as well as SAPS and market supports of the EU guaranteed by the Hungarian National Treasury.

Table 9. The formation of development funds in 2004 (million HUF)

Funds	Directive
Determinations: Funds for agricultural machinery	5912.9
Construction, establishment of plantation	13849.0
Young agricultural entrepreneurs	500.0
Melioration and irrigation development	800.0
Technical development	100.0
Other	438.0
<b>Total determinations</b>	<b>21599.9</b>
Interest subsidy of agricultural development loans	50.0
Establishment of plantations	1800.0
Establishment of forests	3317.0
<b>Total development funds</b>	<b>26766.9</b>

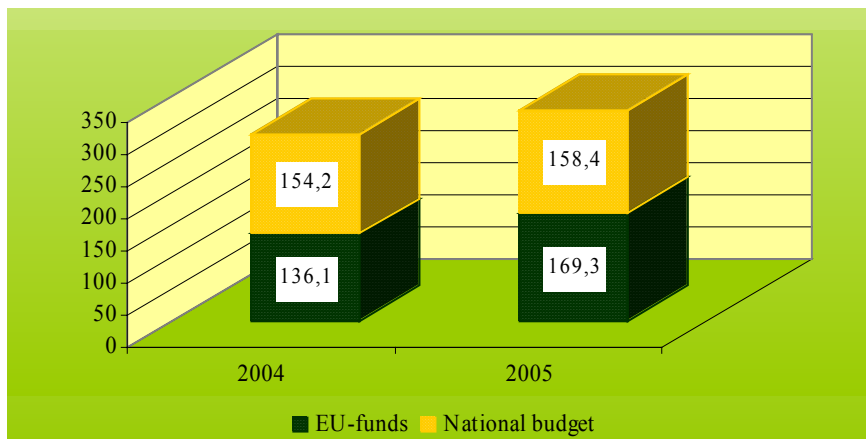
Source: MARD Finance Department

According to the bill presented to the parliament, the central budget provides 158.4 billion HUF for the agriculture which will be complemented by 169.3 billion HUF from the EU (table 10). The total funds provided are 327.8 billion HUF. The increase compared to the 2004 directive is 13% (figure 10). The surplus affects mainly the EU funds, the increase originating from the Hungarian budget is very modest: 4.3 billion HUF.

Table 10. Agricultural and rural development funds  
(million HUF, exchange rate of 254,5 HUF/€)

Directive	Central budget	Funds of European Union
<b>In the budget section of MARD</b>	154445.7	50459.8
<b>In the budget section of EU integration</b>	3982.7	9411.9
<b>In the budget of MARD and EU integration section</b>	158428.4	59871.7
<b>Indirect funds by the EU guaranteed by the Hungarian National Treasury</b>		
Market funds		20178.3
Unified land based fund		89278.6
<b>Total</b>	<b>158428.4</b>	<b>169328.6</b>

The greatest increase occurred in the agricultural and rural development directives, financed jointly by the EU, with a 43% surplus. Land based funds increased by almost 17% originating from EU budget. According to expectations, 13% more will be spent on so-called market actions (intervention, dry forage support, starch refund, wine market regulation etc.) compared to this year. The unfavourable shift in investments also contributed to the fluctuation of **agricultural production** and the fluctuation in outputs in previous years.

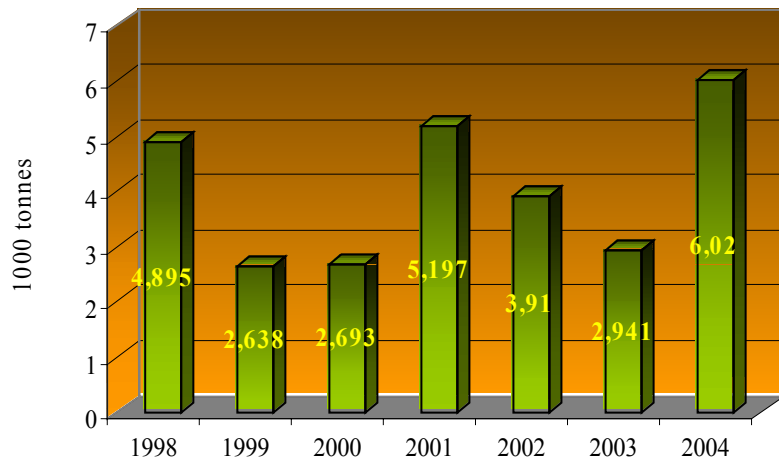


**Figure 10. The fund structure of agriculture and rural development (directives for 2004-2005, billion HUF)**

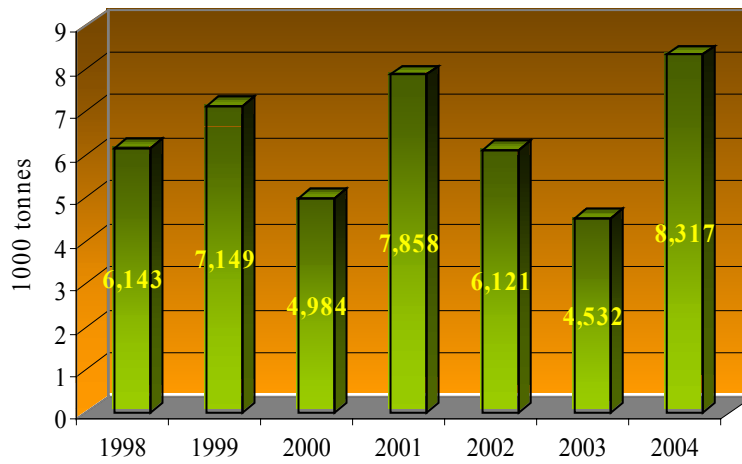
The annual fluctuation of wheat production was almost twofold but significant yield differences were also present in maize production (*figure 11*). Naturally, this significant fluctuation in production is related to changes in growing area size but can also be traced back to the technical standard of agriculture.

The fluctuation of production had a relatively low impact on the annual fluctuation of **imports**, of course this is more apparent in the **export** volumes of specific years. Contrary to relatively large agricultural funds, international relationships in the field of agricultural trade cannot be regarded as satisfactory. The import of agricultural goods increased by 49% between 1999 and 2003, while agricultural export increased only by 23% if expressed in USD. The increase was especially significant in the case of meat, dairy, vegetable/fruit and drink products. The export of forage and crops significantly increased, however, vegetable/fruit and drink export did not increase and meat export also increased minimally.

*Wheat yield (1000 tonnes)*



*Maize yield (1000 tonnes)*



**Figure 11. Crop production data, 1000 tonnes (1998-2004)**



The price level of agricultural goods was low, considering both acquisition and retail prices, and the gap had a tendency to increase. All this impacts on profitability, which is partly due to the unfavourable formation of prices and expenditures. Incomes made in agriculture, which includes the incomes of private farmers and entrepreneurs, vary greatly and have a tendency to decrease.

The gross average monthly income at an agricultural enterprise with at least five employees was 89.273 HUF in 2003. This means that this sector is significantly underdeveloped, reaching only 65% of the 137.187 HUF national economy average.

**In conclusion**, we can detect a very low technical standard in agriculture and this is partly due to the high ratio of small land properties which cannot produce competitively along with the relative decrease of investments. All this leads to extreme yield fluctuations and ultimately to the gradual decay of the agricultural foreign trade position. The solution is to **assist the EU competitiveness of farms at viable levels** and we cannot ignore the fact that individual small plots are a thing of the past.

### **5.3. Assessment of the North Great Plain region on the basis of agricultural results**

The region produces a fifth of the gross domestic product in national agriculture, it is one of the greatest producers of eared crops and maize and the food industry represents a significant ratio in the industry. Its share from the GDP and operating economic organisations is far behind the national average. The lack of capital is typical feature of enterprises. The region does not attract foreign capital, the region ranks fifth in the invested foreign capital per capita. The indicators of employment, average income and unemployment are less favourable than the national average.

Its area is crossed by a common traffic axis from east to west, and the Szolnok and Záhony railway and road that have a significant capacity. This is the only region where the motorway has not been completed. The existing roads are overcrowded and sometimes there are gaps among the settlements. The developments of the coming years include motorways from the east to west and north to south, the river Tisza as a potential traffic opportunity, and airports of county centres. The region has 389 settlements with 55 city status. The settlement density is relatively low, 22 settlements per 1000 square kilometres. Cross border relationships are also significant, currently cultural and educational relationships are typical.

The most important natural resource of the region is soil. The most favourable being loess of Szolnok and Hajdúság and chernozem in the Jászság. Different

sandy soils dominate the Nyírség, with scattered forest, meadow and moorish soils. The Hortobágy is characterised by saline soils. The climate has extremes, with frequent drought and excess water.

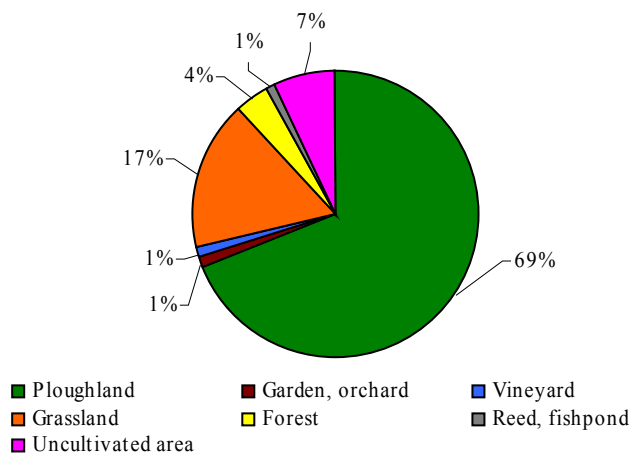
At the general census of 2000, farmers were using about 1 250 000 hectares of land. 95% of this is growing area, which is 18% of the national average. 55% of the growing area is cultivated by private farms. The average size of growing area is 5.5 hectares, economic organisations have 591 hectares and private farms 2.9 hectares.

The area of ploughland decreased to 54%, forest increased to 11% and the uncultivated area to 11% in 2002 compared to 69% ploughland area, 4% forest and 7% uncultivated area in 1950 (*figures 12, 13*). The agricultural land 35-35% of which can be found in Hajdú-Bihar and Jász-Nagykun-Szolnok counties, 30% of it in Szabolcs-Szatmár-Bereg county. 77% of the agricultural area is ploughland, 19% grassland, 4% orchard, and a small percentage of vineyards. 33% of the ploughland is occupied by eared crops, which is 39% nationally. A reason for this is low profitability and the greater volume of traditional plants typical of region (*figure 14*). The area occupied by the most important arable land crops (wheat, maize, sunflower, potato, vegetables) is predominantly (59-88%) cultivated by private farms. The role of large agricultural enterprises is only more significant in the case of sugarbeet (56%) and lucerne (58%). 37% of vegetable, 35% of sugarbeet and 29% of total potato growing area can be found in the region. Sugarbeet is a typical plant of Hajdú-Bihar, potato is typical in Szabolcs-Szatmár-Bereg while the growing area of vegetables is significant in both counties.

The dominance of large plants in agriculture ended in the 1990s; new farm types were established and their number has doubled in the region. The number of private farms increased four-fold. There are 220 000 private farms in the region, 23% of the national total. The 1550 economic organisations make up 18% of the total.

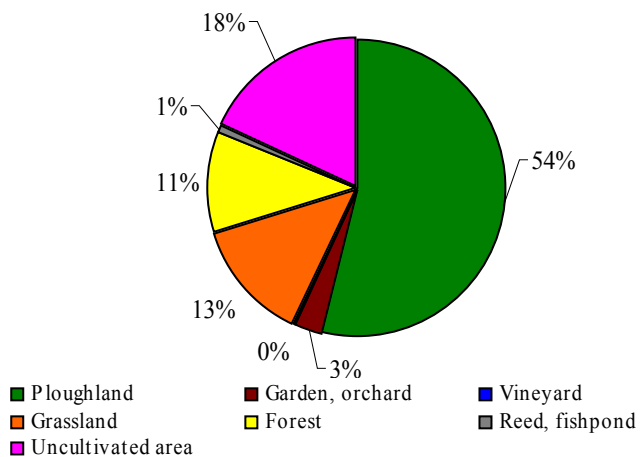
A third of the private farms are very small, cultivating less than a hectare. The ratio of farmers cultivating 1-10 hectares is 27% and only 6% occupy larger land. Less than a third of economic organisations cultivate a maximum 50 hectares, 34% 50.1-500 hectares. 31% of them own areas of land larger than this.

The agricultural nature of the region is reflected by the fact that 23% of those employed in agriculture live in the region out of the 15% total. 5100 people are private entrepreneurs. The proportion of private entrepreneurs in the sector increased by 7% since 1995. The role of those employed in agriculture has decreased. The number of employees between 1995 and 2002 decreased to two third (20 thousand) which is 7% of the national average compared to the 10% of 1995.



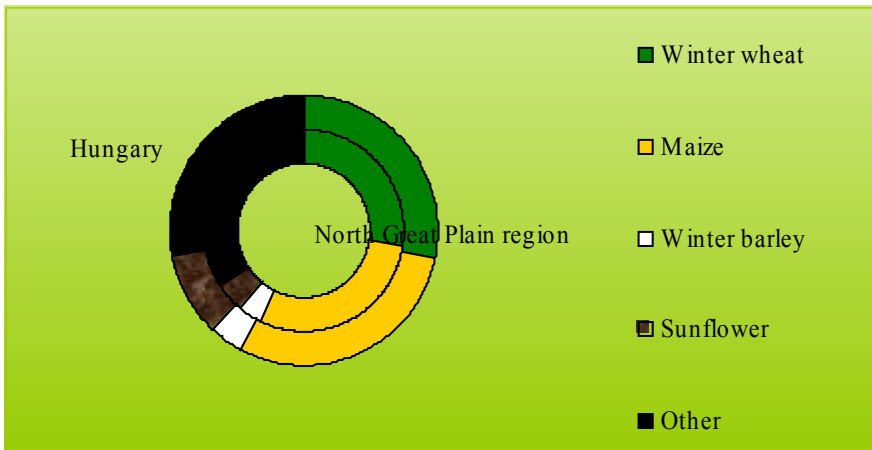
**Figure 12. Land use in the North Great Plain region, % (1950)\***

*\*The total land area in 1950: 1,782 thousand hectares*



**Figure 13. Land use in the North Great Plain region, % (2002)\***

*\*The total land area in 2002: 1,816 thousand hectares*



**Figure 14. The utilisation of ploughland according to main plants, % (2004)**

The region's agriculture produced 115 billion gross added value in 2001, a fifth of the national product. The role of the sector is decreasing. Lack of capital is typical in agriculture. Only 2% of foreign interest enterprises operate in this sector and only 25 of their investments are directed here.

*Strengths:*

- The geographical location of the region is favourable, large consumer markets to the east are easily accessible.
- Climatic and growing site conditions are especially favourable for the production of specific vegetable and fruit types, and the necessary production experiences are also present.
- Rich thermal water resources are available, their utilisation is also an important factor in tourism.
- Large, cheap and comparatively well trained and capable workforce.
- Favourable age distribution of the population, the percentage of youth is higher than average.
- Accessible areas with favourable conditions for greenfield investments.
- Debrecen University, located in the region, is a significant national centre of research and development.

*Weaknesses:*

- Uneven regional development; high ratio of underdeveloped settlements is a serious problem.
- Low capacity public road network compared to the level of traffic. Some of the settlements are difficult to access.
- The standard of investments is constantly lower than the national average.
- Transformation of industrial product structure and the introduction of modern production technologies are slowly progressing. The ratio of export quality industrial goods is lower than the average. Opportunities provided by industrial parks are still unexploited.
- The local small and medium size enterprises are lack capital; there is a lack of interest from foreign investors.
- Relatively few workplaces are created; unemployment ratios are unfavourable.
- The education level of the population and foreign language skills are below the national average.

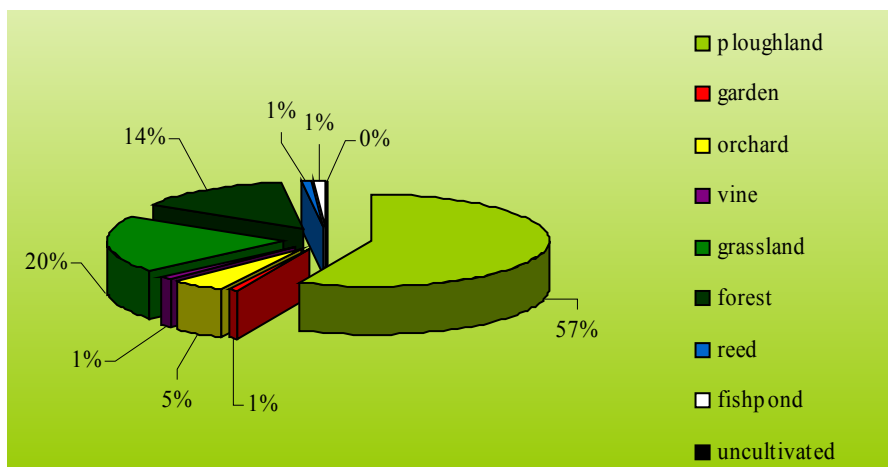
#### **5.4. Assessment of the agricultural sector in Hajdú-Bihar county**

Considering the natural conditions, a number of agricultural sectors have excellent conditions in Hajdú-Bihar county. The wet continental climate (the amount of precipitation generally decreases from the west to the east, but relief conditions sometimes have an opposite effect) of the affected euroregion, and its diverse soil conditions have allowed the establishment of different agricultural cultures. The number of employees in the sector is declining but agriculture is still of key importance in the region.

The dominance of state ownership has decreased in the past decades and the dominance of private ownership is typical in the sector. Typical of structural change is Hajdú-Bihar county where, in the sector of agriculture, forest management and fisheries, there were 41 state farms and 82 cooperatives in 1990 and 2546 enterprises (930 were joint enterprises) in 2001.

After the transformation, agriculture functioned as the employer of workforce that became redundant in industry, therefore in the beginning of 1990 the ratio of those that were employed in this sector increased. The wage of agricultural employees, compared to other sectors, is low so it is not surprising that it is not considered as a „trendy profession”. The solution would be the spread of the concept that would regard agriculture as more of a lifestyle rather than as an economic sector.

Ecological conditions are suitable for the cultivation of almost all plants, but there are plants which are typical of this region and specialised production forms have evolved. An outstanding cultivation form of plant production can be found in the region (ploughland, pastures-grassland, gardens, orchards) and this originates from the traditions of the population, while they are also open to possible innovations (figure 15).



**Figure 15. The land area of Hajdú-Bihar county according to cultivation sectors in % (2004)**

There is a mixed picture regarding the average plot and industry plant size in the region. Prior to 1991, large industry plant sizes dominated, following the change of regime the number small, private plots has increased. Property structure became extremely scattered, which limits the improvement of productivity and the modernisation of agriculture. Small plot production cannot be regarded as market compliant except in the case of intensive cultivation sectors (vine-orchard, vegetable, walk-in plastic tunnel). In less intensive cultivation forms renewed concentration of land property is necessary to achieve profitable farm size. Small and micro size family farms can be a source of complementing incomes but its real future can only be imagined with rural tourism.

In the 1990's the distribution of land area according to cultivation sectors only changed to a small extent. The size of uncultivated areas increased by a small extent.

The dominance of ploughland can be detected from the total agricultural area, their ratio has stayed constant throughout the past decade. The percentage of

pasture-grassland is also significant. The percentages of vine, gardens, orchards are much lower than these and are gradually decreasing. However, these subsectors play an important role in the economy of the region due to greater added value.

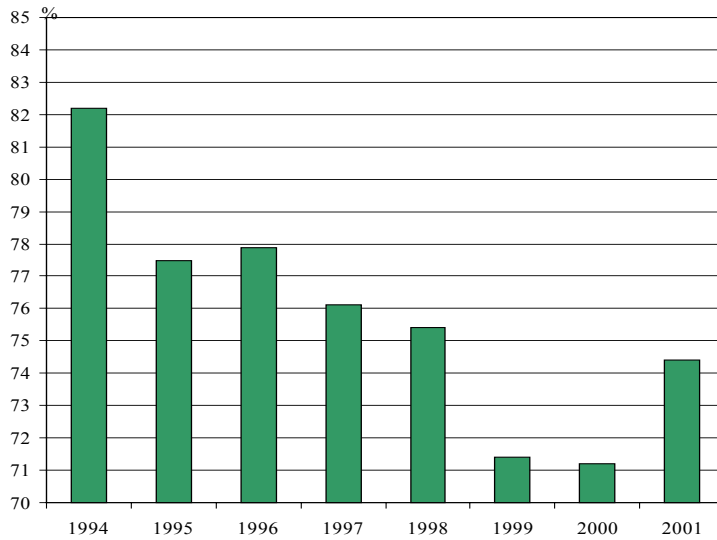
## **6. ASSESSMENT OF REGIONAL DEVELOPMENT FUNDS IN HAJDÚ BIHAR**

An important element of the XXI decree of 1996 about regional development and regional regulation is the establishment of decentralised regional development funds. There was an expansion in funds in 1998: the modification of the regulation regarding the objective and recipient (CXXXI. Regulation of 1997) established decentralised funds, the utilization of which was transferred to the authority of County Regional Development Councils. The distribution of financial instruments is determined by the level of underdevelopment: according to regulations accepted by the parliament (30/1997, 24/2001), population, the GDP/capita, the number of inhabitants in the beneficiary region, the number of local governments and the personal income tax per capita are all considered. On the basis of these, Tóth and Kozma (2004) studied in detail the results and ratios of awarded decentralised funds in the sectors and small regions. GDP/capita in Hajdú-Bihar county, as indicated, is one of the lowest among the country's regions (*figure 16*). The county received considerable amounts from decentralised regional development funds in the examined years (*figure 17*). Hajdú-Bihar county, on the basis of GDP/capita indicators, ranks fourth among the counties, ninth in 1994, tenth in 1996, 1997, 1998 and twelfth in 2000, and thirteenth in 1995, 1999 and 2001.

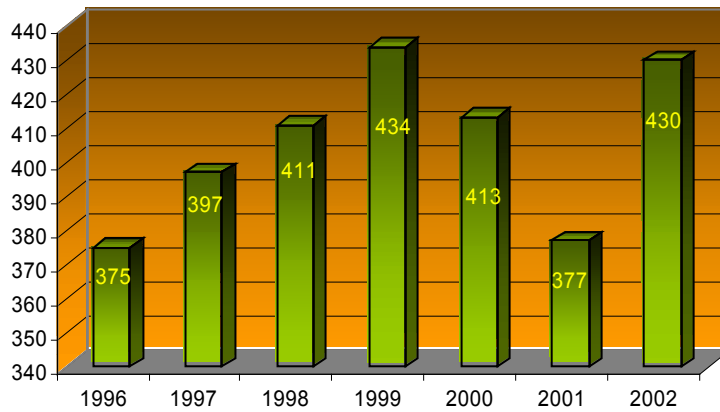
The Regional Development Council of Hajdú-Bihar county awarded more than 6.6 billion HUF, calculated at 1996 prices, for applications submitted from the county between 1996 and 2002 (*table 11*), that resulted in 30 billion HUF of investment.

The amount of fund per project was similar in the case of the Regional Development Directive and the Decentralised Objective type fund, while in the case of the Development Fund for Regional Balance an applicant received greater funds.

Economic organisations received funding mostly from the Regional Development Directive and they had to provide a larger portion of own contribution. The Development Fund for Regional Balance also funded waste water management investments in recent years and these investments require great expenditures. Regarding the Regional Development Directive we can say that it supported food industry and agricultural investments in the examined period (*table 12*).



**Figure 16. The economic development of Hajdú-Bihar county on the basis of GDP/capita indicators in the percentage of national average (1994-2001)**



**Figure 17. Decentralised regional development funds of Hajdú-Bihar county (million HUF)**



Table 11. Decentralised regional development funds in Hajdú-Bihar county 1996-2002

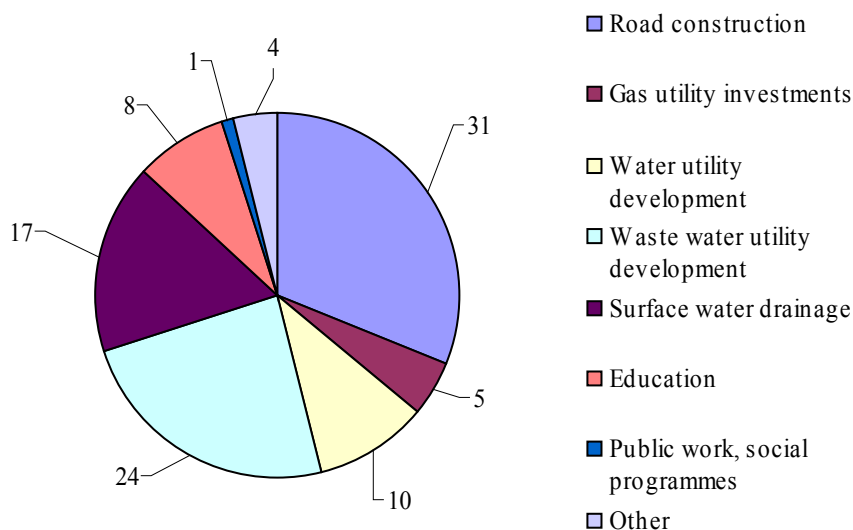
	Regional development directive	Development fund for regional balance	Decentralised objective type fund
The amount of awarded funds (million HUF)	1,929	3,700	967
The number of funded projects	418	595	231
Amount of funding per project (thousand HUF)	4,615	6,219	4,187
The value of implemented investments through funds (million HUF)	12,074	15,695	2264
Ratio of funds (%)	16	24	43

Table 12. Funds from regional development directives in Hajdú-Bihar county 1996-2002 (% , calculated at 1996 prices)

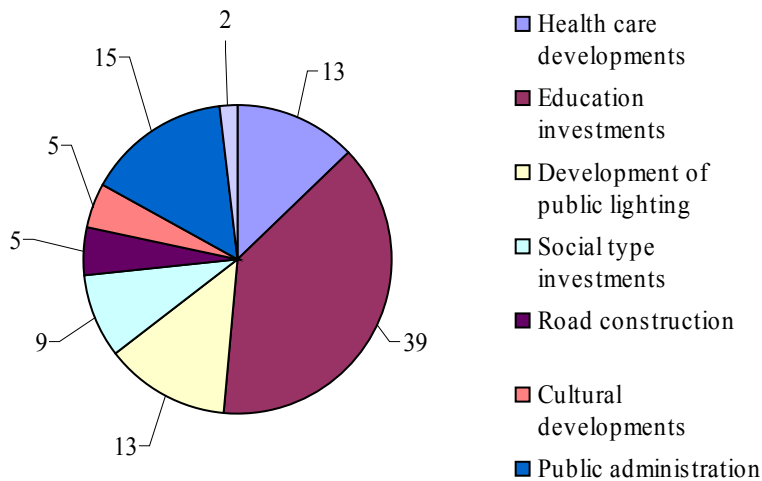
Funds	According to sectors	Rate of funds in the sectors
Development of production infrastructure	10	11
Agricultural developments	23	17
Food industry developments	14	11
Preparation of development plans	6	66
Commerce-service	9	23
Industrial developments excluding food industry	26	19
Tourism	10	15
Human infrastructure	2	28
Total	100	16

When examining the size of funds, we can say that lower than average funds were awarded for the preparation of development plans and commerce-service, while larger than average funds were awarded for the development of production infrastructure, food industry developments and tourism.

In the case of development funds for regional balance (*figure 18*), road construction, development of waste water infrastructure and surface water drainage received the greatest amount of funding, the ratio of awarded funds was the highest in the case of gas pipeline investments, public work and social programmes. The sizes of funds were lower than average in the case of gas and water pipeline network developments, public works and other investments, while education and waste water network developments were higher than average. When evaluating the decentralised objective type funds (*figure 19*), we can see that the highest funds were awarded to education investments, while the roles of health care, public lighting and public administration developments are about equal.



**Figure 18. Development funds for regional balance in Hajdú-Bihar county 1996-2002 (% , calculated at prices of 1996)**



**Figure 19. Objective type decentralised funds in Hajdú-Bihar county 1998-2002 (% ,calculated at prices of 1996)**

When examining the size of funds, we can mention three such areas where funds were lower than average: health care, cultural and public administration investments, while higher than average funds were awarded for the development of public lighting.

When comparing the rate of funds and awarded funds in the specific sectors we can see that where the rate of funds was lower (production infrastructure development, development of tourism, waste water utility development, education) the amount of fund was greater than average. By contrast, in the case of sectors where funds were higher than average (preparation of development plans, commerce-service, gas and water utility development, public work and social programmes) lower funds dominated.

The development programmes defined in the Regional Development Concept of Hajdú-Bihar county: complex rural development, village-water-forest tourism, the economic diversification of the county, creating work places, quality agricultural development, development of transit channels, development of business zones and logistics centres, communication and infrastructural developments, connected small region development, stabilising basic health care service, development of regional innovation centre, higher education and research development, partnership and development of institutional system, culture, education and tourism developments.

In conclusion, we can establish that the awarded funds by the Regional Development Council were in accordance with the objectives defined in the development documents of the county and were aimed at promoting the efficient implementation of tasks defined in the document.

## **7. New scientific results**

- 7.1. I conclude that regional differences in Hungary have not changed fundamentally in the past 15 years. When evaluating economic development, public incomes and unemployment we find that the west-east division is still significant. Development is still the most important priority in regional development plans and programmes.
- 7.2. When evaluating the situation of the North Great Plain, I have found that the region is stagnating from an economic point of view. Its land use conditions are excellent. Plant production results, especially in the case of wheat and maize, are outstanding. The region provides a third of the country's fruit production and half of its apple production. The population retaining capacity of agriculture exceeds the national average. The GDP per gold crown value is higher than the national average. The share of agriculture from total GDP is 11%.
- 7.3. On the basis of statistical sequences I have found that the share of Hungarian agricultural production from gross domestic product is low and fluctuates annually (3.6-4.4%). At the same time, its impact in national economy and society is a lot more significant.
- 7.4. Based on the evaluation of the past five years I have found that the funding of agriculture increased by 59%, the consumer price index for the same period increased 45%, so the real value of funds have increased, its rate compared to agricultural production is medium (15%). Fund increase from the Hungarian budget in 2005 is very modest, only 4.4 billion HUF. EU sources are significantly increasing by about 33 billion HUF.
- 7.5. When evaluating the whole of agriculture I have found that it is still characterised by low technical standard, a large number of small farms are not competitive, yield fluctuation is extreme, its foreign trade position is weak. The solution can only be the support of competitiveness.
- 7.6. When evaluating the assistance system of Hajdú-Bihar county, I have found that the ratio of health care, social and cultural investments is lower than average. Funds for road construction and public lighting were significant. It can be concluded that funds awarded in the past five years were in accordance with objectives defined in the development plans.

### **Publications related to the thesis**

- Harsányi, G., Nagy, A.J., Harsányi, E. (2003): Regional relationships of regional development in the North Great Plain region. *Debreceni Szemle (Debrecen review)*, 1. 86-100.
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