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First report

Multi-level Governance and the Impact of EU Integration in Hungarian Regional and Environmental Policies

Study prepared and compiled as Hungarian National Report by
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Budapest and Pécs, July 2002

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1 INTRODUCTION

1.1 Economic context

Following the deep transformational crisis of the first half of the 90's, and partly as a result of consistent economic strategies, by the end of the 90's the Hungarian economy has been stabilised. The GDP per capita in purchasing power standards (PPS) reached 52% of the EU average in 2000, on a steadily increasing trend from 46% in 1995. At the end of the 90's the annual growth of GDP and that of exports, moreover the unemployment figures were better than the respective EU averages, and inflation dropped under 10 per cent.

Table 1.

Development of main macro-economical indices

Hungary, 1992-2001

	1992	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
GDP index (1989=100)	82,4	81,9	84,3	85,5	86,6	90,6	95,1	99,3	104,5	108,5
Unemployment rate (%)	9,8	11,9	10,7	10,2	9,9	8,7	7,8	7,0	6,4	5,7
Change compared to previous year %										
GDP	-3,1	-0,6	2,9	1,5	1,3	4,6	4,9	4,2	5,2	3,8
Industrial production	-9,7	4,0	9,6	4,6	3,4	11,1	12,5	10,7	18,0	4,0
Consumer price level	23,0	22,5	18,8	28,2	23,6	18,3	14,3	10,0	9,8	9,2
Number of employees	-8,8	-6,3	-2,0	-1,9	-0,8	-0,1	1,4	3,1	1,0	0,0
Productivity of labour (GDP/employee)	6,3	6,1	5,0	3,5	2,1	4,7	3,5	1,3	4,3	3,8
Gross real incomes	1,7	-0,5	5,1	-8,9	-2,6	3,4	3,5	5,5	3,4	8,0
Per capita consumption	0,2	2,2	0,1	-6,8	-3,1	2,1	5,3	5,1	4,6	4-4,5
In the percentage of the GDP										
Gross state debt	78,5	89,5	86,6	85,2	71,9	62,9	61,1	60,4	55,3	52,1
Current account	0,9	-9,0	-9,4	-5,3	-3,7	-2,1	-4,8	-4,4	-2,9	-2,2
Billion Euro										
Net foreign debt including private credits	10,8	13,4	15,4	12,7	11,7	10,7	11,0	11,3	12,1	11,8
Foreign invested capital including privatisation incomes	1,1	2,0	1,0	3,5	1,4	1,6	1,3	1,6	1,2	2,3

Sources: Central Statistical Office, Ministry of Finance, Hungarian National Bank

While the budget deficit remained under acceptable limits at the end of the 90s, the reduction of the deficit has slowed in 2000 and 2001. After a promising start, healthcare reform has been delayed. The reform of the pension system has not been fully implemented.

By 2000 the private sector accounted for 80% of the economy's output. The private sector continued to develop and there are no significant barriers to market entry and exit. There is a high degree of legal certainty, property rights are firmly established. In its 2001 Regular Report, the Commission found that: "Hungary is a functioning market economy and should be able to cope with competitive pressure and market forces within the Union in the near term, provided that it stays on its present reform path" (EU Commission 2001a).

Since the start of the systemic change, the main trend in Hungary's trade policy has been continuous trade liberalisation. While since 1989 export volumes have increased by more than 50%, imports have tripled. In particular, since 1989 Hungary's export and import figures with the EU have quadrupled and the economy has become more and more bound to the economies of the EU member states. By the end of the 1990s, the share of the EU in Hungary's external trade relations reached 75%.

Table 2.

Hungary's external trade with the European Union

Year	Imports		Exports		Imports	Exports
	Value, million USD	Ratio of EU within total imports %	Value, million USD	Ratio of EU within total exports %	Previous period=100.0	
1995	9 514	61.5	8 079	62.8	144.2	148.1
1996	9 684	59.8	8250	62.7	101.8	102.1
1997	13 325.	62.8	13 602	71.2	117.9	124.2
1998	16 479.	64.1	16 781	73.0	123.7	123.4
1999	18 048.	64.4	19 067	76.2	109.5	113.6
2000	18 760.	58.5	21 117	75.2	103.9	110.7

Source: Hungarian Central Statistical Office

Foreign direct investment was and continues to be a very important source of national economic growth. Substantial inflows of foreign direct investment continue beyond privatisation. However, while in the first half of the 90's Hungary was the first country in Central and Eastern Europe regarding per capita foreign direct investment, by 1999 the Czech Republic and Estonia have attracted more cumulative investment than Hungary.

Table 3.

Cumulative foreign direct investment

Hungary, million USD

1996	14 958
1997	16 086
1998	18 517
1999	19 298
2000	19 883

Source: Hungarian Central Statistical Office

Two third of the total foreign direct investment influx financed privatisation deals, while one-third was devoted to green-field investments. Foreign capital accounts for 85% of the wealth of the banking sector, chemical and machine building, alimentary, energy and construction material industry. On the other hand, there is only a small proportion of foreign capital was invested into agriculture. By 2002 the larger part of GDP and exports is generated by a few large companies, which are typically in foreign ownership and often operate under privileged conditions in the so-called 'free zones'. On the other hand, employment is primarily provided by a very large number of micro-, small and medium-sized enterprises operating on the Hungarian market.

Regional inequalities of foreign investments have been continuously increasing. Central Hungary (which includes the capital city Budapest) attracted more investments than other regions, and this advantage has continuously grown.

Table 4.

Foreign investments and number of enterprises by regions

Hungary, 1994-2000

Region	**Per capita foreign investment (Thousand HUF)**		**Number of enterprises per 1000 inhabitants**	
	1994	**2000**	**1994**	**2000**
Central Hungary	164	702	131	118
Central Transdanubia	50	199	93	77
Western Transdanubia	57	228	90	83
Southern Transdanubia	24	53	108	77
Northern Hungary	22	128	61	59
Northern Great Plain	14	69	66	63
Southern Great Plain	23	92	87	74
National average	68	287	96	84

Source: Hungarian Central Statistical Office

During the first decade of the transformation existing regional disparities have grown to a considerable extent due to market forces, in spite of equalising regional policies. Regional income disparities are considerable. By 2000, compared to the EU average, the GDP per capita in PPS of the central region around Budapest reached a level of 76%, while the Northern Great Plain remains at a modest 32%.

Table 5.

Per Capita GDP, incomes and unemployment by regions

Hungary, 1994-2000

	Per capita GDP				Income in the percentages of the national average		Unemployment rate (%)	
Regions	**Thou-sand Ft**	**Percentage of the national average**	**Thousand HUF**	**Percentage of the national average**				
	1994		**2000**		**1994**	**2000**	**1993**	**2000**
Central Transdanubia	367	86,4	1301	99,8	97,7	96,4	12,4	4,8
Western Transdanubia	428	100,7	1450	111,3	92,1	92,6	8,9	4,2
Central Hungary	619	145,6	1948	149,5	120,7	126,9	9,8	5,2
Southern Transdanubia	357	84,0	986	75,7	89,6	82,3	12,7	7,8
Northern Transdanubia	296	69,6	860	66,0	89,7	85,9	15,9	10,1
Northern Great Plain	314	73,9	870	66,8	87,4	81,7	14,6	9,2
Southern Great Plain	354	83,3	969	74,4	87,9	81,4	12,2	5,1
National average	**425**	**100,0**	**1303**	**100,0**	**100,0**	**100,0**	**11,9**	**6,4**

Source: Hungarian Central Statistical Office, Income survey, ECOSTAT, National Job Centre.

1.2 EU integration context

Diplomatic relations between Hungary and the European Communities were established in August 1988. The Europe Agreement between Hungary and the EC was signed in 1991, providing associated status for Hungary to EC and legal foundations for relations. By 1998 Hungary was admitted to the first circle of candidates. Screening of the Acquis Communautaire has taken place with the purpose of identifying the divergences between the community law and Hungarian legal regulations. Following this stage, negotiations started about practically all the chapters of the Acquis (ForMin 2002).

The Hungarian Government adopted a programme of legal harmonisation that covers all fields of both traditional legislation (customs law, competition law, company law, public procurement, regulation of financial and assurance institutions). The Government also developed the conditions of implementation. A National Programme for the Adoption of the Acquis was elaborated in the first half of 1998. Budgetary background of legal harmonisation, institution building, human resource development and economic development measures was created.

A strategic plan was elaborated and adopted by the Government in June 1999, harmonising the objectives of the Programme with the provisions of the EU's pre-accession assistance funds:

- *PHARE.* Hungary is one of the first beneficiaries of PHARE in Central- and Eastern Europe. Between 1990-1999 Hungary received PHARE assistance worth around EUR 1 billion (annual average EUR 100 million).
- *SAPARD.* The Special Accession Programme for Agriculture and Rural Development is aimed at the efficient utilisation of the European agricultural guarantee funds and the creation of a sustainable agricultural and rural development strategy. In the period between 2000-2006.
- *ISPA.* The EU also provides assistance in the fields of environment protection and infrastructure development through the Instrument for Structural Policies for Pre-Accession from the year 2000.

Table 6.

Allocation, contract and disbursement of

European Union pre-accession financial instruments

Hungary 1995-2001

Million Euro

Year	Allocation	Contracted amount	Disbursed amount
1995	99	110	123
1996	109	93	97
1997	104	74	72
1998	93	68	86
1999	131	110	48
2000	185	141	125
2001	278	158	134

Source: Office of the Minister without portfolio responsible for PHARE

2 THE MAIN FRAMEWORKS OF THE HUNGARIAN ADMINISTRATIVE SYSTEM

2.1 Strong local tier – weak counties

Historical preliminaries. The basic units of the Hungarian local governmental system since the thirteenth century had been the counties, organs designed to protect the interests of the nobility. The county was a state within the state. This essentially feudal structure remained intact until the War of Independence of 1848–1849. Accordingly, the relatively great power of the county was retained and acknowledged by the 1870 Act on Municipal Authority. The counties and cities with county rank continued to be the two pillars of local Government.

In 1950 the Soviet system of councils was introduced, which was an essentially hierarchical, centralised organisation within the framework of a monolith state. According to the ruling principle, "the councils were not the organs of local power but the local organs of the (single) power." The county continued to be the basic unit of territorial organisation throughout this period and played a substantial role in the redistribution of public resources. Elected village and urban bodies were subordinated to the county. Therefore, until the systemic change, the structure of the state was basically centralised, even if - compared with the neighbouring countries - the Hungarian system of councils offered more space and freedom to the local actors. The relatively liberal understanding of local competencies has been improved due to the reform of the mechanisms of the planned economy in 1968 and after the modification of the Council Act in 1971.

After the transition of 1989/90 significant reforms were introduced within the Hungarian public administration in the territorial level in organisational, structural and functional terms. The legislators aimed at enforcing new values in the regulation:

- Much attention was focused on the creation of the institutions of *local democracy* in order to provide legitimacy to the local public administration.
- Another value was the *independence* from the paternalism of higher levels. Hierarchic and other obligations were eliminated.
- The legislator's definite aim was to base territorial public administration on the *dominance of self-governments, first of all of the municipalities.* Therefore much less attention was paid to the county tier of the self-Government system.

Table 7.

Territorial units in Hungary using the NUTS system

Level	Denomination	Number of territorial units
NUTS I	Country	1
NUTS II	Region	7
NUTS III	County (capital)	20
NUTS IV	Statistical small regions	150
NUTS V	Settlement	3.135

Source: Central Statistical Office

Nearly all settlements - independently of their size - received the right to establish local self-governments. Thus, in order to enhance local democracy the number of local decision–making units were doubled within a short period so that more than 3000 re-established local governments replaced the formerly jointed 1600 local councils.

Table 8.

Number of local public administrative units

Hungary, 1990–2000

	Individual councils		Joint councils	–	Total
1990	948		688	–	1636
	Municipalities	Districts within the capital city	District notarities	Members in district notarities	Total
2000	1739	23	536	1396	3158

Source: Gazetteer of the Republic of Hungary, 1990;2000; Hungarian Central Statistical Office, Budapest

During the 90's many settlements have been upgraded and have attained the rank of town, or have been awarded the public administrative status of town with city rank.

Table 9.

Number of settlements by their public administrative status

Hungary, 1990–2000

	Capital + towns with county rank	Towns without county rank	Large settlements	Small settlements	Total
1990	9	157	277	2577	3020
2000	23	199	216	2697	3135

Source: Gazetteer of the Republic of Hungary, 1990 and 2000
Hungarian Central Statistical Office, Budapest

While local governments have been reinforced in 1990, the county self-governments received almost no local governmental tasks and resources. The lack of means was accompanied by an unstable political legitimacy, due to the indirect election method of county assemblies. Many consider the weakening the medium (county) level administration as the inevitable consequence of the „bottom up" principle and subsidiarity.

The second elected Government in 1994 acted with the explicit intention of strengthening the medium tier by the introduction of direct elections for county governments. This was successful in the political sense, but the reform of county elections was not accompanied by the reorganisation of competencies and resources.

Table 10.

Names of NUTS II and NUTS III level units

Hungary

NUTS II Regions	NUTS III Counties within the regions
Central Hungary	Budapest and Pest
Central Transdanubia	Fejér, Komárom-Esztergom and Veszprém
Western Transdanubia	Györ-Moson-Sopron, Vas and Zala
Southern Transdanubia	Baranya, Somogy and Tolna
Northern Hungary	Borsod-Abaúj-Zemplén, Heves and Nógrád
Northern Great Plain	Hajdú-Bihar, Jász-Nagykun-Szolnok and Szabolcs-Szatmár-Bereg
Southern Great Plain	Bács-Kiskun, Békés and Csongrád

Source: Central Statistical Office

Various models of competing institutional arrangement of the spatial structures were proposed in Hungary. Since 1990 there has been an ongoing political and professional debate on the role of the counties. The main issues were as follows.

- Which should be the territorial tiers of Hungarian public administration?
- Is the reform of the institutional arrangement of the county necessary?
- Should counties be replaced by smaller units (such as the so called urban–districts) or bigger units (such as the regions)?

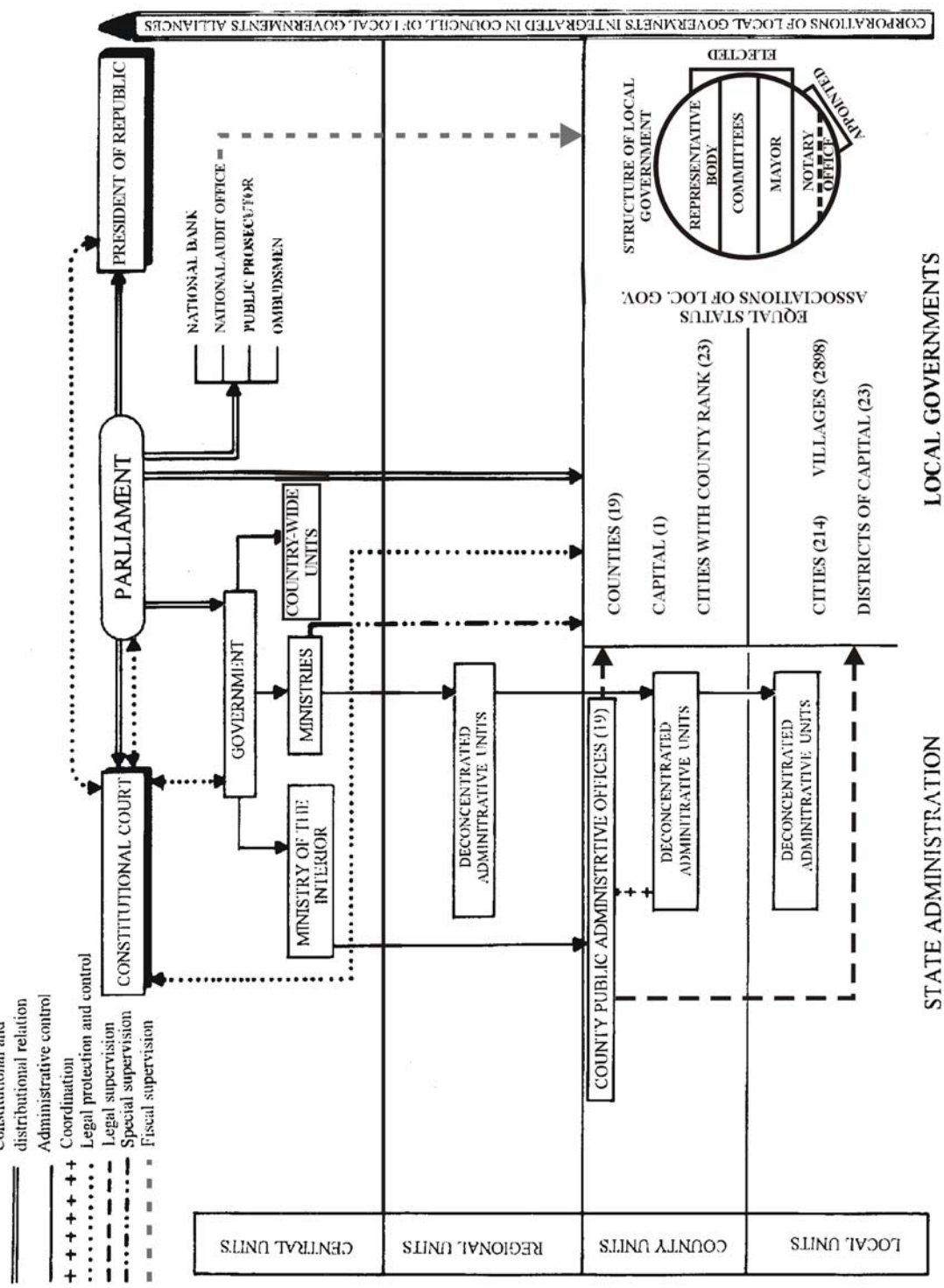
The impact of the reinforcement of local governments on the local society is undoubtedly positive, bringing decisions closer to the citizens. The local governments could mobilise local resources, therefore the quality of infrastructure and the comfort feeling of people improved significantly especially in tiny villages.

2.2 Centrum - periphery relations

The Parliament of transition in 1990 had no detailed concept on the reorganisation of the governmental and public administrative systems. The aim was to increase the role of the Parliament significantly. Yet, no mature concept evolved for the delimitation of parliamentary and Government power and soon it became obvious that the Parliament itself needs a strong Government. In spite of the strong mistrust of the newly elected politicians against the administrative bureaucracy, the need of continuity proved to be stronger. Therefore only minimal changes were introduced within the structure of Government, mostly in the interest of performing new tasks – connected with the systemic change – such as privatisation, compensation.

It is a strong tradition of the Hungarian governmental model that the competencies of the sectoral ministries (line ministries) are very strongly defined, regarding regulation, distribution of resources, establishing and maintaining institutions. After the systemic change the co–ordinative power of the governmental tier weakened, and governmental or national interest could hardly restrict sectoral egoism. This trend has been somewhat changed by the end of the 90's with the substantial reinforcement of the Prime Minister's Office. However, during the whole period one of the most difficult tasks of local and regional politics was the harmonisation of sectoral interests with local and regional priorities (Fleischer-Futo-Pessl 2001).

Figure 1


CENTRAL AND LOCAL ORGANISATION THE HUNGARIAN REPUBLIC
Constitutional and distributional relation
Administrative control
Coordination
Legal protection and control
Legal supervision
Special supervision
Fiscal supervision
CENTRAL UNITS
REGIONAL UNITS
COUNTY UNITS
LOCAL UNITS
CONSTITUTIONAL COURT
PRESIDENT OF REPUBLIC
PARLIAMENT
NATIONAL BANK
NATIONAL AUDIT OFFICE
PUBLIC PROSECUTOR
OMBUDSMEN
GOVERNMENT
MINISTRY OF THE INTERIOR
MINISTRIES
COUNTRY-WIDE UNITS
DECONCENTRATED ADMINITRATIVE UNITS
COUNTY PUBLIC ADMINISTRTIVE OFFICES (19)
DECONCENTRATED ADMINITRATIVE UNITS
DECONCENTRATED ADMINITRATIVE UNITS
COUNTIES (19)
CAPITAL (1)
CITIES WITH COUNTY RANK (23)
CITIES (214)
VILLAGES (2898)
DISTRICTS OF CAPITAL (23)
EQUAL STATUS ASSOCIATIONS OF LOC. GOV.
STRUCTURE OF LOCAL GOVERNMENT
ELECTED
REPRESENTATIVE BODY
COMMITTEES
MAYOR
NOTARY OFFICE
APPOINTED
CORPORATIONS OF LOCAL GOVERNMETS INTEGRATED IN COUNCIL OF LOCAL GOVERNMENTS ALLIANCES
STATE ADMINISTRATION
LOCAL GOVERNMENTS

While competencies have been decentralised, the system of resource division remained strongly centralised. The majority of incomes of the local governmental sector comes from central supports and subsidies. A fairly high proportion of state subsidies are targeted subsidies. In the same time, the tasks of local governments has continuously increased in the last years of the 90's, while the resources and the proportion of local Government allotment in public expenses could not keep up with them (Kopanyi 2001).

This has concentrated a great deal of power and resources in the central tier, and has worsened the budgetary conditions in the territorial tier. Local Government sector has a weak chance to enforce interest in the central tier, and the local governmental associations do not have strong decision influencing competencies. Regarding interest representation the local governments are fragmented. This is aggravated by the lack of competencies of county governments. All this has led to a weak territorial co–ordination and contributed to the decline of the quality of local services and local public administration.

During the 90's the sectorally defined competencies were constantly re-distributed. Right after the systemic changes the Government respectively the line ministries attached high priority to establish strong positions at the local, county and regional level in order to acquire the most possible from the public tasks and resources. Until 1994 some 40 different types of deconcentrated organs were established in the county and regional tier in the administration of labour, construction, education, environment protection, consumer protection, and agriculture. In many cases this has clearly contradicted with the dominance of the local governments embraced by the principles of the political transition.

Due to a definite shortage of integrative forces, co-ordinating elements in all tiers, the most important challenge for the Hungarian public administration is

- the development of the co-ordination between local and local, as well as between local and meso-tier institutions
- the strengthening of the meso-tier - i.e. that of urban districts, counties and regions
- the development of the co–ordination between sectoral institutions and tiers
- and the establishment of mechanisms and institutions to serve these aims.

2.3 Experiments in the institutionalisation of decentralisation

The introduction of the Act on Regional Development and Physical Planning in 1996 (Act 1996) promised substantial changes in the territorial decentralisation process. New institution types were set up, the so-called Development Councils. These institutions encouraged the co-operation between the different tiers and sectors, also between private and public bodies in the form of partnerships. Various new organs have spread in different fields between the state administrative sector and the self-governmental sector: *county education development foundations, county defence committees, regional committees of tourism, water conservancy councils, county renovation and reconstruction committees, youth and sport council*s.

These mixed organisations had some antecedents. At the beginning of the 90's similar organisations of various legal forms were established in the central tier, such as the labour councils. In the second half of the 90's the Government made its public administrative modernisation experiments mostly in the territorial tier.

The operation of these institutions had a significant impact on the entire public administration. In some cases, these organisations encouraged the central Government to bypass the local governmental sector. In other cases the new institutional forms enhanced the uncoordinated character of regional governance.

At the beginning of the second decade of transition, the spatial and sectoral frameworks of power practice are not firmly established. Therefore the success of administrative modernisation remains uncertain.

3 REGIONAL POLICY

3.1 EU and the Hungarian approaches to regional policy

3.1.1 EU influence on Hungarian regional policy

During the 90's economic development, the evolution and consolidation of market economy occurred in Hungary in a regionally differentiated manner. Consequently spatial disparities have been increasing. While formerly developed regions became crisis regions, other regions which were formerly lagging behind, experienced quick economic modernisation. Not only economic differences have been growing, but also social differences, in particular disparities regarding quality of life, education and employment level.

Regional inequalities are properly characterized by the following extremes: while two third of foreign direct investment has arrived to the Central Hungarian Region, the Southern Transdanubian Region has been reached by only 2% of the total foreign direct investment influx.

Spatial inequalities can be observed mainly along the following geographical dimensions:

- between the capital and the countryside,
- between the Western and the Eastern part of Hungary, and
- between central territories and territories near the national borders.

The Hungarian Government started to fight spatial disparities at the early stage of the transition by focussing efforts on deprived territories and problematic regions (VATI 2002). Today an important aim of regional policy is the development of economic competitiveness of the regions. This is determined by the following factors:

- the role of foreign capital in the local economy,
- entrepreneurial activity, in particular the development of small and medium size business sector,
- the level of research and development,
- the level of business services,
- and the level of transport and other infrastructure.

Besides decreasing territorial inequalities, Hungarian regional policy has the following aims:

- to further the spatial spreading of innovations
- to implement a development policy compatible with sustainable development of resources
- to link the regions of Hungary into the European economic space
- to develop the instruments and institutions of regional policy.

Hungary's considerable experience in regional policy has been an important factor in the success of transition. This experience has been critical for accommodating EU programmes and developing a self-reinforcing process of policy implementation and institution building.

The EU started to play an influential role in Hungary as early as 1991 by signing important association agreements, followed by the implementation of the partnership for enlargement. EU contribution was also significant at the policy-making level with the introduction of the PHARE programme and of the subsequent pre-accession instruments.

The Commission has recently defined milestones for the accession phase and promoted a useful discipline based on principles that need to be applied for structural funds type regional policy. Ensuring the EU compatibility of Hungarian policy is a necessary but not automatically sufficient condition for optimising regional policy intervention.

3.1.2 Aims of EU programmes and financial instruments

PHARE was set up in 1989 and was the most important external support vehicle to assist policy implementation in Hungary (and Poland). While designed to facilitate the conversion of CEE countries to a market economy, it provides technical and financial aid in key economic areas and finances a wide range of development projects.[1] Between 1990 and 1999 from a total budget of nearly 11 billion ECU/Euro Hungary received around Euro 1.03 billion, (*i.e.*, an average 0.25 per cent of Hungary's GDP per year).

Since the mid-1990s, the emphasis has moved from supporting privatisation, regional development, and infrastructure investments towards technical assistance, training and education. Programmes have been increasingly accession driven. Given the need to rebalance support

[1] The programme was subsequently extended to other CEEC and by 1997, 13 of them were eligible.

towards public reform, transposition of the *Acquis* and local capacity development, PHARE has now been assigned two major priorities:

- institution building and
- investment support.

Around 30 per cent of PHARE funds was devoted to enhancing the capacity of all democratic institutions, public administrations and organisations for implementing and reinforcing Community legislation. The remaining 70 per cent finances investment projects to facilitate compliance with Community legislation and high EU requirements in various fields. Investment support falls into four major categories *i.e*. investment in EU norms (adopting EU norms and standards), large-scale infrastructure (a priority taken over by ISPA from the year 2000), small and medium-sized enterprise support, and regional development.

In the wake of the pre-accession process, the programme was strengthened with the adoption of Agenda 2000. This document sets up firm accession criteria and allocates financial assistance of more than Euro 3 billion per annum to candidate countries for the period of 2000-2006. This amount is shared between three funds:

- the PHARE programme,
- ISPA (environment and transport infrastructure)
- and SAPARD (agricultural and rural development).[2]

The magnitude of the three funds for Hungary is the following:

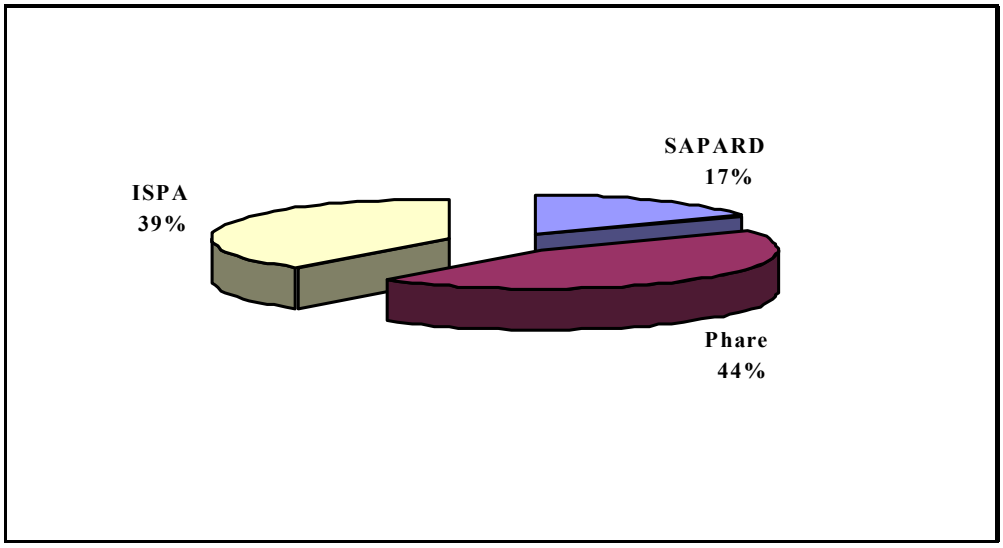
- PHARE amounts to about Euro 96 million
- ISPA can expect approximately Euro 80-90 million
- and SAPARD an average of 35-40 million

per year.

[2] Besides the three pre-accession funds, additional financial assistance is available from the European Investment Bank (€15 billion), European Bank for Reconstruction and Development (€3 billion and €1 billion from the World Bank) in the form of loans for infrastructural investments, enterprise promotion, privatisation.

Figure 1.

Budget shares of the three pre-accession instruments in Hungary, 2000--2002



Source: Data from the European Commission

3.1.3 PHARE and regional development

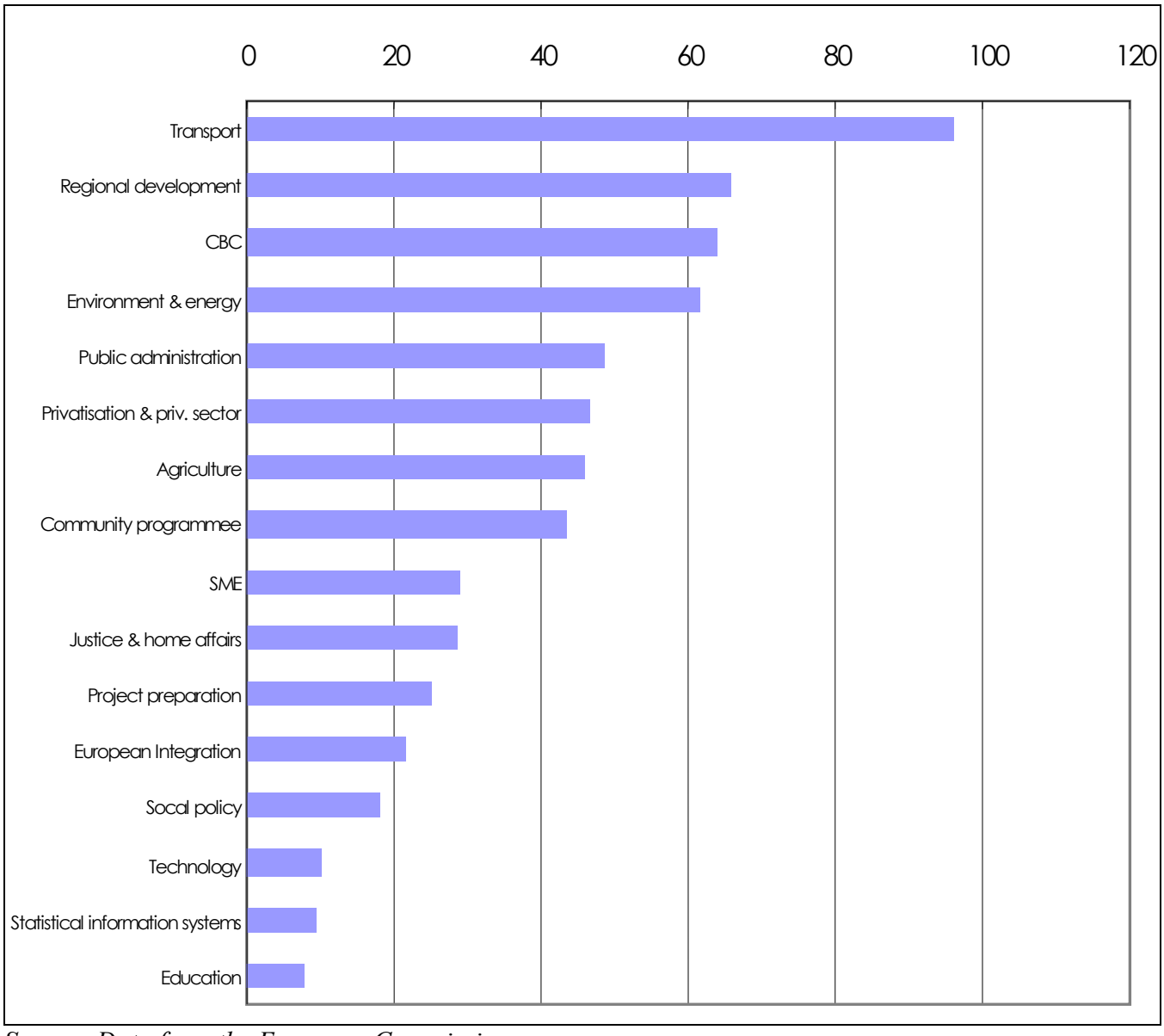
Regional development has been a strong priority of the PHARE program, in particular since 1995. With regard to Hungary's regional policy, EU assistance has contributed to consolidate the regional budget and to provide leverage money for many development projects.

Figure 2.

Allocations of PHARE programmes by sectors

Hungary, 1990–99

Million Euro



Source: Data from the European Commission.

Until now, five regional development programmes have been approved for Hungary of which the 1998 pre-accession programme is still under implementation. In the framework of these five programmes, PHARE regional development obtained Euro/Ecu 66 million. Significant progress was made during the last decade, with PHARE giving a major thrust for change in the regional economy and institutions. The first regional development programme that started in 1993 with an allocation of ECU 10 million significantly contributed to the preparation of the 1996 Act on Regional Development and Physical Planning (Act 1996) and to the modernisation of the Regional Development Fund. Regional policy and the development system of EU member states were analysed and adaptable methods were incorporated into the new regional policy.

Table 11.

PHARE regional development programmes

Hungary, 1992-1998

PHARE regional development programmes	Year of approval	Budget Millions ECU/Euro
Regional development programme	1992	10
Regional development and steel industry reconstruction programme	1995	5
Regional development system programme	1996	10
Regional development programme	1997	34
Programme on regional policy and cohesion	1998	7

Source: Data from the Ministry of Agriculture and Regional Development.

The programme also enhanced the creation and operation of County Development Councils in the two assisted counties. In addition, a significant number of inter-communal partnerships (around 40) were set up. The following programmes with a total budget of Euro 56 million between 1996 and 1999 aimed at

- industrial restructuring (diversification of the economic structure via support for new businesses),
- rural development (via business-related infrastructure),
- human resource development (focusing on employment projects).

Such programmes were particularly useful in paving the way for creating an enabling environment for business initiatives at local level.

For the period of 2000-2002, a PNDP (Preliminary National Development Plan) has been prepared. The main functions of the plan are

- to put the planning process in a multi-annual context,
- to comply with structural funds methodology
- and to provide a programming basis for the PHARE, ISPA and SAPARD instruments.

According to the commitments, the budget, including the national contribution, should more than double. As reflected in the PNDP priorities, PHARE support for economic and social cohesion will give the highest priority to local development and human resources, two areas that were not at the top of the agenda of previous programmes. Support will be focussed on the three least developed regions (Northern Hungary, North and South Great Plain).

However, these programmes are not directly aimed at reducing disparities and boosting economic development but at developing sub-national capacity for managing future development projects. Some development operations are still foreseen in particular for enterprise co-operation and preparing SMEs for the internal market, developing regional tourism, fostering innovation in SMEs, developing business-related infrastructure, employment projects such as promoting the transition from training to work. RDCs (Regional Development Councils) and RDAs (Regional Development Associations) will gain special attention in implementation and project planning. PHARE will also provide further funds for institution building to improve administration capacity at central and sub-national levels.

3.1.4 The cross-border component

In 1995, in the wake of its Interregional Programme (INTERREG), the Commission extended the scope of PHARE by tackling the problem of border regions, an important territorial issue in Hungary as three-quarters of the counties have a border with another country. The Cross-border Co-operation (CBC) PHARE programmes allocated Euro 42 million for co-operation between Austria and Hungary including regional planning, infrastructure investments, establishing industrial parks, trade co-operation, improving human resources and environmental protection.

Similar programmes were introduced between Hungary–Romania, Hungary–Slovenia–Austria, Hungary–Austria–Slovakia, and Hungary–Slovakia. By the end of 1999, a total of Euro 64 million had been approved for CBC programmes. . CBC programmes provided support in

five areas in addition to developing mid-term development programmes of the regions concerned, and contributed to the achievement of a myriad of often small but useful projects.

The bulk of the allocated resources benefited the Western counties of Hungary, the areas with the highest GDP per capita (after Budapest and Central Hungary) and with the best employment figures. Some of the Eastern and Northern counties also participated in CBC programmes in co-operation with Romanian and Slovakian border territories. So far absorption problems seem to have stifled initiatives in the North-Eastern regions. With the recent progress of the EU–Croatian co-operation, there is hope for new CBC programmes in Southern Transdanubian counties.

Table 12.

Beneficiary counties of PHARE Cross-border Co-operation (CBC) programmes

CBC Programmes	Budget approved million Ecu	Beneficiary counties
Hungary–Austria, 1995, 1996, 1997, 1999	42	Györ- Moson-Sopron, Vas, Zala
Hungary–Austria–Slovenia, 1995, 1996	3	Vas, Zala
Hungary–Austria, Slovakia, 1995, 1996	3	Györ- Moson-Sopron
Hungary–Romania, 1996, 1997, 1999	14	Csongrad, Hajdu-Bihar, Bekes, Szabolcs-Szatmar-Bereg
Hungary–Slovakia 1999	2	Györ-Moson-Sopron, Komarom -Esztergom, Pest, Nograd, Heves, Borsod-Abauj-Zemplen
Total	**64**	

Source: Data from the European Commission.

Inter-regional co-operations can also be envisaged in a larger perspective. In 1997 a new INTERREG programme – Executive Measures for the Central, Adriatic, Danubian, South-Eastern Space – was launched. It included Austria, Germany, Italy, Greece, Hungary, Poland, the Czech Republic, Slovakia, Slovenia, Yugoslavia, Croatia, Bosnia-Herzegovina, FYROM, Albania, Moldavia and the Ukraine. Hungary is participating in the programme management structure and actively contributing to several trans-national projects. Other co-operation initiatives include the Alps-Adria working Community (Austrian, Italian and Hungarian counties and regions) or the Carpathian Euro-region (bordering regions of Ukraine, Poland, Romania and Hungary). In addition, the National Regional Development Concept encourages the establishment of the Alföld–Banat–Vajdaság (with Yugoslavia) Euro-region and the Tisza–Maros Euro-region (with Romania).

3.1.5 Sectoral co-ordination of EU support programmes

Transport and environmental programmes always accounted for an important share of the total EU support budget (still close to 20% in PHARE 1999 country programme) reflecting

- the under-equipment of the country in transport infrastructure and
- the serious environmental problems it has to face and hence the need for policy intervention:

Transport infrastructure. In the early 1990s, PHARE-related transport support was mainly devoted to emergency supplies of equipment and parts. Later and especially with the new pre-accession instrument ISPA, the overall objective is to align the candidate countries with Community infrastructure standards and to connect the major transport routes to the Trans-European network. Building such links is considered as critical, counting on a close relationship between FDI (Foreign Direct Investment) and motorway construction and also between FDI and regional economic development. Reaching an agreement on the priority axis is not easy, however. For example, constructing important links within CEE countries, if the given axe is not a priority transport route for the Union as an extension of the TEN network, the project will not receive ISPA assistance.

Environment. The Hungarian Government and the Commission have different views on environmental investment. While both believe that there is a need to focus on sewage treatment and waste disposal, the list of priorities is difficult to establish, The largest part of the investments was planned in Budapest and a few major regional centres such as Debrecen, Szeged, Györ. Lake Balaton is a high priority for the Commission, but not for the Hungarian Government. In addition some projects in Budapest, have been withdrawn from the proposed list mainly because of political conflict between the municipality and the central Government. So far, however, many programmes have been completed under PHARE *e.g.* municipal sanitary landfills, modernisation of the fire department, sewage treatment and sludge disposal, water protection and pollution control and environmental investment in SMEs. A total of approximately ECU 50 million has been allocated for environmental issues.

Agriculture. Although agriculture's share of GDP and employment has decreased since the beginning of the transition, the sector still plays a major role in several regions such as the Great Plain and Southern Transdanubia where it accounts for 15 per cent of GDP. Therefore

agriculture and rural activities have been the focus of several PHARE programmes. At the same time, significant efforts were pursued by the central Government as part of its 1998 Agricultural Programme. With SAPARD now replacing PHARE, the balance between agricultural and rural support is shifting, and rural support is gaining in importance. Although 62 per cent of the funds will go to structural adjustments in agriculture and the implementation of the *Acquis* for the Common Agricultural Policy of the Community, a more territorial approach is encouraged. In addition the Hungarian rural development plan budgets more resources for agriculture projects to start with and at a later period shifts the priority to rural development.

3.1.6 Programme management and co-ordination

As of regional development programmes, the main policy-making responsibility lies in the hands of the Ministry of Agriculture and Regional Development, which also supervises the SAPARD payment agency. SAPARD is a pioneer fund in terms of management. Following the recommendations of DG AGRI (EU General Directorate for Agriculture), the Community opted for a decentralised implementation system.

Programme co-ordination was already an important problem at the time of the unique PHARE framework and is becoming a key issue, because many sectoral and regional (including CBC) programmes have overlapping targets and scopes. Taking care of complementarity might help to avoid duplication and mismanagement. For example, flood control and protection cannot be financed from ISPA but is an important element in CBC programmes. Connections with appropriate SAPARD programmes need to be established to maximise their impact. For example if PHARE supports the restructuring of water management services and funds public awareness campaigns, ISPA water infrastructure projects are likely to be strengthened and their social rate of return increased. Conflicting objectives (*e.g.* promoting food standards within SAPARD and maintaining a high EU tariff) should also be given more attention. The focus should not only be the distribution of tasks between programmes but also the integration of the results of impact assessment studies. Policy measures are being taken in this direction.

The PHARE programme has a *centralised decision-making and implementation system*. While programme management is outsourced, the Commission must countersign every contract and Brussels must approve each payment. Therefore, PHARE allocations are only

frameworks and the realisation of the payments depends on whether the Commission is satisfied with the work of the Hungarian management, with the progress of the programme and whether the contract and the tendering procedures follow EU regulations or not. The introduction of the pre-accession strategy, however, foresees a gradual decentralisation i.e. the shifting of responsibility from Brussels to the national authorities.

Steps toward strengthening national capacity have already taken place such as

- establishing the National Fund (creating a single fund), which is the Central Finance and Contract Unit's (CFCU) single responsibility for payments and contracts,
- better co-ordination between the various PHARE offices and ministries,
- setting up Monitoring Committees,
- and continuously improving financial control and audit.

This implies an important extension of the central administration in several ministries. The Commission has constantly stated that the Hungarian administration system is not yet ready for managing structural funds, although serious improvements have been made to it. It still lacks suitable human resources due to low wages, insufficient training and lack of language capacity. For the EU, strengthening the central administration is a high priority.

The top down nature of PHARE is also clear at the operational level. So far on the national scene, the central Government has kept responsibility for implementing a majority of projects. Some levels of decentralisation have nevertheless been introduced in many regional development and CBC programmes. County Development Councils originated in the first PHARE programme. From the 1995 programme onwards, Regional Development Councils (RDCs) and Agencies (RDAs) have been set up to identify projects and manage tendering. Such RDCs and RDAs have been formed in the Northeast, the North Great Plain, the South Great Plain and Southern Transdanubia.

Administrative capacities and policy expertise at this level nevertheless still lag behind. The macro-regional level is operating with newly created institutions (many RDCs were established in 1999). These Regional Development Councils have a budget for financing development projects for the first time as of the year 2001, although more limited than the County Development Councils and at the cost of central and county budgets.

Assessment studies on PHARE sub-programmes are often characterised by mixed opinions. A common criticism refers to management problems and often-important delays in project implementation as well as the inflexible contracting procedures. Lack of preparative studies and master plans, moreover insufficient support provided to the financial sector to develop its knowledge on infrastructure project management are often emphasised. For PHARE-financed transport infrastructure, analyses show a strong bias towards investment (at the expense of institution building and especially of training) and lack of co-ordination between PHARE and other international financing institutions (on procedures). Strategic PHARE-supported institutional projects were said to have little impact on policy formulation, while their effect on policy implementation was satisfactory. The PHARE CBC is another programme that did not lead to full satisfaction. Institutional weaknesses, management shortcomings and low absorption rates caused major delays in implementation. More focus on small projects, decentralised management and more active partnership could improve the governance of the programme considerably and enhance its efficiency.

3.1.7 EU compatibility of Hungarian regional policy

The new pre-accession approach alters significantly the conditions under which the Hungarian regional policy operates. This policy generates considerable expectations, as it establishes the conditions of tapping EU Structural Funds (SF) at the time of accession. So far, the pre-accession instruments expenditures represent approximately Euro 30 per inhabitant, three times the amount of 1999 transfers, which will be further expanded to a Euro 60 per inhabitant for aid during the first year of accession and will increase up to Euro 220 per inhabitant in later years (*i.e.* the current average of cohesion countries). In order to receive these transfers, matching funds equivalent to about one-fourth of the EU transfer need, however, to be put in place. It is also necessary for the Hungarian policy framework to integrate the four principles which govern the EU structural approach *i.e.*

- concentration,
- programming,
- partnership and
- additionality.

In this context, the extent to which Hungarian regional policy complies with these principles characterises its state of preparedness. This compatibility analysis can also help to identify the major obstacles to convergence and anticipate the length of the accession period.

Concentration. With regard to zoning and regional targeting, Hungarian methodology is now close to EU methodology. The 1996 Act shifted the method of area designation from ranking settlements to assessing statistical territorial units to define four types of regions:

- underdeveloped areas,
- industrial crisis areas,
- regions with high levels of unemployment,
- and rural territories.

Such categorisation is very similar to the EU (former) objective areas 1 to 5b. In addition, around one-third of the population is covered by regional policy programmes in both the European Union and Hungary. Eligible areas are very concentrated in the Western and central parts and more diffuse in the East and South of Hungary.

The main financial instruments of Hungarian regional policy are allocations and supports re-distributed by the central Government to various tiers of local administration. Eligibility to receive these funds is determined partly by the deficiencies of the local markets of labour and capital.

In Hungary significantly more money is spent (in relative terms) on physical infrastructure than in Western Europe. Conversely, a much higher share of EU projects in regional development targets investments creating new jobs, supporting enterprises and human resources development than in Hungary, particularly at local level where local governments are overwhelmingly focused on operational tasks and (small) infrastructure investments.

Table 13.

Distribution of decentralised allocations by county

Hungary, 1998-2000

County	Distribution of decentralised allocations Millions HUF				Unemployment rate 1998
	Regional development Allocation	Spatial equalisation Support	Total	Total decentralised allocations per capita	
Budapest	0	0	0	0	3.6
Baranya	890	1588	2478	5676	4.0
Bács-Kiskun	1442	2585	4027	6997	9.4
Békés	1007	1805	2812	6579	12.3
Borsod-Abaúj-Zemplén	1955	3528	5483	6897	17.7
Csongrád	918	1599	2517	5559	7.8
Fejér	497	801	3815	2949	7.6
Györ-Moson-Sopron	866	840	1706	2985	4.4
Hajdú-Bihar	1255	2243	3498	5982	13.7
Heves	594	1065	1659	4782	11.6
Jász-Nagykun-Szolnok	1130	2021	3151	7071	12.4
Komárom-Esztergom	408	708	1116	3279	9.5
Nógrád	761	1390	2151	9165	14.7
Pest	1103	1995	3098	3000	5.9
Somogy	716	1290	2006	5580	11.2
Szabolcs-Szatmár-Bereg	1758	3216	4974	8025	14.9
Tolna	493	866	1359	5100	11.5
Vas	308	489	797	2790	5.2
Veszprém	599	1066	1665	4077	7.9
Zala	464	792	1256	3921	8.0
Total	**17164**	**29887**	**47051**	**5249**	

Source: Government Decree 28 / 1998 (II. 18). Official Hungarian Gazette, 1998-2000.

Programming. Strategic programming - which builds on a pyramid of plans and goals from local via regional to national levels - needs more focus and articulation in Hungary. The first regional plans (mid-term programming) were prepared as part of various PHARE Regional Development and Cross-Border Co-operation (CBC) programmes. Country-wide preparation of such programmes and their integration into National Development Plans is still under way.

In general, Hungary continues to devote much effort to strategic planning at national level but Government officials often claim that there are too many of them and that they are often little more than a set of ideas. Programming, on the other hand, involves not only the preparation of long and mid-term plans but also a strict order of procedures that compels the preparation and the implementation of the programmes. While PHARE has actively contributed to developing programming capacity via technical and financial assistance, at the national level more focus has been given during the last two years to building this capacity at regional level and this

will be reinforced with PHARE 2000–2002. It is unfortunate, however, that the local level largely falls outside of this institutional building and planning effort.

Additionality. Assessing Hungary's potential for receiving structural funds in this context is particularly difficult. The yearly budget of all separate Hungarian state funds aiming at country-wide development slightly exceeds Euro 1 billion: about half of these funds is earmarked for road, environment or telecommunication infrastructure. However, not all projects financed from these funds are comparable to structural funds programmes, given the eligibility conditions imposed by the Commission.

It is known that during the 1994–1999 period, Greece and Portugal received structural funds resources of nearly eight per cent of their GDP. Taking this data as a basis, and especially the per capita level, Hungary would be eligible for 4.08 billion from EU Structural Funds. Given the gap between such amounts and co-financing resources available and given that other CEE countries exhibit similar or even greater disproportion, the Commission introduced a four per cent ceiling of the GDP for EU Structural Funds receipt in Agenda 2000 instead of the GDP per capita comparison.

Management issues.

Table 14.

Use of PHARE support

Hungary, 1990 - 1996

Year of approval	The amount of support million ECU	Percentage of contracted support at the end of 1996	Percentage of paid support at the end of 1996
1990	89.8	105.8	105.3
1991	119.5	95.6	89.8
1992	97.5	96.4	90.4
1993	99.0	99.8	74.5
1994	84.5	64.9	41.4
1995	92.0	20.7	16.1
1996	101.0	9.4	9.4
Total	683.3	71.1	61.9
Other projects	4.2	84.0	81.7
Total	**687.5**	**71.1**	**62.0**

Source: Data from the Ministry of Foreign Affairs, Aid Co-ordination Office.

The issue of co-financing also raises the problem of managing EU Funds in Hungary. Although in the early years of PHARE, the share of funds spent of the total allocated was relatively high, the overall share of the contracted amount of the total allocation reached 71 per cent for all programmes between 1990 and 1996.

The average time between programme approval (in Brussels) and completion is two to three years, excluding discussion time. At the end of 1996, only around 60 per cent of the support had been paid for the period under review. 1999 data indicated some progress. Another problem concerns the present focus of pre-accession aid to three regions, which means that they will be the only ones to gain expertise in EU Fund management.

3.2 Mapping of Institutions and Actors

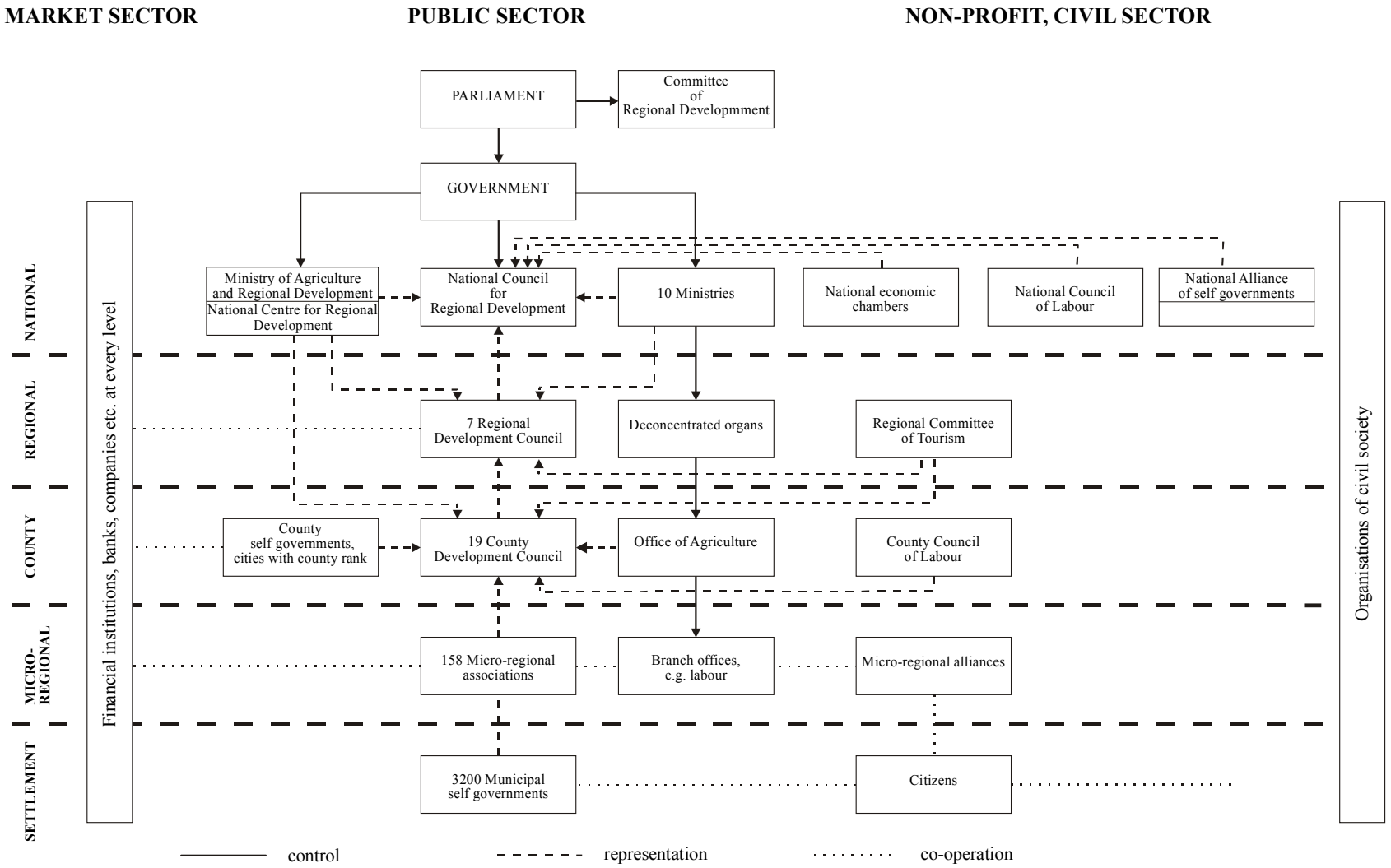
3.2.1 The administrative structure for regional development

The objectives of the Act on Regional Development and Physical Planning in 1996 involved the necessity of the decentralisation of public administration and a more flexible management of regional policy establishing partnership with the actors of the social and private sectors. The failures of the former regional policy were partly caused by the centralised administrative system neglecting the local actors in the regional development decision-making.

Although the legislator realised the advantages of decentralisation it remained reluctant to share its competencies in regional policy with the county self-governments. Therefore the legislator introduced a special institution parallel with the public administration: the four level system of Development Councils. The creation of the territorial Development Councils has further weakened the elected county assemblies. Also, in building the respective institutions, the principle of partnership was not fully applied.

Figure 1

The key organisations of regional development in Hungary



In terms of public law it is difficult to define the nature of the territorial Development Councils since the legislator did not describe the precise type of organisations to be established under the name Development Council. This led to several practical problems in their operation i.e. in their financing, staffing matters or legal control.

The composition of the Development Council showed between 1996-1999 tripartite or corporate character, it is varying in the different tiers (like national, regional, county and micro-regional).

- *At micro-regional level* the legislator did not prescribe the establishment of Development Councils. The local municipalities had got a right to create associations for development issues, and these associations could participate in the county councils.
- *County level.* County Development Councils consisted of: representative of the county assembly, of the cities with county rank, representatives of micro-regional associations within the county (their number is fixed by law accordingly the number of NUTS 4 units), representatives of employers (chambers) and the employees (trade unions), and finally the representative of the ministry responsible for regional policy. The basic contradiction of the model is that these Development Councils were equipped with far more power and competencies than the directly elected county assemblies. County Development Councils decide upon the development concept of the county and are entitled to distribute state subsidies within an application system.
- *Regional level.* The original act in 1996 did not launch the establishment of *regions* larger than counties. The establishment of Regional Development Councils was voluntary, and therefore did not receive resources or competencies. The fundamental reason for the hesitation about the regions was the fact that in regionalisation not only political-power issues but also possible geographical borders were uncertain in 1996. In the Regional Councils participated the representatives of the ministries, economic chambers, trade unions, associations of municipalities, and the presidents of county assemblies. The National Regional Development Concept of Hungary was passed by the Parliament at the spring of 1998. This document defined the number and borders of the NUTS 2 regions. However, the regional Development Councils were not to follow the borders of the NUTS 2 regions until the amendment of the act in 1999 which rendered the establishment of Regional Development Councils obligatory.

- *At national level* the National Regional Development Council was established with representatives of county councils, ministries, the capital, the national associations of local governments, the economic chambers, and the Council of Interest Reconciliation. The council had no decision-making competence, it is an advisory organ for the minister responsible for regional policy.

3.2.2 Main actors for policy making, monitoring and implementation

Table 15.
The members of (organs represented in) the Development Councils
Hungary, 1996

	Public Sector	Private Sector	Civil Society/NGOs
National Level	• 1-6 representatives of the County Development Councils • 9 ministers • Mayor of the capital city • National Alliance of Local Governments	• National economic chambers • Hungarian Investment Bank[3]	• Representative of the employers and employees • Hungarian Foundation for Small Business Development [4] • Hungarian Academy of Sciences[5]
Regional Level	• County Development Councils • 9 ministries • Max. 6. Representatives of the development associations of municipalities in the concerned region • Appointed representative of the Government	• Economic chambers	–
County Level	• President of the county assembly • Mayors of the towns with county status within county • Representative of the minister responsible for regional development • Representatives of the concerned statistical micro-regions	• Territorial economic chambers	• County Labour Council
Micro-regional Level	• Development associations of municipalities	–	–

The monitoring institutions of regional development evolved only parallel to the PHARE programmes and they are not yet integrated into the institutional system of regional development. The Government decree 166/2001 (IX.14) about the establishment of the monitoring systems of programmes implemented with the utilisation of international subsidies and funds, which as its title implies, treats the issue of monitoring institutions, preparing for the adaptation of the Structural Funds. However the new, and quite complicated system has not yet been set up,

[3] delegate with voice but no vote
[4] delegate with voice but no vote

preliminarily for the reason, that the explicit target is to have them launched parallel to the arrival of the resources from the European Union.

The Development Councils are authorised to make their own decisions on the implementing institutions of regional development, therefore no unified practice has evolved. The offices of the county assemblies carry out administrative tasks of the majority of the County Development Councils, but there are also county agencies operating in the form of non-profit companies. In some counties independent secretaries without legal personality carry out the preparatory and implementation tasks.

3.3 Institutional and Structural Changes

According to the 1999 modification of the Act on Regional Development and Physical Planning it is already compulsory to establish regional Development Councils for the territory of the NUTS 2 regions. The aim was to create regions, which meet the regional assistance requirements of the EU and will become the strongest level in the regional policy.

The balance of the modification of the Act on Regional Development is not explicitly positive from the aspect of the requirements of EU accession. The Government, parallel to increasing the space of the regional tier development policy, expanded its own power by modifying the composition of the Development Councils. In these bodies the representation of the micro–regions (which are functioning as the associations of municipalities) was decreased. Moreover the representation of employees, of economic chambers, and of employers was phased out. Consequently the representatives of the Government acquired the majority within the Regional Councils, since in the regional tier 10 ministries receive representation in the council. Thus the Regional Development Councils and the County Development Councils maintained some of their autonomous character, but - if their composition is considered - these bodies can be regarded as deconcentrated organs rather than decentralised organs.

[5] delegate with voice but no vote

Table 16.
Members of (organs represented in) the Development Councils
Hungary, 2000

	Public Sector	Private Sector	Civil Society/NGOs
National Level	• The regional Development Councils • 9 ministers • The mayor of the capital city • The National Alliance of Local Governments • The minister responsible for sport and youth matters[6] • The foreign minister[7] • The minister responsible for the co-ordination of the PHARE programmes[8] • Balaton Development Council[9] • The Central Statistical Bureau[10] • The Central Ethnic and Minority Office[11]	• National economic chambers • Hungarian Investment Bank[12]	• Representative of the employers and employees represented in the Interest Reconciliation Council • Hungarian Business Development Foundation[13] • Hungarian Academy of Sciences[14]
Regional Level	• The County Development Councils • 9 ministries • 1 representative by county of the development associations of municipalities • Mayors of the towns with county status within the region • The Regional Tourism Committee	–	–
County Level	• The president of the county assembly • The mayors of the towns with county status • The representative of the minister responsible for regional development • 3 representatives of the concerned development associations of municipalities • The County Agricultural Office • The Regional Tourism Committee	–	–
Micro-regional Level	• Development associations of municipalities	-	-

The formulation and the implementation of a conscious region building strategy will take time. In Hungary the most essential issue is not whether the counties or regions should make the sub-national level. The primary task is to get rid of the traditions of state centralisation and formulate a political will for the decentralisation of the power.

[6] delegate with voice but no vote
[7] delegate with voice but no vote
[8] delegate with voice but no vote
[9] delegate with voice but no vote
[10] delegate with voice but no vote
[11] delegate with voice but no vote
[12] delegate with voice but no vote
[13] delegate with voice but no vote
[14] delegate with voice but no vote

3.4 Evidence of Adaptation

In Hungary conscious regional development policy has begun in 1971, when the Government adapted a concept on the development of the Hungarian network of settlements. The model was based on the theory of central places and assigned substantial development advantages to the towns, and in particular to larger towns. The resulting policy increased the inequalities between the town and the village and caused immigration from the smaller settlements. In the same time, the regional development policy which lasted until the systemic change decreased the differences between the regions, the counties.

Planning and the system of redistribution of public resources served development targets. Implementation was mainly the task of the Government, its State Planning Office and the county councils. The centralised state administration and the county–centered territorial administrative system were compatible with the strongly concentrated development policy. However it is also unquestionable, that - following the reforms in 1971 - the Hungarian council system, in particular the councils of larger towns and counties, received more autonomy than the respective local bodies of other socialist countries.

Following the systemic change regional inequalities have been increased and crisis regions evolved, the treatment of which was the responsibility of the Government (VATI 2002). One of the main hindrances of the treatment of territorial crisis was that the county tier lost its previous positions and therefore it was not an appropriate territorial actor any more for the management of the development policy.

The foundations of the regional policy considered and established in the national scale were created by the Act on Regional Development and Physical Planning in 1996. The institutional system established could for some extent decentralise the resources and competencies but in general it was unable to eliminate the centralisation and the sectoral overweight characteristic for the Hungarian governmental model. The spatial frameworks of regional policy are further on uncertain, since the planning, development and resource division activities are carried out in three territorial levels in a parallel manner.

Due to the progress of the accession and the motivating power of the PHARE programmes the role of the large regions seems to be strengthened especially following the modification of the act in 1999. The chances of regional decentralisation highly depend on the future behaviour of the Union and on the values of the prospective domestic governments.

3.5 Case Study: the Southern Transdanubian Region

3.5.1 Situation analysis of the region

3.5.1.1 General characteristics

This section sets out a description of the current socio-economic situation in the NUTS 2 Southern Transdanubian Region.

Figure 3.

The NUTS II division of the country based on the National Development Concept 1998

The Southern Transdanubian Region consists of Baranya, Somogy and Tolna counties. To the South-West, the region is bordered by Croatia. The neighbouring regions are Central Transdanubia in the North, the Southern Great Plan in the East and Western Transdanubia in the North-West. On the basis of its 14,169 km^2 territory, the region is considered a region of medium size, representing 15.2% of the total territory of the country. 9.7% of the Hungarian

population, or 975,000 people, live in this region. This gives the lowest population density of the entire country (69.5 people/km^2).

Compared to other Hungarian regions and to other regions in the nearby countries, Southern Transdanubia can be regarded as a less developed region.

Table 17.

Key data for the Southern Transdanubian Region

2001

Population	%, Hungary = 100%	9,7
Gross domestic product (GDP)	%, Hungary = 100%	7.5
Industrial export	%, Hungary = 100%	4.4
Number of registered unemployed persons	%, Hungary = 100%	12.0
Businesses with foreign interest	%, Hungary = 100%	6.1
Length of motorways	%, Hungary = 100%	3.6
Unemployment rate*	%, Number of people in active age = 100%	7.8
Employment rate*	%, Number of people in active age = 100%	36.3
Activity rate (15–74 years)*	%, Number of people in 15-74 age bracket = 100%	51.3

Source: Regional Statistical Yearbook. Budapest., Central Statistical Office, 2001.
**Source: Income Statistical Survey of the Central Statistical Office, 2001.*

3.5.1.2 Population

The population of all three counties is declining continuously, partly due to migration and partly due to natural causes. The rate of decline exceeds the national average figure, due partly to a natural decline of population and partly to emigration by some of the workforce. On the basis of the data taken at the beginning of 1999, the population of the region had dropped to 980,185 persons from 1,061,000 people in 1980. The period between 1998 and 2000 can also be summarised by a falling population, and the rate of this decline has exceeded the national average by more than half a per cent (–0.42%).

Table 18.

Population changes

	Population at the beginning of 1998	**Population at the beginning of 1999**	**Population at the beginning of 2000**	**Changes between 1998–2000 (%)**
Southern Transdanubia	985 562	980 185	974 768	–1.10
Hungary	10 135 358	10 091 789	10 043 224	–0.90

Source: Central Statistical Office

41% of the region's population live in Baranya County, while Somogy County, which is the fifth largest in area of all counties in Hungary and the largest in all Transdanubia, contains 34%. Tolna County is the home of 25% of the population of the region.

The main characteristic features of the current population of the region include the low number of live births (9.7‰), high mortality rate (13.9‰) and relatively advanced ageing. The natural decline has been continuous since the beginning of the 1980s and the decline is continuously increasing. As of migration, in larger towns, the dominant trend these days is migration into the surrounding villages, but the main target of the migration from the countryside is still the capital city.

The ageing process can be underlined very clearly by the facts that in 1980 the ratio of 60–year olds and over within the total population was 17%, and this increased to 19.7% by 1999, yet the ratio of children (0–14 years of age) has dropped from 21.5% to 17.5%. The ratio of inactive income earners (pensioners) is extremely high in the region, and the proportion of adult population is below the national average. This gives an extremely high overall percentage of dependent persons.

Table 19.

Age composition of the population

2000

Area	**0–14**	**15–59**	**60–X**	**TOTAL**
Southern Transdanubia	17.1%	63.0	19.9	100
Hungary total	17.1%	63.2	19.7	100

Source: Central Statistical Office

The large number of small villages is a dominant feature of the region. In Southern Transdanubia, the population is below 1,000 in 75.7% of settlements (the national figure is 54.7%).

Table 20.

Number of settlements by size classes of the local population

2000

	Local population size class								
Area	**up to 499**	**500–999**	**1,000–1,999**	**2,000–4,999**	**5,000–9,999**	**10,000–49,999**	**50,000–99,999**	**100,000–**	**Total**
Southern Trans-danubia	343	139	100	48	8	13	1	1	653
Hungary total	1033	688	657	483	138	115	12	9	3135

Source: Central Statistical Office

3.5.1.3 Employment and human resources

The activity rate of the region is below the national average, while the ratio of people receiving pensions and equivalent services exceeds the national average significantly. The high proportion of dependent people within the region is unfavourable for the competitiveness of the region. Economic activities have declined in line with the nation-wide tendencies. In 1996; one third of the population of Southern Transdanubia were engaged in active income earning activities, which represented 9% of the active income earners living in the country. The activity rate of the region stands 1.5% below the national figure, in particular Tolna County exceeds the regional average by approximately 2%.

Table 21.

Economically active population in the Southern Transdanubian Region, 2000

Area	**Number of economically active residents (thousand people)**	**Economically inactive people (thousand people)**	**Activity ratio, %**
Southern Transdanubia	384	365	51
Hungary total	4.112	3.574	53

Source: Central Statistical Office

Among those receiving pensions and pension-type services, the percentage of people receiving pension before the retirement age is nearly three times higher the national figure (38.1% compared to 13.3%). This is due to the early retirement schemes which were made available for certain jobs (underground work, radiation danger, etc.) during the reduction of coal and uranium mining, and which many people chose in order to avoid unemployment.

Table 22.

Pensioners and people receiving pension-type services

2000

Region	**Number of pensioners and people receiving pension-type services**	**Of whom people receiving pension before the retirement age**	
		Number of persons	**Ratio (%)**
Southern Transdanubia	318.416	123.461	38

Source: Central Statistical Office

As the employment structure changed, the public sector became the most important employer in the region, while the second largest employer is now the processing industry.

The number of employees dropped dramatically in the region (by nearly 30%) between 1992–1998. The largest drop was registered in mining (92.8%). The elimination of uranium and coal mining, as well as the redundancies due to the loss of markets for processing industry (primarily food industry) represented extremely strong restructuring factors in the entire region.

The percentage of employees in the region working in agriculture significantly exceeds their contribution to regional GDP. Therefore, efficiency needs to be increased within agriculture. Although the number of agricultural employees has dropped by 50% during the period, the percentage of employees in this branch still exceeds the national average by two-fold.

Table 23.

Changes in employment

Area	Number of employees 1992	Number of employees 2000	Change (%)
Southern Transdanubian Region	263.767	232.491	–11.9%
Hungary total	4.796.200	3.849.100	–19.7%

Source: Central Statistical Office

As mentioned above, agriculture offers more jobs than generally applies in Hungary – 14.0% of employees in Southern Transdanubia, whereas the ratio is only 7.5% for the entire country. Among the three counties of the region, the population of Tolna County is most intensively involved in agriculture (16%), while in Baranya County, this percentage is just above 10%.

Table 24.

Agricultural employees

Area	Number of agricultural employees		Change (%)	As a percentage of total employees, 1998
	1995	1998		
Southern Transdanubia	29.212	24.972	–15.0	14
Hungary total	295.100	278.800	–5.5	7.5

Source: Central Statistical Office

The unemployment features of Southern Transdanubia do not differ significantly from national data: in 1999, unemployment was slightly higher (8.2%) than the national average (7%); since then it has declined rather faster than the national trend, so that the current rate is lower than the national average. However, important differences can be observed within the

region. A dramatic decline of jobs took place in mining, which had very severe negative impacts and this can still be felt in some places, so intervention in the form of special treatment and subsidies is required there.

The same also applies to some other micro-regions where the (official) rate of unemployment is nearly twice as high as the national average, although this is not due to the crisis of mining. Much of Southern Transdanubia lies near to the border and is composed of relatively closed areas in terms of transport. On the other hand, as a result of the establishment of new enterprises the rate of unemployment in the central areas and larger towns is much below the regional (and national) average.

Long-term unemployment is lower than the national average. Generally, rates of unemployment are closely related to the level of qualifications of the population living in each municipality and to the transport features of those towns and villages.

Table 25.

Rate of long-term unemployment (over 180 days)

1998

Area	Long-term unemployment, %
Southern Transdanubian Region	4.0
Hungary total	5.5

Source: Central Statistical Office

In the region, the ratio of people with secondary and higher-level education is much below the national average, yet the secondary education system is developed and is of good quality, and the percentage of higher education institutions is also high in the region. This indicates that the region is losing some of its best qualified human resources.

During the micro-census in 1996, approximately 84% of the population of the region had at least primary school qualifications, which constitutes the mandatory qualifications. This ratio is similar to the nationwide figure of 85%. However, the region is behind the national average in respect of higher qualifications. The ratio of persons 18 years and older who possess at least secondary education was 30%, while the national figure was 35%.

Table 26.

Students attending secondary education by seat of the educational institution

1998

Area	Students	Of which: attending daytime courses
Southern Transdanubia	40.128	34.028
Hungary total	461.588	376.726

Source: Central Statistical Office

10% of the Southern Transdanubian population aged 25-year and older have obtained higher qualifications, compared with a national figure of 12%. Among the three counties, the best-qualified population is in Baranya County, which can be explained by a much wider choice of higher education institutions there than anywhere else in the region.

The current structure of primary and secondary education can be considered good, but in the small villages of Southern Transdanubia, 60–70% of the villages lack a primary school. Nearly two thirds of the secondary education institutions offering general knowledge consist of vocational training and secondary technical schools.

Apart from the two university towns of Southern Transdanubia, Pécs and Kaposvár, there are higher education institutions in Szekszárd and some other towns in the region too.

The proportion of students studying social and natural sciences is much higher than the national average, while the ratio of technical students is significantly lower. Of the university students studying on daily courses, 60–70% learn social and natural sciences.

Apart from higher education, research activities should be stressed. In 1997, the region contained 154 research facilities employing altogether 1,457 researchers. Nearly 84% of the research places were concentrated in Baranya County. This ratio is related to the regional nature of the university, since the majority of the research facilities operated at the universities.

3.5.1.4 Equal opportunities

In accordance with the national average, there is a clear difference in the remuneration of men and women in the labour market. Changes in income according to sex also reflect the female

or male dominance of various occupations. However, in general it can be concluded that the income figures of the two sexes are getting closer to each other.

Average gross monthly incomes in the region are generally lower than the national figure. The biggest differences exist in the case of male white collar employees, which is related to the production structure of the region, the high ratio of public sector employment and the lack of large international companies. Male incomes are highest in Tolna county, for both manual and white collar workers, which can be explained by the better incomes available at Paks Nuclear Power Station. In general, similarly to the national average, it can also be said that there are major differences between the average gross monthly income of full-time male and female administrative employees. The biggest difference can be found in Tolna County, which can again be explained by the relatively high incomes earned by white collar workers at Paks Nuclear Power Station (and the lack of female employment there). Female administrators earn higher incomes in Baranya County than in the other two counties, which can be explained by the large service network operating in Pécs involving relatively well-qualified employees (in the banking and health sectors, etc.).

The ratio of women is much higher among the unemployed, and especially the long-term unemployed, partly due to their lower average level of qualifications and partly due to the difficulties which the majority of female workers apparently face in returning to the labour market after child birth. Women represent 65% of the long-term unemployed, and 70% of these are in the older age category.

There is a demand for IT experts in the labour market, but for the time being, information technology seems to be considered a male occupation. However, as distance working with the help of computers and the internet is becoming more and more popular in the West, this might in the future offer very good employment opportunities, especially for women.

The percentage of Roma is higher than the national average, and they suffer from the same extreme disadvantages with regard to employment that apply in the rest of the country. It is absolutely necessary to extend to this region the initiatives to improve their situation that have been launched elsewhere.

3.5.1.5 Productive sector

The region is rich in natural resources and geographic assets. Almost nine tenths of the territory is arable land, and the ratio of forests is also high. There are considerable mineral resources in the region, and there are also thermal and medicinal waters. Despite all this, the economic performance of the region is below the national average. The per capita GDP of the region was only 77.6% of the national average in 1999, and it represented 38% of the average figure for the 15 EU countries between 1995 and 1997. Even by Hungarian comparisons, the development of industry in Southern Transdanubia is extremely low. However, there are several large companies operating in the region on the basis of which an effective industrial development strategy can be developed in the future. There are some minor branches, including branches representing high technology, where major development is taking place.

Tourism is an extremely important means of exploiting the special features of the region, while the service sector generates the highest income.

As of the density f corporate businesses and sole proprietorships Southern Transdanubia can be regarded as typical among the regions.

Table 27.

Number of active corporate enterprises by types of business

1999

Area	Corporate businesses	Region/ country %	Sole proprietorships	Region/ country %	Total operating enterprises	Region/ country %	Operating enterprises per 1000 residents
Southern Trans-danubia	25.551	7.6	47.081	10.1	72.632	9.1	73
Hungary total	334.702	100.0	467.513	100.0	802.215	100.0	77

Source: Central Statistical Office

Looking at the breakdown of companies according to the number of employees, we can conclude that Southern Transdanubia does not significantly differ from the national average according to the size of businesses, though the regional figure exceeds the country average for medium-sized enterprises. The dominance of companies with less than 10 employees (97.1 %) is clear, while the number of companies with more than 300 employees is absolutely insignificant (0.1%).

Table 28.

Main features of the operating enterprises, 1998 (%)

	Breakdown of businesses according to the staff categories (%)				Number of enterprises per 1000 residents
Area	0–10 employees	11–50 employees	51–300 employees	300+ employees	
Southern Transdanubia	97.3	1.9	0.7	0.1	73
Hungary total	97.1	2.2	0.6	0.1	77

Source: Central Statistical Office

All important banks are present in Southern Transdanubia, so in this respect the region is not behind others. Other organisations here also help support new enterprises: investment companies (Balatoni Regionális Fejlesztési Rt. and Dél-dunántúli Regionális Fejlesztési Rt.), consultants, chambers, private enterprises.

Virtually all types of communications services are available to new enterprises. However, access to these and the use of telecommunications is not very widespread yet, primarily due to lack of capital.

3.5.1.6 Household income and consumption

On the basis of 1998 data, the household income figure was below the national average. In the case of net income, the difference was only 3%, which is not significant.

Table 29.

The average per capita household income in 1998

Description	Southern Transdanubian Region	Hungary	Southern Transdanubia / Hungary
Total net income	298.172	306.561	97%
Total gross income	348.917	378.131	92%
– of which: income from work	230.600	254.812	90%

Source: Central Statistical Office

Considering the consumption structure in households, the three largest expense categories are foodstuffs, housing expenses and transport. Nearly 64% of total income is spent on these categories. Accumulation-type expenses (10.1%) are under-represented in the consumption

structure. On the basis of the above table it can be concluded that the consumption structure of the Southern Transdanubian Region is similar to the national figures.

3.5.1.7 Infrastructure

While electricity generation and distribution, as well as telecommunications, are much above the national average, transport and environmental protection infrastructure are not at all well developed. Horizontal connections between villages and other settlements are often insufficient. Transport infrastructure in Southern Transdanubia, and in particular road access, is amongst the worst of all regions, which can basically be explained by the lack of motorways. At the same time, there are significant variations in the quality of public roads.

3.5.1.8 Territorial imbalances

Most of the region's problems can only be solved or managed through the development of transport. Approaching the region by road is cumbersome, time consuming and unsafe; the same applies to connections between the central areas within the region; and another significant deficiency is that, despite the existing possibilities, there is no active regional airport which would operate at acceptable standards. A civilian airport could be established at several locations, for example, at the military-civilian airfield in Taszár (located in Somogy County) or at Pécs-Pogány airport (located in Baranya County). There are several smaller airports in the region which are used for supplementary or special functions (Balatonkiliti, Őcsény, Kaposújlak).

3.5.2 Regional policy in the region

The main actor of regional policy in the region is the South Transdanubian Regional Development Council. President and vice-presidents of the council are the presidents of the County Regional Development Councils of the 3 counties of the region. Further members of the Council are

- the mayors of the 3 towns with county rank of the region,
- the representatives of the Local Government Associations of the small-regions,
- the representatives of 9 line ministries,
- and the representative of the Regional Tourism Board.

The administrative body of the Council, the South Transdanubian Regional Development Agency has been created in 1998. The Agency maintains offices in all three county seats of the region.

The Council attaches a high priority to partnerships with public and private organisations. It Council works in close co-operation with the following organisations:

- Self-governments of the 3 counties of the region (Baranya, Somogy, Tolna)
- Self-governments of the 3 towns with county rank of the region (Pécs, Kaposvár, Szekszárd)
- Scientific and educational institutions (Universities of Pécs and Kaposvar, Centre for Regional Studies of the Hungarian National Academy of Sciences, Pécs)
- County level Chambers of Commerce
- Publicly Licensed Companies for Regional Development (Balaton and Southern Transdanubia)
- Southern Transdanubian Branch of the Government Agency for Investment, Trade an Development (ITDH)
- Regional Marketing Directorate of the Publicly Licensed Company for Tourism Development

Table 30.

SWOT Analysis of the Southern Transdanubian Region, I.

Strengths	Weaknesses
• Openness to the South, „Southern gate" role • Developed regional centre, diversified regional connections; Pécs the institutional centre for research activity • Variable, rich landscape, sub-Mediterranean climate • Variety of nationalities, meeting of several cultures; large number of ethnic Germans living in the region can attract investors through German connections; foreign language skills; special opportunity to stand out; developed and maintained national traditions with lively cross-border relations • Developed higher education infrastructure, largest number of higher education students after the Central Hungary region; the impact of the two university towns, Pécs and Kaposvár can be felt in the entire Transdanubia • Strong cultural and historical heritage • 40% of national electricity generation takes place in the region • Basic conditions exist for a competitive agriculture: the region represents a very significant corn production area for the entire country • The viniculture of Southern Transdanubia is known all over Europe, with undisputed national role in quality grape production • The ratio of forests in the region exceeds the national average be 4%, with excellent opportunities for further afforestation • The region has significant and various natural resources, thermal and medicinal springs, which can also be used as a basis for the rapidly developing tourist industry • The tourist attractions are very important, with a wide variety of tourist products	• Relatively large distance from the main European development axes, peripheral location within the country, and bad transport situation, bordered by rivers and other waters • The decline of population exceeds the national average, because of migration and low live birth ratio, as well as high mortality rate • Extremely large percentage of inactive income earners (pensioners) and a large number of small villages • The proportion of wage earners in the region has declined • Depressed small regions, extremely high unemployment on the Southern borders, with a lot of dead-end villages, bad road network, unfavourable transport conditions and few jobs • The percentage of students participating in technical and IT higher education is below the national average • Severe deficiencies in transport infrastructure represent a barrier to the development of the economy • Recultivation of mining not yet completed, with insufficient landscape rehabilitation • There is a lack of extensive relations with suppliers • Foreign investment has not been attracted into the region, in proportion to its qualities • There are too few high quality hotels • Air pollution is one of the most severe environmental problems in certain parts of the region •
Opportunities	**Threats**
• Ability to participate more intensively in European economic and social processes in parallel with EU enlargement process • Development of an agricultural structure, capable of adjusting to the EU • Introduction of environmentally friendly agricultural technologies • Extension of services relying on higher education • Development of complex tourist services and products • Large companies and economic development organisations are established in the region and can form the basis for the industrial development strategy • Potential for co-operation with Slovenia and Croatia in the area of transport and economic development	• Unless transport is developed intensively, the region will not be able to participate effectively in the international distribution of labour • Polarisation of agriculture, small average land size, as a result of which the region will lose its international competitiveness • Villages will lose ability to retain their population, and the small villages will become empty • Lack of funding for the elimination of environmental damages or development of environmental protection infrastructure • Environmental, nature and landscape protection do not receive sufficient attention • Renewal of the South Slav conflict

The Regional Development Council of the South Transdanubian Region has elaborated a Regional Operative Development Program. Taking into consideration the strengths, weaknesses, opportunities and threats to the region, priority areas of development policy in the South Transdanubian Region are as follows:

- the development of infrastructure, with special respect to road and motorway development, and to information and telecommunication infrastructure,
- the development of tourism, with special respect to the lake Balaton and to health and thermal tourism,
- the development of institutions helping the spreading of innovations, with special respect to existing educational and research facilities, industrial parks, incubation houses and logistical centres,
- the support of companies offering employment to many people,
- the re-cultivation and economic development of former mining areas,
- the development of alimentary industry in order to facilitate the processing of local agricultural products.

4 ENVIRONMENTAL POLICY – WASTE MANAGEMENT IN HUNGARY

4.1 National Approach to Environmental Policy, in particular to Waste Management

4.1.1 Environmental Policy

The state of the environment in Hungary is typical for Central and Eastern European countries. After the systemic change environment protection has been influenced by the economic crisis. Following the collapse of Hungary's traditional export markets, by 1993 GDP fell nearly 20 per cent and reached its previous level only in 1998. The crisis has rearranged the economic structure of Hungary. During this period, environmental pressures have been substantially reduced. Air pollutant emissions and pollution loads to water have decreased significantly due to the fall in industrial production in the early 1990s and partly due to investments in pollution abatement and control. (EU Commission 2001c)

The environment protection infrastructure of Hungary is incomplete, and needs much modernisation to comply with EU standards, especially in the field of sewage and waste managment. Due to lower level of technological development, resource utilisation of the economy is lower, also pollution per unit of output is higher than in the economy of the European Union. The integration of environmental aspects into sectoral policies, the wide spread use of recycling and environment managment systems has also a long way to go. (Kerekes-Kiss 1998)

Regarding the individual policy areas of environment protection, the gap between Western Europe and Hungary is the widest in the following three areas:

- sewage of urban wastewaters,
- waste disposal and management
- and air pollution.

Legislation. During the last decade Hungarian regulations for environment protection were continuously and in detail harmonised with EU legislation. The corner-stones of this development were as follows.

- The introduction of obligatory Environmental Impact Assessment for investment projects in 1993.

- The Act on the General Rules of Environment Protection in 1995 (Act 53. of 1995). It contains a comprehensive set of enforcement requirements and economic instruments for environmental protection. It includes new or increased fees on products that constitute environmental risks. These product fees are expected to reduce consumption and encourage recycling. The funds generated go to the Central Environmental Protection Fund. (Act 1995)
- The elaboration of the National Environmental Protection Program 1997-2002 (NEPP) by the 83/1997 (Sept. 26) Parliament decision in 1997. The NEPP takes into account the Environmental Action Programme for Central and Eastern Europe, the Fifth EU Action Programme and Agenda 21. (NEPP 1997)
- The Government Programme for 1998 to 2002 has introduced a legal harmonisation programme with the aim of achieving, by 2002, complete approximation of Hungarian environmental laws with EU legislation.
- The National Programme for the Adoption of the Acquis Communautaire (NPAA) determined targets, deadlines concerning legal harmonisation, institution building and implementation needs, addresses costing, with reference to the financial resources to be ensured by the central budget, the private sector and the municipalities. Also reference has been made in this Programme to the expected use of Community financial resources, such as PHARE and ISPA. (NPAA 2001)

By 2002 the country has adopted most of the EU's environmental regulations and norms. Environmental policies are largely based on the use of regulatory and economic instruments, and have been accompanied by sizeable environmental investments.

Institutional arrangement. Immediately before the systemic change and ever since the institutions of environment protection have undergone a deep reorganisation. The Hungarian environment- and nature protection policy belongs to a ministerial level direction since April, 1988. It was with that date, that an Environment Protection and Water Management Ministry was established by unifying the earlier National Office for Environment- and Nature Protection, and the National Water Office. By that time the construction of the Gabcikovo-Nagymaros Dam on the Danube and the conflict between environmental and water management approaches became hot issue in Hungary. This conflict has also got a symbolical political background, identifying the dam construction as the centralised power's action without

showing any willingness to accepting people's opinion versus the environment protection as a civil based activity for serving general interests of people.

Right after the new election on the summer of 1990 water management was separated from environmental administration (and was coupled with transport and communication issues). The Environmental Ministry after a few months of separated operation was unified with construction, regional development and national monument issues, and its name was changed to Ministry of Environment and Regional Management. That basic structure of the ministry was kept for eight years. After the 1998 elections the new government removed construction and regional issues to the Ministry of Agriculture and Rural Development, and the competencies for natural monument protection to the new Ministry of National Cultural Heritage. Thus the Ministry for Environmental Protection became a separated branch within the government structure. Since the 2002 Parliamentary elections environmental issues are again coupled with water management isues.

Demands on sub-national structures intensify with the EU integration process, in particular with the implementation of the Environmental Acquis (EU Commission 2001c). Various tasks and responsibilities, which were previously carried out by the national government, have been shifted to sub-national level, to local governments, moreover to regional and local state administrations. The capacity of these administrations is limited, both in terms of their resources and expertise.

The National Council for Environment Protection is the forum, where local, county and regional communities, central agencies, moreover representives of economic agents and NGOs are able to participate in the interest reconciliation process. This is an advisory body to the Government, bringing together several authorities on environment, to promote and enhance environmental policy and trying to achieve integration of environment in other policies. *Economic interest groups* intensively participate in the rule making process. EU integration is often taken as a pretext to enforce their vested interests and to deviate investments from their optimal schedule and efficient allocation. *Civil organisations* also have an important role in influencing legislation, and in raising awareness.

Implementation. Inadequate enforcement of environmental regulations is a major concern in Hungary. (EU Commission 2001a) The development of the institutional system of environment protection is a difficult task which will take more time than the modernization of the infrastructure. Implementation problems arise due to lack of resources, lack of information or problematic political decisions. Due to substantial lobbying force of local and sectoral interest groups investments are often targeted to areas with lower priority or lower efficiency.

4.1.2 Trends of waste streams

The yearly total volume of waste produced in Hungary (1999) is estimated at around 73 million tons. Of this

- nearly 4 million tons are classified as hazardous waste according to the Hungarian regulation in force,
- non-hazardous waste is around 65 million tons,
- and there is nearly 3 million tons inert waste originating mainly from construction and demolition work.

Nearly one-half of non-hazardous waste consists of the mainly organic waste produced by agriculture and food industry (in total 35 million tons). Nearly one-half of around 4.5 million tons of municipal solid waste originates from households, while its other half is produced by institutions, services and industry, similar to and manageable together with household waste. The volume of communal fluid waste is estimated at 6.5 million tons, collected from the septic tanks of households not having public sewerage system and not connected to waste water treatment plants. The remaining approximately 23 million tons of non-hazardous waste is of industrial origin with around 90% coming from power station and metallurgical slag, waste of mining and querrying and sewage and water treatment sludge.

Table 31.

Total amount of waste produced in Hungary

Million tons

Type of waste	**1990**	**1995**	**1999**
Agricultural	50.0	45.0	35.0
Industrial	34.6	27.1	23.2
Communal solid	4.9	4.5	4.3
Communal fluid	12.0	10.0	6.3
Hazardous waste	4.5	3.4	3.7
Total	**106.0**	**90.0**	**72.5**

Source: National Waste Management Plan 2001.Budapest, Ministry of Environment.

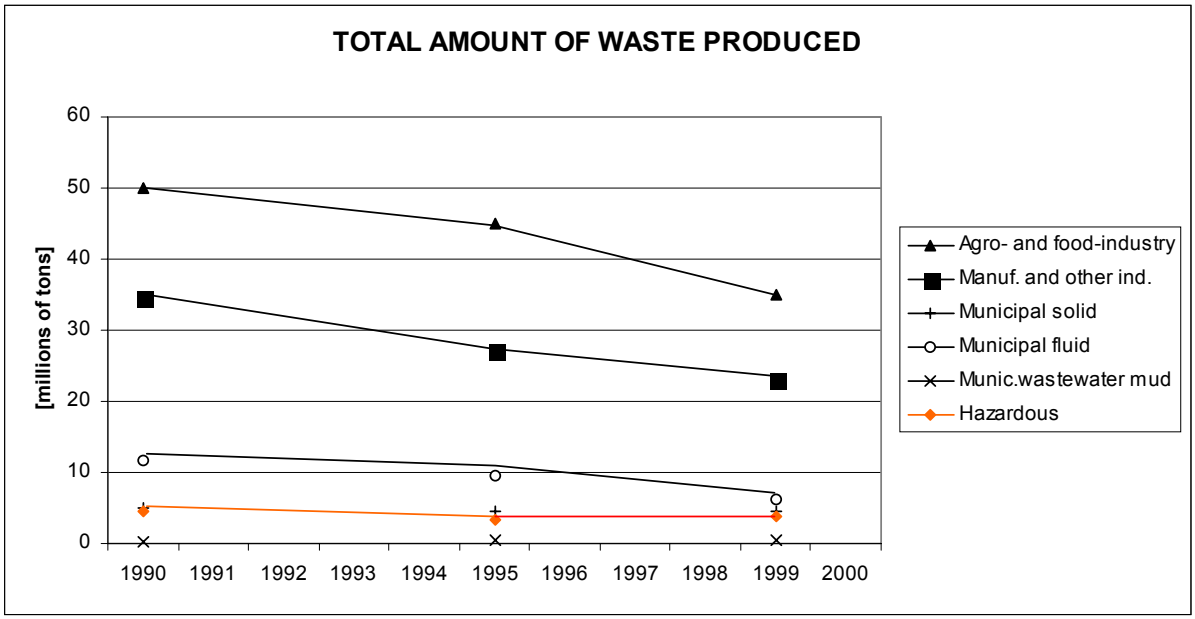
Over the last decade, and in particular in the first half of the 90's the volume and the hazardousness of waste has decreased. However, this decrease was much more a result of a recession in economic production, than conscious preventive measures.

- The reduction in *agricultural and hazardous wastes* is due almost in whole to a fall in production,
- For *industrial wastes* continuous changes in the structure of the industry and a coinciding development of products and technologies produces smaller and less hazardous volumes of waste,
- The volume of *municipal solid waste* has hardly changed in recent years, in spite of the continuous growth of consumption.
- The decrease in the volume of *communal fluid waste* is due primarily to expanding sewerage networks and sewage neutralisation.

Figure 4.

Total amount of waste produced in Hungary

1990-1999



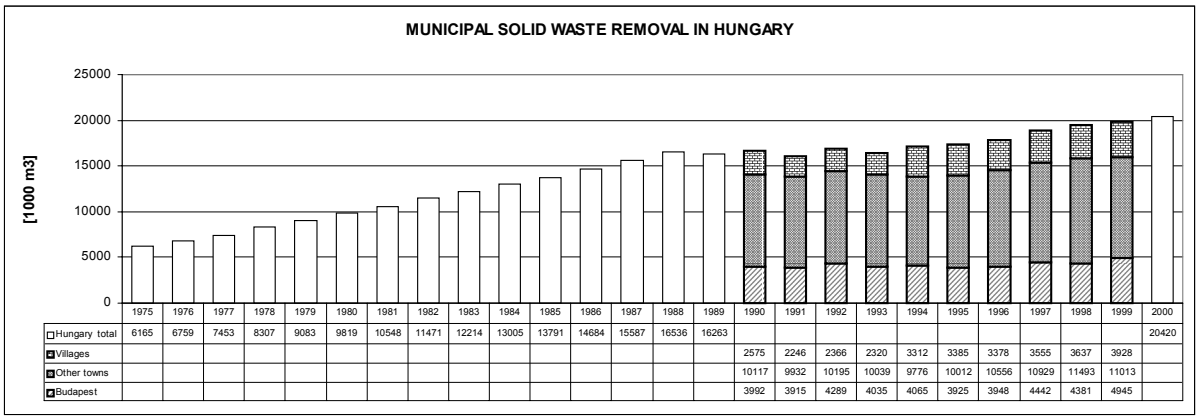
Source: National Waste Management Plan 2001.Budapest, Ministry of Environment.

Regarding *municipal solid waste* the trend of the previous 15 years shows a continuous increase. After 1988 the trend presented a half-a-decade stagnation, while in the recent years an increase was again presented.

Figure 5.

Municipal solid waste removal in Hungary

1975–2000



	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Hungary total	6165	6759	7453	8307	9083	9819	10548	11471	12214	13005	13791	14684	15587	16536	16263											20420
Villages																2575	2246	2366	2320	3312	3385	3378	3555	3637	3928	
Other towns																10117	9932	10195	10039	9776	10012	10556	10929	11493	11013	
Budapest																3992	3915	4289	4035	4065	3925	3948	4442	4381	4945	

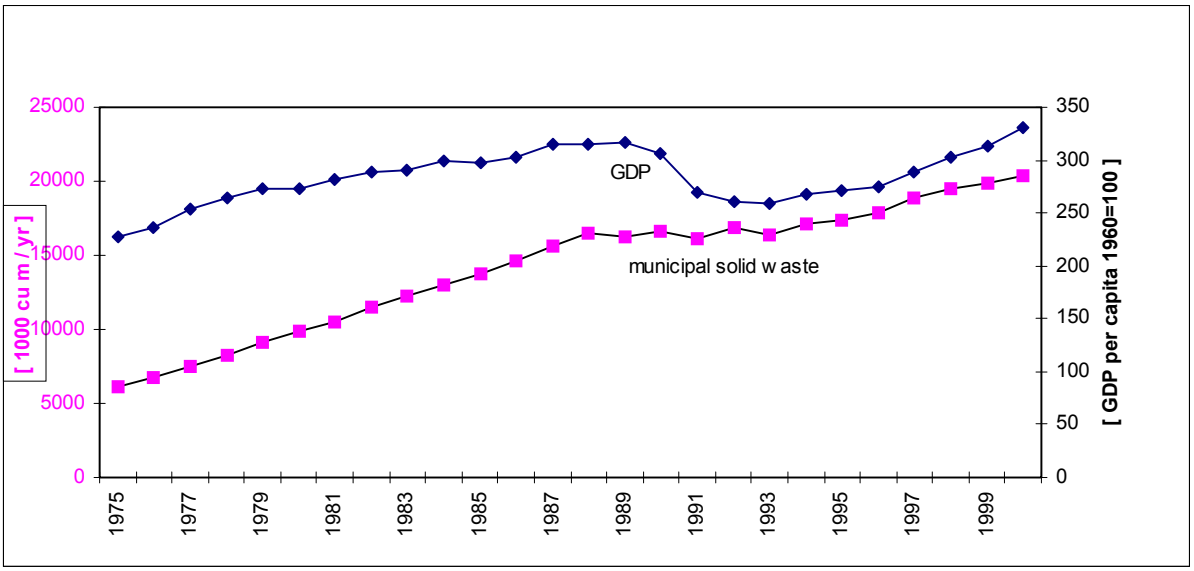
Source: Hungarian statistical yearbooks Central Statistical Office, Budapest

On the following figure we introduce together the change of the per capita GDP in Hungary and the trend of the municipal waste removal. We can distinguish three major periods: before 1988 both yearly GDP and waste increased, but the relative growth in waste was higher. During the transition period the GDP decreased radically, while the amount of waste remained more or less the same amount. Since 1993-94 the GDP increases again, this time accompanied by a modest growth in waste removal.

Figure 6.

Removed municipal solid waste and per capita GDP growth in Hungary

1975–2000



Source: Hungarian statistical yearbooks Central Statistical Office, Budapest

The *recovery of waste produced* does not reach 30% for industrial non-hazardous wastes and 20% for hazardous wastes, while only 3% of municipal solid waste and 40% of communal fluid waste is recycled. The overall recovery rate is significantly improved by the facts that

- a high volume of agricultural plant waste and by-product is returned into the soil,
- and due to the subsequent processing of nearly two-thirds of animal origin wastes (animal corps, slaughterhouse waste).

In total this gives a recovery rate of 50%, but without agricultural waste it does not even reach 30%. The introduction of the product charge system was a major contribution to the achievement of this result, because as a result of that nearly 35% of packaging waste, nearly 100% of waste accumulators and 40% of waste oils is recovered.

Disposal, in particular landfilling is still the most typical form of managing wastes. The rate of landfilling is nearly identical to that of recovery, but it almost reaches 60% if agricultural waste is not included. The use of physico-chemical, biological or thermal disposal methods do not reach 10% as a whole.

Table 32.

Management of waste produced – Hungary, 1999

In percentages of tons

Waste type	**Recovery**	**Landfill**	**Incineration, other disposal**	**Total**
Agricultural	75	23	2	100%
Industrial	29	60	11	100%
Communal solid	3	83	14	100%
Communal fluid	40	20	40	100%
Hazardous	20	74	6	100%
Total	50.2	40.0	9.8	100%

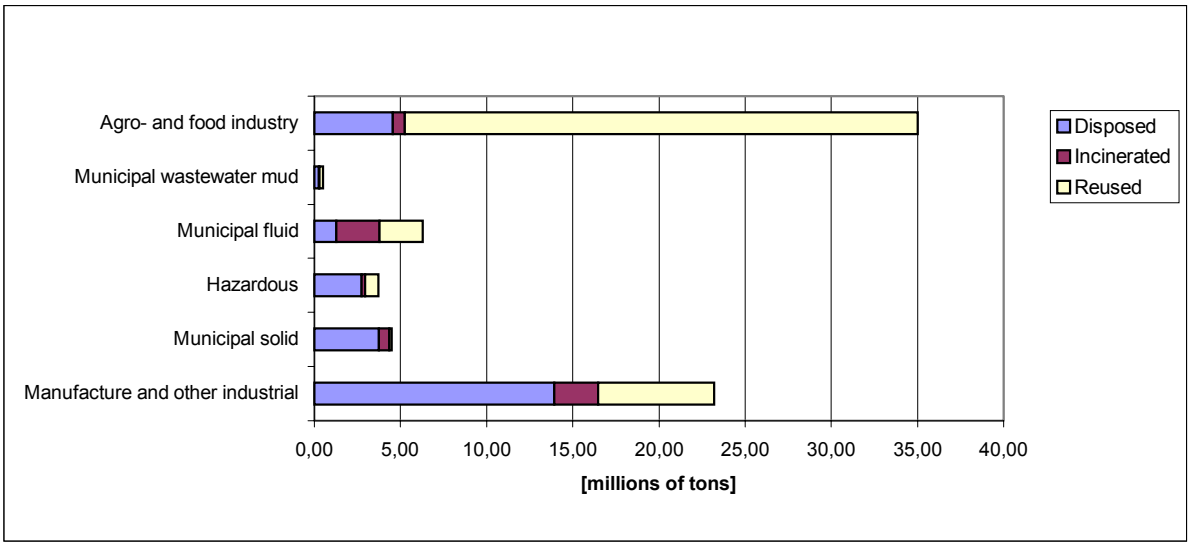
Source: Hungarian statistical yearbooks Central Statistical Office, Budapest

It is useful to present the above percentages also in absolute numbers. We can see on the figure below, that the results of reuse in all non-agriculture fields are modest. In other words, the industrial solution of secondary use of wastes is not yet really extended in Hungary.

Figure 7.

Handling of created wastes

Hungary 1999



Source: Hungarian statistical yearbooks Central Statistical Office, Budapest

Only two-third of Hungarian households is served by organised waste collection systems. Most of the collected waste is landfilled in small communal facilities which, for the most part, do not conform to environmental regulations. Waste management is a critical issue, since dumping is the major solution applied in dealing with the problem of communal waste. There are also more than 2000 illegal dump sites in the country. Separate collection of municipal solid waste does not exist, apart from some sporadic and experimental attempts. Large amounts of industrial hazardous waste have been accumulated over the last decades awaiting treatment. Treatment capacity is still largely insufficient.

Before and after the systemic change, hazardous wastes have caused the most of the social conflicts related to environmental problems. Capacities for disposal of hazardous wastes are scarce, there is no real competition in this field. Often the polluter pays principle - a key element of EU legislation and policies - cannot be applied because monitoring of pollution is underfinanced.

The order of waste management priorities is defined by EU policies as follows:

1. Prevention,
2. Recuperation,

3. Incineration with Energy-recuperation,
4. Landfilling.

This is also an important principle of Hungarian waste management policy, to be found in the most important documents. (NEPP 1997, NPWM 2001) However, due to deficiencies in the waste management infrastructure, institutions and finances, this principle can be maintained only to a limited extent.

4.1.3 Legal framework of waste management

The basic legal document of the waste management in Hungary is the Act XLIII of 2000 on waste management (Act 2000). The law brought Hungary closer to compliance with the European Union's Waste Framework Directive 75/442. It incorporates the principles of integrated pollution prevention, that of precaution, polluter pays, regionalism and manufacturer responsibility into Hungarian law. It offers general rules and procedures for waste management, treatment and recovery, encourages product manufacturers toward the efficient use of resources.

The Act formulates the overall aim that a minimum of 50 percent (by weight) of packaging wastes should be recovered by 2005. A yearly schedule is elaborated to diminish the biodegradable organic material content of waste disposed in landfills.

Responsibilities are set out in a way to ensure multi-level governance.

- *Local governments.* The nature of the waste management task of the municipalities have changed from rather facultative to rather obligatory. They are expected to ensure the disposal of abandoned waste, maintain public areas through regular services and manage municipal waste.
- *County governments* are responsible for promoting environmentally sound waste treatment within the territory of the county. They must
    - draw up a county waste treatment plan,
    - select, in co-operation with municipal local governments, areas within the territory of the county that are suitable for waste treatment and disposal,
    - collect local waste management plans from municipal governments and harmonise them

    - cooperate with other county governments in accomplishing waste management tasks,
    - promote and support the establishment of joint waste treatment sites of local governments.
- *Operators of waste treatment facilities* must draw up a schedule to implement the requirements provided in the waste act and must verify the environmental and technical conformity of landfills by environmental audits.
- *Manufacturers* of the product that became waste, producers or holders of waste must pay the waste treatment costs or dispose of the waste according to the polluter pays principle.

The Act set dates to the formulation of the National Waste Management Plan, moreover to regional and local waste management plans.

The Act calls for establishing a waste management information system. Producers and holders of waste and operators of waste management facilities must record the amount and composition of waste generated and managed.

Further alignment to EU legislation was achieved with the adoption of implementing legislation for the Law on Waste Management. Areas covered in 2001:

- public service providers for waste management
- public service contracts,
- calculation of fees for municipal waste management services,
- categories of waste and hazardous waste treatment;

4.1.4 Implementation of regulations

The National Plan for Waste Management has been elaborated in the Ministry for Environment (NPWM 2001). In 2002, all the seven regions must produce waste management plans based on the National Plan for Waste Management. These plans must be approved by all relevant interest groups and functions as a forum of public participation.

Implementation of waste management regulations needs substantial human resources and good data bases. However local branches of the National Environment Protection Agency lack the necessesary financing.

The level of intercommunal co-operation is low. Cooperation between local communities to develop waste management infrastructure is supported by the Central Environment Protection Fund, in order to utilize the economies of scale brought by joint development. However, the Central Environment Protection Fund lacks transparency.

The policy of decentralisation towards the municipal level has not been advantageous in every respect (Pest 2001a). Competences of the higher authorities in the field of waste management are too weak at present. Many municipalities do not have the means or the people to deal properly with waste management. Important costs are difficult to carry by smaller municipalities. Supported investments lead to too many and too small investments, important costs are carried by higher authorities. Control on illegal dumping, burning and dumping of waste in the backyards is insufficient.

4.2 Mapping of Institutions and Actors

4.2.1 The administrative structure for waste management

Central public agencies and their country-wide organisations. The main regulator body of waste management is the Ministry of Environment (EnvMinistry 2002). Its competencies are policy elaboration, preparing legal, economic and technical regulation, harmonisation with other sectors, planning, controlling and managing implementation, also establishing, directing and controlling the authority and administration in the field of the waste management, including the direction of the relevant research, development and education tasks.

The first level administration competence in licensing and controlling belongs to the nation-wide 12 territorial Environmental Inspectorates, while the second legal level is represented by the Chief Inspectorate of Environmental and Nature Protection. The same system serve basically also for collecting and preparing the statistical information on waste related activities.

Beside the Ministry of Environment, almost all other ministries dispose with special tasks relating to waste management, from which it is worthy to underline the public and animal health, water management, soil conservation, consumer protection and customs authorities. The direction and data collection of those activities belong to the Economic, Agriculture, Internal Affairs, Health,

Transport, Education ministries and to the Central Statistical Office. Over the last decade the competencies and the names of the respective ministries have changed several times.

Regional responsibilities. The Waste Law has defined a wide range of competencies and tasks of the counties. The main role of the regions is to integrate the waste management plans of the counties within the region, and to harmonise them with the National Waste Management Plan.

Local responsibilities. Out of the three key focus areas of national environment policy, waste management and sewage are generally most relevant to local governments. On the local level, first of all relating to municipal waste issues, it is the local municipality that represents the first legal level. The clean-up of contaminated sites is also a critical area of responsibility. Local governments handle environmental information with openness. They are interested in facilitating the media coverage of environmental problems within their territory, since this is a means to lobby for state assistance concerning the clean-up of contaminated sites.

4.2.2 Main actors for policy-making, monitoring and implementation

Public authorities described above are the main actors for policy-making, monitoring and implementation of waste management. On the national level and in all territorial tiers there are formal and informal fora to ensure the co-operation of the regulators and of the regulated companies and of the society.

Individual industrial firms and industrial interest groups have also elaborated concepts regarding waste management and impact assessments related to implementation of EU regulations. These actors participate in the interest reconciliation process, influencing legislation and its implementation.

The spectrum of civil organisations is wide, ranging from nation-wide environment protection alliances to local ingle issue groups. Besides participation in the rule-making process, writing opinions on a wide range of bills, various groups of the civil society are also active in cleaning sites and in denouncing illegal waste deposits and depositors to the authorities. An important part of their activity is education and awareness raising through their own periodicals, media presentations and specific events. Civil organisations enjoy favourable tax regulations,

and are financed partly from private contributions, partly from public expenses on a project by project basis.

Table 33.

Main actors of waste management

Hungary, 2002

	Public Sector	Private Sector	Civil Society / NGOs
National Level	• Ministry of Environment • Ministry of Transport and Economic Affairs, • Ministry of Interior, • Ministry of Agriculture and Regional Development, • Ministry of Health, • Central Statistical Office • National Inspectorate for Environment and Nature Conservation, • National Authority for Consumer Protection • Institute for Environmental Management	• Alliance of Manufacturers (GYOSZ) • Individual large companies interested in the rule-making process • Alliance of Waste Utilisation Companies • Nation-wide there are more than 1400 firms that are active in the field of waste collection, waste disposal, waste utilisation, waste transportation, waste processing or handling of hazardous waste. • Trade associations of various professions	• Various environment protection groups, such as: • Hungarian Waste Alliance "Humusz" • Levegö Alliance • Reflex Alliance • Alliances of Local Communities • National research and education institutions
Regional Level	• Regional municipalities • Environmental Inspectorates, • Water Management Directorates, • Plant Health and Soil Protection Stations, • National Park Directorates, • Transport Inspectorates,	• County-based Chambers of Commerce and Industry, • Chambers of Agrarian Companies • Large companies located in the region,	• Regional research and education institutions • Regional groups organised for nature protection
Local Level	• Local municipalities	• Companies located in the settlement	• Local NGOs, single issue movements

Policy-making, monitoring and implementation tasks have been heavily influenced by Hungary's EU integration process. Regarding the tasks implementing the Environmental Acquis in the field of waste management, the National Programme for the Adoption of the Acquis has defined the tasks of public agencies (NPAA 2001). This document has defined a stucture of activity fields, and has assigned special tasks to the relevant professional branches and territorial levels of public administration.

Table 34.

Authorities responsible for implementation of the waste management policy according to twelve activity fields of waste management

Activity field	Responsible Authorities
Basic rules and principles of waste management	Min. of Envir., Min. of Economic Affairs, Min. of Interior, Min. of Agriculture and Regional Development, Min. of Transport and Water Management, Min. of Health, Hungarian Central Statistical Office, Nat. Inspectorate for Envir. and Nature Conservation, Environmental Inspectorates, Nat. Public Health and Medical Officers Service, Water Management Directorates, Plant Health and Soil Protection Stations, Transport Inspectorates, Customs Bodies, Police, Fire Brigade, Nat. Authority for Consumer Protection, county and local governments, Inst. for Environmental Management, "Fodor Jozsef" Nat. Public Health Centre Nat. Envir. Health Inst.
Data supply, report and registration	Min. of Envir., Min. of Economic Affairs, Min. of Agriculture and Regional Development, Min. of Transport and Water Management, Hungarian Central Statistical Office, Min. of Health, Nat. Inspectorate for Envir. and Nature Conservation, Environmental Inspectorates, Plant Health and Soil Protection Stations, County and local governments, Inst. for Environmental Management, "Fodor Jozsef" Nat. Public Health Centre Nat. Envir. Health Inst.
Hazardous wastes	Min. of Envir., Min. of Economic Affairs, Min. of Health, Min. of Agriculture and Regional Development, Nat. Inspectorate for Envir. and Nature Conservation, Environmental Inspectorates, Nat. Public Health and Medical Officers Service, Plant Health and Soil Protection Stations, Inst. for Environmental Management, "Fodor Jozsef" Nat. Public Health Centre Nat. Envir. Health Inst.,
Transboundary movements	Min. of Envir., Min. of Transport and Water Management, Min. of Economic Affairs, Min. of Finance, Directorate General of the Hungarian Customs and Finances Guard, Nat. Inspectorate for Envir. and Nature Conservation, Environmental Inspectorates, Customs Bodies, Police, Inst. for Environmental Management,
Packaging and its wastes	Min. of Envir., Min. of Economic Affairs, Min. of Health, Min. of Agriculture and Regional Development, Environmental Inspectorates, Nat. Public Health and Medical Officers Service, Nat. Authority for Consumer Protection Customs Bodies, Inst. for Environmental Management,
Waste oils	Min. of Envir., Min. of Economic Affairs, Min. of Health, Min. of Transport and Water Management, Hungarian Energy Agency, Environmental Inspectorates, Nat. Public Health and Medical Officers Service, Nat. Authority for Consumer Protection Customs Bodies, Inst. for Environmental Management
PCBs and PCTs	Min. of Envir., Min. of Health, Min. of Economic Affairs, Hungarian Energy Agency, Environmental Inspectorates, Nat. Public Health and Medical Officers Service, Customs Bodies, Inst. for Environmental Management.
Batteries and accumulators	Min. of Envir., Min. of Economic Affairs, Min. of Health, Environmental Inspectorates, Nat. Authority for Consumer Protection Customs Bodies, Inst. for Environmental Management
Titanium	Titanium-dioxide industry wastes: Min. of Envir., Min. of Economic Affairs
Landfill of waste	Min. of Envir., Min. of Interior Affairs, Min. of Health, Min. of Economic Affairs, Min. of Agriculture and Regional Development, Min. of Transport and Water Management, County and local governments, Nat. Inspectorate for Envir. and Nature Conservation, Environmental Inspectorates, Nat. Park Directorates, Water Management Directorates, Plant Health and Soil Protection Stations, Inst. for Environmental Management, "Fodor Jozsef" Nat. Public Health Centre Nat. Envir. Health Inst.
Waste paper	Min. of Envir., Min. of Economic Affairs, County and local governments, Envir. Management Inst.
End-of life vehicles	Min. of Economic Affairs, Min. of Envir., Min. of Interior, Min. of Transport and Water Management, Min. of Health, County and local governments, Nat. Inspectorate for Envir. and Nature Conservation, Environmental Inspectorates, Water Management Directorates, Plant Health and Soil Protection Stations, Inst. for Environmental Management, "Fodor Jozsef" Nat. Public Health Centre Nat. Envir. Health Inst., Police, Customs Authorities, Consumer Protection Inspectorates

Source: (NPAA 2001)

4.3 Institutional and Structural Changes

After the systemic change the most important institutional change of waste management policy was the delegation of certain well-defined responsibilities to county and local levels. EU integration, in particular legal harminization and EU financial instruments have proven to be the most important driving forces of developing waste management institutions and infrastructure. The Environmental Acquis and the experiences of EU member states have also provided a blueprint in many institution development projects. Thie aim of these projects was to improve the efficiency of law enforcement, to gather up-to-date data on the state of wastestreams, to fulfil reporting obligations and to facilitate the newly introduced planning.

For the above purposes an increase and continuous education of the professional staff of the central and decentralised environment protection organisations was necessary. The implementation of several EU Directives necessitated and still necessitates the development of various laboratories in order to perform the obligatory measurements and control. In particular, the regular measurement of the composition of municipal wastes according to standardised criteria requires special methodological developments.

As of recent developments, in 2001 in line with the stipulations of the NPAA several training programmes have been launched for local governments and for environmental authorities to facilitate the implementation of the new 2000 Act on Waste Management. The number of staff at the Ministry for Environment, at the National Inspectorate for Environmental Protection and Nature Conservation and at the 12 regional Environmental Inspectorates dealing with waste management issues has been increased.

The basic document of the institution development of waste management is the revised version of the National Programme for the Adoption of the Acquis (NPAA 2001). This document outlines these development tasks according to activity fields specific to waste management.

Table 35.

Institution building tasks according to twelve activity fields of waste management

The National Programme for the Adoption of the Acquis (2001)

Activity field	Institution building tasks
Basic rules and principles of waste management	The Act on Waste Management defines the framework of a coordinated planning, management, data traffic and authority system covering the entire scope of waste management. It is indispensable for the law's enforcement to continue the development of authorities and their professional background, and development of the information system. Tasks scheduled for 2001: • establishment of the waste management planning system, • establishment and promulgation of the scheme of the overall registration and data supply system, • further development of the professional background of authorities, • harmonisation and development of the waste qualification system, • formulation of the economic incentive and sanction system in compliance with internal market rules.
Data supply, report and registration	The Ministry of Environment is responsible for reporting obligations. Collection, processing and distribution of waste management data must be re-defined according to requirements of various EU Directives. It is necessary to determine the tasks of sub-ordinated institutions engaged in data collection and evaluation.
Hazardous wastes	• It is necessary to continue the expansion and professional in-service training of the staff of authorities, to transform the hazardous waste information system according to the Community waste list and data requirements, and to include the hazardous waste management planning system into the overall planning system.
Transboundary movements of waste	Proper quality standard control of transboundary movements of wastes requires: • Preparation of customs bodies engaged in border control, creation of professional staff, and application of foreign language training, • Standardisation and simplification of the licensing system, • Creation of registration for license applications and licenses, and of actual traffic, • Development of quick, direct information flow between bodies concerned, • Preparation of Environmental Inspectorates, Road Inspectorates and the Police for the inland control of shipments, • Creation of a control system for "green" list wastes.
Packaging and its wastes	Measures to be taken for fulfilling the provisions of legal instruments on packaging: • Planning, monitoring, reporting and registering system for the manufacture, import and distribution of products concerned, • Planning an information system capable of tracing the origination, collection and management of packaging wastes, • Assurance of the conditions of controlling compliance with the obligation to apply the marking system, • Creation of financial and professional control background for re-collection, re-purchase, trade-in or deposit fee systems, • Transformation of the product charge system and within that the material and cash flow system, making the control of exemptions and obligations stricter, • Strengthening and preparing environmental protection and consumer protection inspectorates.
Waste oils	Measures to be taken for fulfilment of the provisions of legal instruments on waste oils: • Establishment of monitoring, reporting and registration system for the manufacture, import and distribution of products concerned, • Establishment of information system capable of tracing the origination, collection and management of waste oils, • Introduction of measures necessary for the control of composition of products.
PCBs and PCTs	The enforcement of the Directive regulating management of PCBs/PCTs requires: • Registration of assets and equipment concerned, continuous control of their replacement and disposal, • Control of compliance with quality assurance,

Activity field	Institution building tasks
	• Introduction of measures necessary for control measurements, • Import-checking of products potentially containing PCB/PCT, • Preparation of control bodies – Environmental Inspectorates, customs bodies, National Public Health and Medical Officers Service. • The disposal of PCB-containing equipment and the disposal of wastes must be performed and controlled in accordance with existing regulations on hazardous wastes.
Batteries and accumulators	The fulfilment of provisions on batteries and accumulators requires: • Establishment of a monitoring and registration system for the manufacture, import and distribution of product, and an information system tracing the collection and management of wastes produced, • Preparation of environmental protection, consumer protection and customs bodies for controlling fulfilment.
Titanium-dioxide industry wastes	There are no tasks related to wastes of the titanium-dioxide industry beyond the preparation of the relevant law.
Landfill of waste	The fulfilment of the Directive on waste landfill requires: • Preparation and development of bodies taking part in licensing and controlling (Environmental Inspectorates, water management directorates, plant health and soil protection stations, state public health and medical officer service, municipalities), • Introduction of requirements for measuring the quantity, quality and composition of wastes, • Planning the separate collection and management system of organic components and rubber waste, • Registration of the quantity and composition of waste produced, collected and disposed of.
Waste paper	In order to improve the recovery of paper waste measures have to be taken: For facilitating the use of recycled paper at public administration , For planning the separate collection and recovery system of paper waste, For registering the quantity of waste produced, collected and recycled, and disposed of.
End-of life vehicles	As preparation for introduction of the Directive provisions information and preliminary training programs have to be held for • domestic manufacturers and distributors of vehicles, • entrepreneurs engaged in vehicle maintenance, • firms accepting, disassembling and processing end-of life vehicles, • and for authorities taking part in licensing and controlling, especially for the police, customs and tax authorities, environmental protection and consumer protection authorities.

Source: (NPAA 2001)

One of the most important target groups of environmental regulations is the company sector. During the 90's the Hungarian economy has underwent deep structural changes. Pollution has been decreased due to the fact that several large companies of heavy industy have been closed or reduced production. The liquidation of many companies was accompanied by environmental audits, and in many cases privatisation was granted on the condition that the new owner takes the responsibilities of cleaning up the site. Since 1993 investment projects need to prepare Environmental Impact Assessments, and since 1996 companies substantially burdening the environment must employ an Environment Protection Executive (Chamber 1999).

The overall environmental bilance of foreign direct investment into Hungary was positive. Foreign owned firms often regard environment management as part of their risk management.

Most of the green-field investments use up-to-date technology and conform to contemporary environmental requirements.

Various surveys have been conducted to reveal the measures taken by individual companies in order to adapt themselves to environmental challenges.

Table 36.

Frequency of clean production measures among companies of various sectors

Hungary, 1997

Measures	Ali-mentary	Wood and paper	Textile	Metal-lurgy	Machine construction	Construction	Chemical
	industry						
Energy saving	very frequent	very frequent	frequent	very frequent	very frequent	very frequent	frequent
Material saving	frequent	very frequent	frequent	very frequent	frequent	very frequent	very frequent
Water saving	frequent	frequent	not frequent	frequent	frequent	very frequent	frequent
Cleaner technology	frequent	frequent	sporadic	frequent	not frequent	frequent	very frequent
Waste sorting	frequent	frequent	not frequent	sporadic	not frequent	sporadic	frequent
Material substitution	not frequent	frequent	frequent	not frequent	frequent	frequent	frequent
Waste reuse	frequent	frequent	not frequent	not frequent	not frequent	very frequent	very frequent
Market creation for waste	frequent	frequent	not frequent	sporadic	not frequent	sporadic	frequent
Re-designing processes	frequent	sporadic	sporadic	frequent	frequent	sporadic	frequent
Re-designing products	sporadic	not frequent	sporadic	sporadic	sporadic	sporadic	frequent
Re-designing production	not frequent	not frequent	sporadic	frequent	sporadic	sporadic	not frequent

Source: Company survey results from (Kerekes-Kiss 2000)

4.4 Evidences of Adaptation

Legislation. In the National Environmental Protection Program (approved in 1997, revised in 2001) gradual approximation of EU laws was planned and full law harmonisation by the end of 2001, the earlier supposed date of accession (NEPP 1997). The document has defined the completion of the major part of legal approximation as a key element of Hungary's present environmental strategy.

The implementation of certain EU directives has proven to be very expensive. According to opinions of the European Commission and competent research institutes (Kerekes-Kiss 2000), the necessary private and public investment was estimated in 1997 at about 8-10 billion Euros.

Table 37.

Costs of implementing EU environmental directives

Billion HUF, on 1997 prices

	One-time investment costs	Yearly recurring costs of managing infrastructure and institutions
Air pollution	500	75 to 125
Noise and vibration	5 to 10	-
Water protection	1400 to 1760	210 to 440
Municipal waste	100 to 110	15 to 25
Hazardous waste	100	15 to 25
Industrial non-hazardous waste	30 to 40	5 to 8
Waste management, total	230 to 250	35 to 60
Environment security	65	10 to 15
Integrated Pollution Prevention and Control	100 to 300	15 to 75
Nature protection	35	5 to 10
Total	**2300 to 2920**	**345 to 730**

Source: (Kerekes-Kiss 2000)

Despite high costs, there is a wide consensus on the fact that fulfilling the environmental requirements of EU integration brings much more benefits than costs.

Due to these financial burdens Hungary requested transitional periods in its Environmental Negotiating Position Paper, submitted to the EU in July 1999. During the accession negotiations, the Chapter Environment was opened in December 1999 and provisionally closed in June 2001 (EU Commission 2001c). Transitional periods have been requested in respect of legislation having the highest cost implications as follows:

- recovery and recycling of packaging waste until 2005
- treatment of urban waste water until 2015
- air pollution from large combustion plants until 2004
- incineration of hazardous waste until 2005

Implementation. The NPAA has outlined institution building for law enforcement as a high priority simultaneously with legal approximation. Also the importance of development of EU-conform monitoring networks and environmental information systems was highlighted.

The completion of waste *management plans* is a key element of EU environmental legislation. The Hungarian implementation of the respective EU Directives (75/442/EEC on Waste Management, 91/689/EEC on Hazardous Wastes) has been successful and the hierarchy of waste management plans is in the course of being elaborated on central, regional, county and local levels. These plans conform to EU requirements.

Out of the 728 registered landfills in Hungary, only six are so far in line with EU requirements, and a further 67 are aligned to a large extent. In particular, a great number of low capacity local landfills are not in conformity with the Acquis and there exists a large number of illegal ones (EU Commission 2001a).

Conditions for the effective and transparent utilisation of Community funding for environmental investments (PHARE, ISPA, LSIF, and LIFE) were created. Half of the resources of the ISPA Programme are devoted to environment protection. In particular, the following projects are in course in the field of Waste Management

- Communal Solid Waste Management System located in Mid-Danube-Tisza Plain Greater Region
- Hajdu-Bihar County: selective waste collection and solid waste management system
- Regional waste management programme in the area of the city Szeged
- Solid waste management system in the area of the city Szolnok
- Municipal Solid Waste Management System in the Sajo-Bodva Valley region
- Development of Municipal Waste Management System in the area of Tisza Lake.

A program has been initiated under Phare 2000 for the establishment of a standardised waste management information and statistics system. This is indispensable for building the waste management planning system. For this purpose also a twinning co-operation agreement is prepared. Public participation in the legal harmonisation and the implementation process is continuously promoted.

4.5 Case Study: the Region Central Hungary

4.5.1 Main Characteristics of the Region

The Region Central Hungary is the smallest among the Hungarian regions, its territory is 6919 km2, but it has the biggest population among the regions: 28% of Hungary's population lives here - approximately 2,8 million people. It consists of the capital city Budapest and of Pest County. The Region has four neighbouring regions and border with Slovakia to the north.

Table 38.

Key figures on the population of the Region Central Hungary

2000

Areas of the Region	Population	Density (persons/km²)	Number of households
Pest County	1 018 201	159	372 636
Budapest	1 838 753	3502	821 515

Economic situation. The situation of the region is determined by its central position, the relatively highly developed infrastructure, and by the dominance of the capital and its agglomeration (Central 2001). The region contributes two-fifth to the Hungarian GDP, concentrating 40% of all active economic organisations in the country. The importance of financial services and real estate development are constantly growing, enhancing the dominance of service sector within economic structure of the region. The region is one of Central Europe's focal points in terms of attraction of foreign direct investment (FDI). There are considerable differences inside the region: while in Budapest the per capita GDP produced is double of national, and 89% of EU GDP, in the surrounding Pest County per capita GDP is only 78% of the national average. Budapest concentrates branches of production with high added value, like electronics, pharmaceuticals, chemicals, confection, food, and printing industry. Pest County is the site of traditional types of industry such as oil refinement, production of electronic machines and tools, food procession, and textile industry.

Transport. Due to centralised radial structure of Hungarian transport network the Region has a unique position in public road and railway systems. All motorways and main rail lines of European importance cross the region. Ferihegy, Hungary's only international airport is also located here. The river Danube crosses the region.

Employment. The number of the unemployed has been decreasing for years, and unemployment rate in 2000 is 5.3%, less than the country's average. There has been a shift in employment in the last decade from the production sector to service sector.

Education and research. The Region Central Hungary - especially the capital - plays significant role in education: More than one fourth of all students of the country attending secondary schools learn in institutions of the Region Central Hungary, while 44% of high level education students pursue their studies here. In education of economists, doctors, technical experts and artists the region has the largest capacity in Hungary. Two-third of scientific researchers and developers works here. Two third of budget devoted to R&D has been invested in the Region.

Tourism. Capacity of tourism has been increased in the last few years, one sixth of bed-places in public accommodation is to be found here, mostly in Budapest. 2 million visitors yearly.

Environment policy in the Region. The most problematic domain of environment is that three-quarter of the waste water of Budapest flows without sewage into the Danube. The green surface of the capital is quickly diminishing. Existing communal landfills do not correspond to the requirements of safe disposal.

The Regional Development Council of the Central Hungarian Region has analysed the competitiveness of the region in a strategic document[15]. The analysis arrived to the following conclusions.

[15] Strategic Plan of the Central Hungarian Region. 2001 – 2006. April 2001

Table 39.
SWOT Analysis of the Region Central Hungary
Strengths and Weaknesses

Internal Factors – Strengths	Internal Factors – Weaknesses
Economy ▪ Low level of unemployment – (Budapest and its Agglomeration) ▪ High economic activity – (Budapest and its Agglomeration) ▪ Qualified, skilled labour force – (Budapest) ▪ High concentration of FDI – (Budapest and its Agglomeration) ▪ Concentration of headquarters of multinational companies – (Budapest) ▪ Concentration of business service activities – (Budapest) ▪ Continuous outmigration of industrial sector – (Pest County) ▪ Ample supply of industrial parks and real estates – (Pest County) ▪ Infrastructure of quality tourism – (Budapest) ▪ Concentration of cultural economy (Budapest and its Agglomeration)	Economy ▪ Spatial system is centralised, transversal connections of sub-centres are weak – (Region) ▪ Territorially uneven economic development – (Region) ▪ Dual economy – (Region) ▪ Lack of connections between companies both in productive and service sector – (Region) ▪ Low income generating capacity of SMEs – (Region) ▪ Lack of vertical and horizontal integration in agriculture – (Pest County) ▪ Out-of-date production factors in agriculture – (Pest County) ▪ Lack of EU-knowledge (Region) ▪ Weak supply of tourism events in (Pest County); leisure facilities are underdeveloped – (Pest County) ▪ Weak regional marketing – (Region) ▪ Lack of major cultural events – (Budapest) ▪ Unclarified distribution of competencies between the capital, its districts and the settlements of the Agglomeration (Budapest and its Agglomeration) ▪ Uneven level of infrastructure provisions and services – (Region)
Human resources ▪ Infrastructure of education and training is given- (Budapest) ▪ High concentration of research institutions and universities – (Budapest) ▪ Scientific park - (Budapest) ▪ Concentration of healthcare institutions – (Budapest) ▪ Concentration of cultural institutions – (Budapest)	Human resources ▪ Weak co-operation skill, lack of partnership – (Region) ▪ Weak connections between the universities and industrial R&D, as well as between education and the business sector – (Region) ▪ Relatively low level of language skills – (Region) ▪ Increasing social and income difference (dual society) – (Region) ▪ Growing territorial differences in human resources – (Region) ▪ Elements of information society are weak – (Region) ▪ Territorially concentrated social problems – (Region) ▪ Missing programs for the enhancement of living conditions of the Gipsy minority – (Region) ▪ Employment problems in peripheral areas - (Pest County) ▪ Unsatisfactory level of social and healthcare infrastructure - (Region) ▪ Homelessness unsolved – (Budapest) ▪ High crime rate - (Budapest) ▪ High ratio of aged population – (Region)
Infrastructure ▪ Developed communication infrastructure – (Budapest and its Agglomeration)	Infrastructure ▪ Permanent lack of capacity in the primary road system – (Agglomeration) ▪ Lack of transversal road connections – (Region) ▪ High ratio of unpaved roads in settlements – (Region) ▪ Lack of tariff-integration in public transport– (Agglomeration) ▪ Shortage of parking – (Budapest) ▪ Low level of sewage and waste-water treatment – (Region)
Environment ▪ Attractive built environment – (Budapest and its Agglomeration)	Environment ▪ Complex and severe pollution, due the metropolitan position – (Agglomeration) ▪ Communal waste treatment unsolved – (Region) ▪ Decreasing green areas – (Region) ▪ Building stock is in bad conditions– (Budapest) ▪ Unfavourable image of settlements – (Region) ▪ Unregulated and wasteful land-use – Agglomeration

Source: (Central 2001)

Table 40.

SWOT Analysis of the Region Central Hungary

Opportunities and Threats

External Factors - Opportunities	External Factors - Threats
▪ Permanent and great internal market – (Region) ▪ Turntable role in transport– (Region) ▪ Transfer role between Western and South-Eastern-Europe – (Budapest) ▪ Favourable natural and territorial conditions – (Region) ▪ Unused alternative energy resources – (Pest County) ▪ Legal safeguards for regional actors for the protection of the environment - (Region)	▪ Sensitivity toward global and EU tendencies – (Region) ▪ Unsolved problems of the Gipsy minority, weakness of national programs – (Region) ▪ Economic needs of municipalities are stronger than environmental considerations – (Region) ▪ Time requirement of creation of Environmental awareness – (Region) ▪ The ability of agriculture to keep people in rural areas is decreasing– (Pest County) ▪ New Economy is not prioritised by national policies – (Region)

Source: (Central 2001)

4.5.2 Justification for the selection of the area

The Hungarian Parliament established seven regions in Hungary by the acceptance of National Regional Development Concept on the 10th of March, 1998. As it was also underlined in the regional chapter of this paper, the Budapest – country-side division is a major issue in the Hungarian development a territorial distinction. We decided to choose the Region Central Hungary, that is the region that includes the capital, because territorial imbalances within one region can be illustrated by presenting the capital and its surrounding county. The organisation of waste management exemplifies the mutual dependence of a large city and the nearby countryside, and highlights the necessity of co-operation and of multi-level governance within one region.

4.5.3 Waste management in the Region

4.5.3.1 Municipal solid waste production

In the capital Budapest the quantity of the municipal solid waste collected in the framework of public service is approximately 4 million cubic metres. During the 90's the population of the capital has decreased by ten percent and this has diminished the quantity of municipal waste (Budapest 2000). On the other hand, the surrounding Pest County produces yearly 1.7 million cubic metres of municipal solid waste, which has increased during the 90s and organised waste collection has been developing dynamically in the County (Pest 2001a).

Table 41.

Key data on municipal solid waste

Pest County 1980-1999

Years	1980	1990	1997	1998	1999
Number of settlements included in organised waste collection	52	92	175	178	180
Number of flats and holiday homes included in organised waste collection	131.780	235.125	355.515	365.724	368.969
Of this: number of flats	n.a.	208.212	312.588	320.466	324.925
Removed waste, 1000 m^3	577	1.214	1.650	1.581	1.740
Disposed waste 1000 m^3	518	1 214	1 650	1 581	1 740
Number of landfills	31	29	68	65	65

Source: Central Statistical Office

The composition of municipal waste in the region shows territorial imbalances: the share of paper, plastics and textile is relatively higher in the capital, than in the surrounding Pest County.

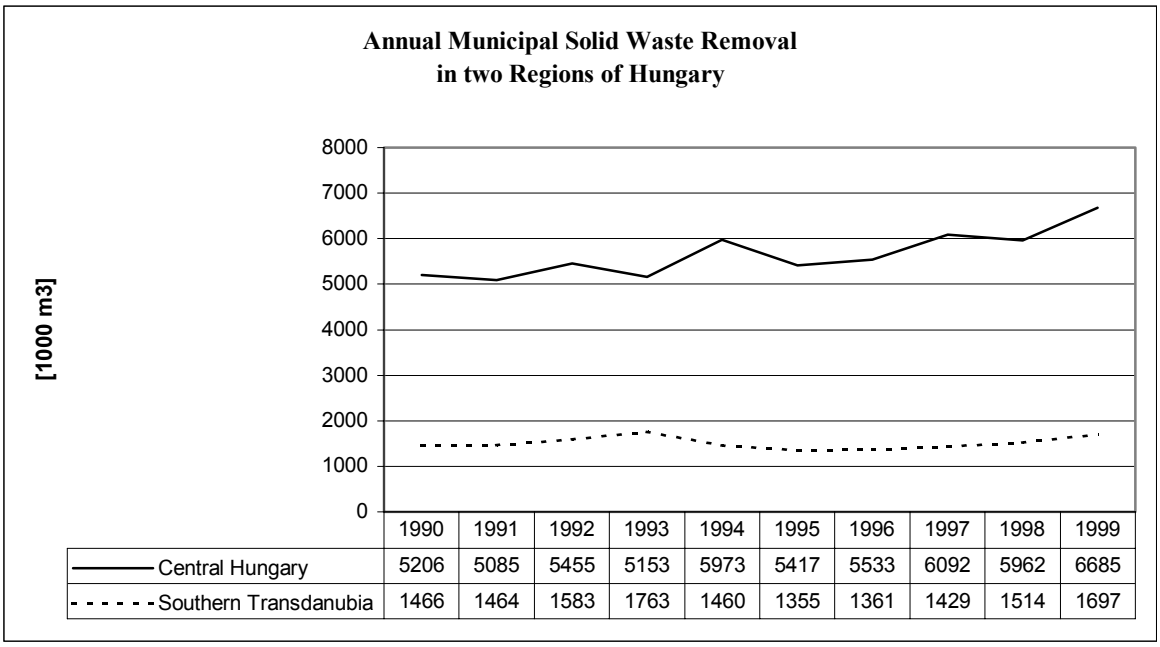
Table 42.

Estimated total quantities (t/y) of different municipal waste fractions

Region Central Hungary, 1998

	Pest County	Budapest
Paper	46000	140000
Glass	12000	30000
Metals	12000	30000
Plastics	21000	88000
Organics	122000	228000
Textile	6000	44000
Hazardous	3000	7000
Other	83000	169000
TOTAL	*305000*	*736000*

Figure 8.



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Central Hungary	5206	5085	5455	5153	5973	5417	5533	6092	5962	6685
Southern Transdanubia	1466	1464	1583	1763	1460	1355	1361	1429	1514	1697

4.5.3.2 Industrial waste production

Within this category two main sub-categories can be distinguished: (a) hazardous and (b) non-hazardous waste (Budapest 2000, Pest 2001a).

(a) Hazardous waste. As companies are obliged to report hazardous waste production, data are available on hazardous waste production. Figures can be derived from the existing data-base, which is founded on information provided by the waste producers themselves. The following table illustrates the fact that the production of hazardus wastes has significantly decreased both in Budapest and Pest County.

Table 43.

Hazardous waste production in the Region Central Hungary

Area	Year	Ton/year
Pest County	1993	407 452
	1994	309 912
	1995	419 582
	1996	64 466
	1997	75 277
Budapest	1993	601 311
	1994	597 447
	1995	241 599
	1996	128 626
	1997	208 679

Source: Ministry of Environment.

(b) Non-hazardous industrial waste production of the Region can be calculated only indirectly. The Central Statistical Office estimated the production of non-hazardous industrial waste for the whole country to be 10 million ton of non-hazardous industrial waste was produced in Hungary in 1997, according to this source. Taking the share of the industrial production in Pest County and in Budapest into account, a rough estimate can be made on the regional level.

Table 44.

Non-hazardous industrial waste production
Region Central Hungary, 1998

Area	Share of industrial production, %	Estimated non-hazardous industrial waste production
Pest County	7,8	780 000 t/y
Budapest	16,6	1 660 000 t/y

4.5.3.3 Waste collection and disposal

Organised waste collection covers almost hundred percent of Budapest. In the capital functions the only waste incineration work of Hungary, which burns 60% of all collected municipal solid waste of Budapest. At the beginning at the 90s there were still 4 landfills on the territory of the capital, all of which have been filled up and closed. For the disposal of the rest of the municipal waste of Budapest the landfills of the surrounding Pest County are used.

4.5.4 Mapping of institutions and actors

Regional strategy. On the level of the Region the main stakeholder of waste policy is the Regional Development Council. In the document "Strategic Plan of the Region Central Hungary 2001-2006", it is stated that that waste management is counted as a weakness characteristic to the whole Region (Central 2001). The document highlights that landfills not satisfying hygienic requirements are among the most hazardous polluters in the region. Accordingly a high priority is attached to the improvement of the state of the environment, and the development of the environment protection infrastructure is a required action. Acitivities that can be supported in this respect are the following:

- Complex waste management programs (regional landfill, waste recycling programs)
- Recultivation of filled-up uncontrolled landfills
- Assessment and liquidation of illegal landfills.

Table 45.

Main actors in policy making and implementation of waste management Region Central Hungary, 2002

	Public Sector	Private Sector	Civil Society / NGOs
Regional Level	• Regional Development Council • County Assembly and Administration • The Mayor's Office in Budapest • Municipalities of the Region and their alliances • Environmental Inspectorates • Local offices of the following national public agencies: National Public Health and Medical Officers Service, Water Management Directorates, Plant Health and Soil Protection Stations, National Park Directorates, Transport Inspectorates, Customs Bodies, Consumer Protection Inspectorates	• Individual companies in the region • Municipal and county- level Chambers of Commerce and Industry • Environment protection companies, consultancies and their alliances. There are 396 firms in the Region Central Hungary, (301 of which registered in Budapest) that are active in the field of waste collection, waste disposal, waste utilisation, waste transportation, waste processing or handling of hazardous waste	• Regional nature protection and environment protecion alliances • Regional research and education institutions
Local Level	• Local municipalities	• Individual companies in the settlement	• Local NGOs, single issue movements

Budapest strategy. On the level of the capital the main stakeholder of waste policy is the Mayor's Office of Budapest. The aims of the municipal solid waste management in Budapest are defined in the Municipal Waste Management Concept, elaborated by the Environment Management Institute, in 2000 (Budapest 2000). The document is followed by a detailed op-

erational plan, wich has been accepted by the Municipal Assembly. The concept is structured as follows:

- development of the waste collection system,
- development of the waste transport system,
- development op waste utilization,
- development of landfillds,
- involvement of social groups.

The concept has set the ambitiuos aim of diminishing of the organic part of landfill waste by 20 % during period 2000-2005. Proportion of reused waste should be increased up to 25-30 % of total waste. The concept has taken into consideration not only the Hungarian legislative framework of waste management and local governments, but also the relevant directives of the European Union and recommendations of the OECD.

Pest County strategy. On county level the main stakeholder of waste policy is the Assembly and Administration of Pest County. The Strategic Program for Regional Development for Pest County does not present a detailed waste management program, because the county has a separate Waste Management Plan. However, the Strategic Program states that waste management, in particular the disposal and treatment of waste should be dealt with within the framework of a regional program and the problem should be solved by handling it in a complex manner.

The document "Waste Management Plan of Pest County, 2001" outlines the respective strategy of the county (Pest 2001). The Plan is accompanied by a SWOT analysis, of which the main elements are as follows.

Table 46.

SWOT analysis of Waste Management
Pest County, 2001

Strengths • Well organised municipal solid waste collection • Recently established regional landfills.	**Weaknesses** • Illegal landfills • Lack of selective waste collection • Influx of wastes created outside Pest County • Many landfills not satisfying essential hygienic requirements.
Opportunities • Widening the range of selective waste collection, • Integrated waste management • Development of recycling industry • Organisation of household hazardous waste collection • Spread of household composting.	**Threats** • Illegal landfills pose hygienis threats • Illegal practice of deposing sludge in landfills devoted to solid waste • Improper use of liquid fertilizers.

Source: Waste Management Plan of Pest County, 2001

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6 STATISTICAL APPENDIX

6.1 National time series

Table 47.

Basic data on Hungary, I.

	1996	1997	1998	1999	2000
Population (average) in 1000	10.193	10.155	10.114	10.068	10.024
	in km²				
Total area	93.030	93.030	93.030	93.030	93.030
National accounts	**1000 Mio HUF**				
Gross domestic product at current prices	6.894	8.541	10.087	11.393	12.877
	1000 Mio ECU/euro				
Gross domestic product at current prices	35,6	40,4	41,9	45,1	49,5
	ECU/euro				
Gross domestic product per capita[16] at current prices	3.500	4.000	4.100	4.500	4.900
	% change over the previous year				
Gross domestic product at constant prices (nat. currency)	1,3	4,6	4,9	4,2	5,2
	in Purchasing Power Standard				
Gross domestic product per capita[17] at current prices	8.600	9.300	10.000	10.700	11.700

Table 48.

Basic data on Hungary, II.

	1996	1997	1998	1999	2000
Structure of production	**% of Gross Value Added**				
- Agriculture	6,6	5,9	5,5	4,8	:
- Industry (excluding construction)	26,3	28,1	28,2	27,7	:
- Construction	4,3	4,6	4,6	4,7	:
- Services	62,8	61,4	61,7	62,8	:
Structure of expenditure	**as % of Gross Domestic Product**				
- Final consumption expenditure	73,9	72,3	72,4	74,0	73,5
- household and NPISH	51,9	50,3	50,8	52,4	51,5
- general government	22,0	21,9	21,7	21,5	22,0
- Gross fixed capital formation	21,4	22,2	23,6	23,9	24,6
- Exports of goods and services	38,9	45,5	50,6	53,0	62,5
- Imports of goods and services	39,9	45,5	52,7	55,5	66,7

[16] Figures have been calculated using the population figures from National Accounts, which may differ from those used in demographic statistics.

[17] Figures have been calculated using the population figures from National Accounts, which may differ from those used in demographic statistics.

Table 49.

Basic data on Hungary, III.

	1996	1997	1998	1999	2000
Inflation rate	**% change over the previous year**				
Consumer price index	23,5	18,5	14,2	10,0	10,0
Balance of payments	**In Mio ECU/euro**				
-Current account	-1.339	-848	-2.020	-1.975	-1.620
-Trade balance	-2.110	-1.733	-2.080	-2.054	-2.296
Exports of goods	11.327	17.388	18.447	20.521	27.560
Imports of goods	13.437	19.121	20.527	22.574	29.855
-Net services	1.975	2.026	1.591	1.315	1.939
-Net income	-1.161	-1.263	-1.662	-1.556	-1.705
-Net current transfers	-44	122	130	320	442
***-of which*: Government transfers**	-12	-4	-40	-8	-14
- FDI (net) inflows	1.426	1.603	1.260	1.552	1.458
Public finance	**in % of Gross Domestic Product**				
General Government deficit/surplus	-3,2	-6,8	-7,8	-5,4	-3,1
General Government debt	:	64,2	62,1	60,5	55,7

Table 50.

Basic data on Hungary, IV.

	1996	1997	1998	1999	2000
Financial indicators	**in % of Gross Domestic Product**				
Gross foreign debt of the whole economy	61,1	52,9	55,0	56,1	51,6
	as % of exports				
Gross foreign debt of the whole economy	157,3	116,3	108,7	105,8	82,5
Monetary aggregates	**1000 Mio ECU /euro**				
- M1	6,0	6,8	7,1	8,3	9,0
- M2	16,0	17,7	18,2	20,8	22,5
- M3	16,2	17,9	18,3	21,0	22,8
Total credit	18,4	26,3	25,9	25,0	27,2
Average short-term interest rates	**% per annum**				
- Day-to-day money rate	23,8	20,8	18,0	14,8	11,1
- Lending rate	28,2	23,0	20,1	17,2	13,1
- Deposit rate	20,6	17,6	15,4	12,6	9,2
ECU/EUR exchange rates	**(1 ECU/euro=..HUF)**				
- Average of period	193,74	211,65	240,57	252,77	260,05
- End of period	206,91	224,71	252,39	254,70	265,00
	1995=100				
- Effective exchange rate index	85,7	79,6	71,0	66,9	63,3
Reserve assets	**Mio ECU/euro**				
-Reserve assets (including gold)	7.773	7.634	8.106	10.883	12.065
-Reserve assets (excluding gold)	7.743	7.607	8.081	10.854	12.036

Table 51.

Basic data on Hungary, V.

	1996	1997	1998	1999	2000
External trade[18]	**Mio ECU/euro**				
Trade balance	-1.944	-1.881	-2.407	-2.799	-4.308
Exports	12.529	16.876	20.505	23.487	30.525
Imports	14.473	18.757	22.912	26.286	34.833
	previous year=100				
Terms of trade	97,7	101,2	101,3	98,4	97,3
					as % of total
Exports with EU-15	69,7	71,2	72,9	76,2	75,1
Imports with EU-15	62,3	62,8	64,1	64,4	58,4
Demography	**per 1000 of population**				
Natural growth rate	-3,7	-3,8	-4,3	-4,8	-3,8
Net migration rate (including corrections)	0,0	0,0	0,0	0,0	0,0
	per 1000 live-births				
Infant mortality rate	10,9	9,9	9,7	8,4	9,2
Life expectancy :	**at birth**				
Males:	66,1	66,4	66,1	66,3	67,1
Females:	74,7	75,1	75,2	75,1	75,6
Labour market (ILO methodology)	**% of labour force**				
Economic activity rate	48,2	48,1	48,4	49,6	50,0
Unemployment rate, total	9,9	8,7	7,8	7,0	6,4
Unemployment rate, males	10,7	9,5	8,5	7,5	7,0
Unemployment rate, females	8,8	7,8	7,0	6,3	5,6
Unemployment rate of persons < 25 years	18,0	15,9	13,5	12,4	12,1
Unemployment rate of persons >= 25 years	8,5	7,5	6,7	5,9	5,4
	as % of all unemployed				
Long-term unemployment rate	49,8	46,5	44,3	44,9	44,2
Average employment by NACE branches	**in % of total**				
- Agriculture and forestry	8,3	7,9	7,5	7,1	6,5
- Industry (excluding construction)	26,7	27,1	28,0	27,4	26,8
- Construction	6,0	6,0	6,2	6,6	7,0
- Services	59,1	59,0	58,3	58,9	59,7

[18] For 1996-1998 period, data were converted by using monthly average exchange rates. From 1999, the conversion is based on the average rates of exchanges of Eurostat.

Table 52.

Basic data on Hungary, VI.

	1996	1997	1998	1999	2000
Infrastructure	**in km per 1000 km²**				
Railway network	83	83	85	85	85
	km				
Length of motorways	365	381	448	448	448
Industry and agriculture	**previous year=100**				
Industrial production volume indices	103,4	111,1	112,5	110,4	118,3
Gross agricultural production volume indices	106,3	96,2	97,9	103,9	96,5
Standard of living	**per 1000 inhabitants**				
Number of cars	223	227	220	225	235
Main telephone lines	260	304,8	334,7	359,3	347,1
Number of subscriptions to cellular mobile services	46,4	69,5	102,2	161,3	306,9
Number of Internet subscriptions	:	:	:	13,6	22,0

Source: Central Statistical Office

Table 53.

Main economic trends
Hungary, 1996 - 2001

		1996	1997	1998	1999	2000	2001 latest
Real GDP growth rate	per cent	1.3	4.6	4.9	4.2	5.2	4.2 H1
Inflation rate -annual average	per cent	23.5	18.5	14.2	10.0	10.0	9.9 Jan-Sep
-December-on-December	per cent	19.9	18.6	10.1	11.4	10.0	8.0 Sep-Sep
Unemployment rate, end-year -ILO definition	per cent	9.9	8.7	7.8	7.0	6.4	5.8 Jan-Aug
General Government budget balance	per cent of GDP	-3.2	-6.8	-7.8	-5.4	-3.1	:
Current account balance	per cent of GDP	-3.8	-2.1	-4.8	-4.4	-3.3	:
	million ECU/euro	-1,339	-848	-2,020	-1,975	-1,620	-365[19] Jan-Aug
Foreign debt -debt export ratio	per cent	157.3	116.3	108.7	105.8	82.5	:
-Gross foreign debt	million ECU/euro	21,746	21,354	23,079	25,272	25,562	:
Foreign direct investment inflow -balance of pay-ments data	per cent of GDP	4.0	4.0	3.0	3.4	2.9	:
	million ECU/euro	1,426	1,603	1,260	1,552	1,458	911[20] Jan-Aug

Sources: Hungarian Ministry of Foreign Affaires, National Bank

[19] Source: National Bank
[20] Source: National Bank

Table 54.

Per capita foreign direct investment (ECU, EURO)

Central, Eastern and Southern European Countries

	1995	1996	1997	1998	1999
Bulgaria	8	10	54	58	98
Cyprus	84	51	76	44	84
Czech Republic	190	109	111	235	495
Estonia	104	81	161	348	218
Hungary	**360**	**154**	**183**	**171**	**194**
Latvia	54	121	186	130	147
Lithuania	15	32	84	223	132
Malta	378	689	382	747	2 100
Poland	72	92	112	147	92
Romania	14	9	47	81	46
Slovakia	34	52	29	94	65
Slovenia	68	73	142	75	91

Source: Hungarian Central Statistical Office

6.2 Economic indicators of the year 2000

Table 55.

Main Indicators of Economic Structure

Hungary, 2000

Population (average)	**thousand**	10,024
GDP per head[21]	**PPS**	11,700
	Per cent of EU average	52
Share of agriculture[22] **in:** **-gross value added** **-employment**	 **per cent** **per cent**	 4.1 6.5[23]
Investment-to-GDP ratio[24]	**per cent**	24.6
Gross foreign debt/GDP[25]	**per cent**	51.6
Exports of goods & services/GDP	**per cent**	62.5
Stock of foreign direct investment	**million Euro** **euro per head**[26]	17,946 1,790

Source: Hungarian Ministry of Foreign Affaires, National Bank

[21] Figures have been calculated using the population figures from National Accounts, which may differ from those used in demographic statistics.
[22] Agriculture, hunting, forestry and fishing.
[23] Data refer to 1999.
[24] Data refer to Gross fixed capital formation as % of GDP.
[25] Estimated.
[26] Figures have been calculated using the population figures from National Accounts, which may differ from those used in demographic statistics.

Table 56.

Hungary's external trade with the EU countries

2000

Country	Imports		Exports		Imports	Exports
	Value, million USD	Ratio of country within total imports%	Value, million USD	Ratio of country within total exports %	Previous period=100.0	
Austria	2 366	7.4	2 443	8.7	94.5	101.8
Belgium	721	2.2	878	3.1	99.1	116.5
Denmark	150	0.5	138	0.5	102.9	122.1
Finland	373	1.2	99	0.4	117.3	108.1
France	1 401	4.4	1 470	5.2	106.6	130.9
Germany	8 213	25.6	10 471	37.3	100.3	109.1
Greece	54	0.2	95	0.3	102.4	129.3
Ireland	253	0.8	251	0.9	147.6	100.0
Italy	2 407	7.5	1 654	5.9	111.5	112.0
Luxembourg	31	0.1	9	0.0	122.9	137.3
Netherlands	708	2.2	1 522	5.4	100.7	117.4
Portugal	125	0.4	152	0.5	122.6	122.3
Spain	573	1.8	523	1.9	122.2	128.5
Sweden	369	1.2	254	0.9	116.0	109.8
United Kingdom	1 017	3.2	1 156	4.1	119.2	103.3

Source: Hungarian Central Statistical Office

6.3 Regional data

Table 57.

Key data on Hungarian regions

1999

Region	Area (km^2)	Population	Population density (person / km^2)	Settlement density (settlement / 100 km^2)	Proportion of town population (%)
Central Hungary	6919	2844224	411	2,7	78,8
Central Transdanubia	11236	1107163	99	3,6	56,1
Western Transdanubia	11209	984151	88	5,8	55,3
Southrn Transdanubia	14169	974768	69	4,6	54,9
Northern Hungary	13429	1269132	95	4,5	49,5
Northern Great Plain	17729	1521951	86	2,2	61,0
Southern Great Plain	18339	1341835	73	1,4	65,6
Hungary total	93030	10043224	108	3,4	63,5

Source: Central Statistical Office

Table 58.

Unemployment rates in Hungary by regions

1993-2000, %

	1993	1994	1995	1996	1997	1998	1999	2000
Central Hungary	7,3	6,0	6,2	5,6	5,3	4,4	5,2	5,2
Central Transdanubia	12,2	10,6	10,3	9,8	9,7	8,2	6,0	4,8
Western Transdanubia	8,7	7,7	7,5	7,5	6,8	5,7	4,4	4,2
Southern Transdanubia	12,3	11,2	11,7	12,6	13,2	11,2	8,2	7,8
Northern Hungary	18,3	14,8	15,3	16,6	16,7	15,6	11,5	10,1
Northern Great Plain	17,1	15,8	15,7	16,5	16,5	14,5	10,1	9,2
Southern Great Plain	13,7	11,7	10,5	10,8	11,1	9,7	5,7	5,1
Total	*12,1*	*10,4*	*10,4*	*10,5*	*10,4*	*9,1*	*7,0*	*6,4*

Source: Hungarian Central Statistical Office

Table 59.

Per capita GDP In Hungary by regions
1994-1999 , Thousand HUF

	1994	1995	1996	1997	1998	1999
Central Hungary	619	792	993	1254	1474	1710
Central Transdanubia	367	497	621	807	978	1061
Western Transdanubia	428	565	710	885	1102	1301
Southern Transdanubia	357	448	541	653	770	880
Northern Hungary	296	400	467	566	678	751
Northern Great Plain	314	391	476	581	675	726
Southern Great Plain	354	457	549	655	761	843
Total	*425*	*549*	*676*	*841*	*997*	*1132*

Source: Hungarian Central Statistical Office

6.4 EU financial instruments

Table 60

PHARE commitments 1990-1995, by year and sector
ECU million

Sector	1990-1991	1992	1993	1994	1995	Total
Administration and Public Institutions	8.0	14.5	1.5	0.0	3.0	27.0
Agricultural restructuring	33.0	5.0	30.5	0.0	10.0	78.5
Education, Training and Research	29.5	16.0	26.0	24.0	16.0	111.5
Environment and Nuclear Safety	37.0	10.0	0.0	15.5	12.0	74.5
Financial sector	19.0	0.0	0.0	0.0	0.0	0.0
Infrastructure (Energy, Transport, Telecommunication)	8.3	0.0	0.0	29.0	36.0	73.3
Private sector, Restructuring, Privatisation	71.5	11.0	31.0	16.5	6.0	136.0
Integrated Regional Measures	0.0	10.0	0.0	0.0	5.0	15.0
Social Development and Employment	3.0	26.0	0.0	0.0	2.0	31.0
Public Health	0.0	0.0	10.0	0.0	0.0	10.0
Other (Multidisciplinary, General TA etc)	0.0	5.0	0.0	0.0	2.0	7.0
Total	209.3	97.5	99.0	85.0	92.0	582.8

Source: Hungarian Ministry of Foreign Affairs.

Table 61.

PHARE commitments 1996 - 1999 by sector
ECU million

European Integration	28
Education and Training	45
Reform of public Finance	25
Economic restructuring	142
Infrastructure	150
EU programmes	30
Flexible non sectoral TA	5
Total	425

Source: Hungarian Ministry of Foreign Affairs.