



**Organising for EU Enlargement**

A challenge for member states and candidate countries

**MULTILEVEL GOVERNANCE**

Landfills in Hungary

OEUE PHASE II

Occasional Paper 5.5 – 12.04

József Mocsári

Budapest Corvinus University

[Budapest University of Economic Sciences and Public Administration]



FIFTH FRAMEWORK PROGRAMME



Dublin European Institute  
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## **ABSTRACT**

In this paper Hungarian waste policy is explored with special regard to the legislative and institutional aspects of landfill policy. A micro case study is also presented, on the establishment of the regional landfill in Pest and Nógrád county, in which one can observe when and how 'Europe hits home'. Waste policy in Hungary is a policy area where the transposition of EU directives is already complete, the implementation stage has started and citizens can directly feel the impact of the European Union on their lives. The state-of-the-art regarding many other policy areas is almost the opposite: for instance concerning the implementation of the Habitats<sup>1</sup> Directive there are not only implementation delays, but also a delay in transposition.

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<sup>1</sup> See OEUE Occasional Phase II Occasional Paper 5.3.- 09.04 Multilevel Governance: The Implementation of the Habitats Directive in Hungary – Missing Details Behind the Big Picture[ [www.oeue.net](http://www.oeue.net)].

## **INTRODUCTION**

The economic management of natural resources requires the reduction of the exploitation of non-renewable resources, efficient and economical use of material and energy resources, and exertion of minimal impact on the environment. It is an essential condition for long-term sustainable development. The principles and objectives of Hungarian Environmental Policy supporting sustainable development as laid down in *Act LIII of 1995 on general environmental regulations* are defined in relation to waste in *Act XLIII of 2000 on waste management* (hereinafter WM Act). In order to ensure the sustainable use of natural resources, the Act supports the use of technologies generating minimum amount of waste with economical material and energy consumption, thereby preventing the pile-up of waste; utilisation of materials producing less hazardous waste, representing lower risk; as well as recovery to the fullest the generated waste materials and energy; and finally disposal of non-reusable waste in an environmentally friendly manner that does not cause hazards to human health, and as a part of this, reduction to the minimum of waste disposal in areas where this would have a long term impact on the environment, especially in valuable areas.

In this paper Hungarian waste policy is explored with special regard to the legislative and institutional aspects of landfill policy. A micro case study is also presented, on the establishment of the regional landfill in Pest and Nógrád county, in which one can observe when and how "Europe hits home" (Börzel-Risse, 2000). Waste policy in Hungary is a policy area where the transposition of EU directives is already complete, the implementation stage has started and citizens can directly feel the impact of the European Union on their lives. The state-of-the-art regarding many other policy areas is almost the opposite: for instance concerning the implementation of the Habitats Directive there are not only implementation delays, but also a delay in transposition.

## **WASTE MANAGEMENT IN HUNGARY**

Waste management is an important component of any environmental strategy. The Hungarian National Waste Management Plan was prepared after a detailed situation analysis and was approved by the Parliament in November 2002. It established that the ratio of waste generation was high, recycling levels low for most types of waste, and that there were numerous cases where waste management was inadequate, giving rise to significant health and environmental hazards and risks. In the year of 2000, some 70 million tons of waste was generated in Hungary, which represented all waste generated in production, distribution and consumption, including agricultural waste, which is for the most part recovered in agriculture. Some 4.95 per cent of the above mentioned quantity was hazardous waste, while 10 per cent of the remaining 95.05 per cent non-hazardous waste was inert waste (part of construction-demolition waste and waste from building material production). Municipal waste included approx. 4.6 million tons of solid municipal waste; some two thirds of it originating from households, while the remaining one third came from institutions, services and the industry. This latter is similar to household waste, and can be treated together with municipal waste. Of these, the quantity gathered in organised way and treated amounted to 4.1 million tons (some 90 per cent). Municipal liquid

waste was estimated to be around 15 million tons. There was an additional 0.7 million tons of sewage sludge from the sludge storage of non-public and public sewage treatment plants (300 thousand tons each) as well as the sludge resulting from sewer cleaning (90 thousand tons) (data from: NWMP, 2002).

The typical treatment of generated waste is disposal, mostly into landfills. The proportion of the latter, not including agricultural waste, is over 50 per cent. Physical-chemical, biological treatments, or thermal waste disposal (the latter includes power generation as well) is 20 per cent in total, however half of this amount is represented by municipal liquid waste treated in water treatment plants or discharged into the sewers. Thermal waste disposal amounts to some 6 per cent, while the approximately 4 per cent of physical-chemical treatment consists mainly of chemical substances. Approximately 75 per cent of hazardous waste, some 60 per cent of industrial waste, and over four fifths of municipal solid waste is disposed at any of the 665 registered landfill sites, operated by public utilities, however only 15 per cent of these sites are provided with the appropriate liner system. According to a survey of landfill sites, supported by PHARE, in addition to the above sites there are some 620 sites, mostly with small capacity. The Budapest Waste Treatment Plant is the only municipal waste incinerator of Hungary. This plant takes care of the disposal of over the half of municipal waste produced in the capital, however there is an urgent need for the reconstruction of its flue gas treatment system (data from: NWMP, 2002).

## **LEGAL FRAMEWORK OF WASTE MANAGEMENT**

In Hungary, waste management is controlled by a complex set of legal regulations and procedures. Legal provisions determine technical requirements for waste management, the applicable economic incentives and sanctions, the responsibilities of the waste generator and managers of waste, as well as the licensing and supervisory duties of the authorities. In addition to legal provisions, separate programmes and funds are available for educational programmes, raising public awareness, research, and for individual voluntary undertakings (certification, eco-labelling and eco-management systems) that help and guarantee investments for the development of waste management. Moreover, there are opportunities for publishing professional implementation guides for facilitating the treatment of various waste types.

The framework for legal regulation of waste management is defined in *Act XLIII of 2000 on Waste Management*, based on *Act LIII of 1995 on General Rules of Environmental Protection*. The WM Act incorporates the principles of integrated pollution prevention, that of precaution, polluter pays, regionalism and manufacturer responsibility into Hungarian law. It is a framework law, thus it offers general rules and procedures for waste management, treatment and recovery, encourages product manufacturers toward the efficient use of resources. It gives authorisation for the different types of waste, and for waste management activities, and for determination of detailed regulations pertaining to waste management facilities. The regulations for treatment of hazardous waste and of municipal waste, for transboundary waste transportation, for incineration, for landfilling, and for the agricultural utilisation of sewage sludge were determined accordingly, as well as the regulations for certain types of waste that

require special treatment. The waste management fines, and the legal provisions pertaining to waste recording and data transmission responsibilities, also assist the enforcement of the Act (NWMP, 2002).

If we map the actors regarding waste management policy, one can see that multi-level governance is ensured by the WM Act, which sets responsibilities for the following levels:

As regards *local self-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-level self-governments* are responsible for promoting environmentally sound waste treatment within the territory of the county. They must draw up a county waste treatment plan, collect local waste management plans from local self-governments and harmonise them. Furthermore they select, in co-operation with municipal local governments, areas within the territory of the county that are suitable for waste treatment and disposal, cooperate with other county governments in accomplishing waste management tasks, and 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. Finally, *manufacturers* of the product that becomes waste, producers or holders of waste must pay the waste treatment costs or dispose of waste according to the polluter pays principle (ADAPT, 2003).

There are two legal instruments relating to landfills in the European Union. The most important in this policy area is the *Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste*. The Landfill Directive lays down more specific requirements for the design, operation, closure and after-care of landfills. (*The deadline for implementation of the legislation in the Member States was 2001.*) The objective of the Directive is to prevent or reduce as far as possible negative effects on the environment from the landfilling of waste, by introducing stringent technical requirements for waste and landfills. The Directive is intended to prevent or reduce the adverse effects of the landfill of waste on the environment, in particular on surface water, groundwater, soil, air and human health. It defines the different categories of waste (municipal waste, hazardous waste, non-hazardous waste and inert waste) and applies to all landfills, defined as waste disposal sites for the deposit of waste onto or into land. Landfills are divided into three classes: landfills for hazardous waste; landfills for non-hazardous waste; landfills for inert waste (European Commission, 2004).

A standard waste acceptance procedure is laid down so as to avoid any risks:

- waste must be treated before being landfilled;
- hazardous waste within the meaning of the Directive must be assigned to a hazardous waste landfill;

- landfills for non-hazardous waste must be used for municipal waste and for non-hazardous waste;
- landfill sites for inert waste must be used only for inert waste;
- criteria for the acceptance of waste at each landfill class must be adopted by the Commission.

The Directive sets up a system of operating permits for landfill sites. Applications for permits must contain the following information:

- the identity of the applicant and, in some cases, of the operator;
- a description of the types and total quantity of waste to be deposited;
- the capacity of the disposal site;
- a description of the site;
- the proposed methods for pollution prevention and abatement;
- the proposed operation, monitoring and control plan;
- the plan for closure and aftercare procedures;
- the applicant's financial security;
- an impact assessment study, where required under Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment.

We also need to mention the *2000/738/EC: Commission Decision of 17 November 2000 concerning a questionnaire for Member States reports on the implementation of Directive 1999/31/EC on the landfill of waste*. Member States must ensure that existing landfill sites may not continue to operate unless they comply with the provisions of the Directive as soon as possible. They must report to the Commission every three years on the implementation of the Directive and on the basis of these reports, the Commission must publish a Community report on the implementation of the Directive (European Commission, 2004).

The adoption of the Hungarian act on waste management in June 2000 was an important step in complying with the relevant *acquis*. This is a framework law, which allows the adoption of secondary legislation on specific types of waste. The law entered into force in January 2001, thus Hungarian legislation was aligned with the EC landfill Directive. The Hungarian Act on waste management and the *Decree of Ministry of Environment No. 22 of 2001 on landfills* deal with the issue of Hungarian landfills. In general, the content and structure of the Hungarian decree is in accordance with the community law. The most important provisions and the key instructions of the Landfill Directive are already present in the Act on Waste Management, and the technical enforcement rules are laid down in the Ministerial Decree on landfills.

In a certain sense the creation of the waste management planning system and elaboration of waste management plans themselves can be interpreted as a task of approximating laws, because the framework Directive on waste stipulates for Member States that the competent authorities must prepare waste management plans. For the purposes of fulfilment the Act on

Waste Management introduced a planning system, whereby waste management schemes can be made for national, regional and local (or municipality association) levels. After about one and half year delay, The National Waste Management Plan (NWMP) was approved by the Parliament in December 2002. On the basis of the adopted National Plan, Environmental Inspectorates, municipalities and their associations were required to prepare local waste management plans by the end of 2003 as well.

## **INSTITUTIONAL BACKGROUND**

### **The administrative structure for waste management**

The main regulatory body of waste management is the Ministry of Environment and Water Management. 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 waste management, including the direction of relevant research, development and educational tasks. The responsibilities of the Ministry in charge of the environment are mainly the professional, political and strategic definition of waste management, ensuring harmonisation with other sectors and other regulators, planning, management and supervision of implementation, creation, management and supervision of the institutional and administrative background for waste management, and reconciliation of interests with social and economical organisations are. In addition, however, the all branch ministries have sectoral supervisory, regulatory, planning and control functions in relation to waste management, which must be carried out in an integrated manner, in accordance with the other sectors, but with the use of their own instruments as required by the given tasks and scopes of responsibility.

The tasks of waste management authorities (licensing, supervision, enforcement) are carried out by the 12 Regional Environmental Inspectorates of the Ministry, and, mostly at second instance, by the National Inspectorate of Environment and Nature Conservation. The same system serves basically also for collecting and preparing the statistical information on waste related activities. Beside the Ministry of Environment, almost all other ministries are in charge of special tasks relating to waste management, especially regarding public and animal health, plant and soil protection, water management, consumer protection, and customs administration. From the sectoral supervisory, implementation control, and data collection aspect, the following are to be emphasised: the Ministries of Economy and Transportation, Agriculture and Regional Development, Health, Internal Affairs, as well as the Central Statistical Office; while from the teaching, training and information spreading aspect the Ministry of Education has to be mentioned. (Over the last decade the competencies and the names of the respective ministries have changed several times.) The Ministry of Finance has a very important role in economic regulation and incentives, and in controlling customs and excise authorities. The goals of NWMP and the necessary instruments for their implementation are to be included in sectoral policies and development plans. It is the responsibility of each ministry to carry out necessary planning, research and development, reconciliation of economic interests in order to realise this task (NWMP, 2002). Within the scope of activities of the Ministries, special measures are to be taken

for the treatment of waste, generated by budgetary organs (e.g. Ministry of Defence, the police, the fire department, institutional waste). These are to be included in the development plan of the given sector (NWMP 2002).

As regards *county-level responsibilities*, the WM Act has defined a wide range of competencies and tasks for the county-level self-government. The main role of the counties is to integrate the waste management plans of the municipalities within the county, and to harmonise them with the National Waste Management Plan. Thus, their main responsibility is preparing environmental programmes co-ordinated together with the local self-governments; and giving their preliminary opinion on the local environmental programmes or initiating the preparation thereof. As can be seen, the county-level local governments mainly carry out coordinative tasks. However, it is important to mention that county-level local governments have no authority competences and do not take part in the allocation of environmental protection funds.

At the *local level*, out of the three key focus areas of national environment policy, waste management and sewage are generally most relevant to local self-governments. On this 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 self-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. However, the main problem at this level is that there is no sufficient financial support for local self-governments to fulfil their environmental tasks defined in the Acts. Their share in the central budget is minimal, and they do not collect enough local tax.

### **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 the sub national level as well, there are formal and informal forums to ensure the co-operation between the stakeholders, including the companies and the society. 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 single-issue groups. They participate in the rule-making process, make opinions on rules and acts. 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 (see Table 4) (ADAPT, 2003).

Policy-making, monitoring and implementation tasks were heavily influenced by the EU accession negotiations. Regarding the tasks implementing the Environmental Acquis in the field of waste management, the National Programme for the Adoption of the Acquis laid down the tasks of public agencies (MFA, 2002). This document assigned special tasks to the relevant professional branches and territorial levels of public administration (see Table 3).

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 harmonization 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. 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. 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 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, but it is far from the satisfactory level. The NPAA outlines these development tasks according to activity fields specific to waste management. As regards the fulfilment of the Directive on waste landfill, the NPAA 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 standards for measuring the quantity, quality and composition of wastes,
- registration of the quantity and composition of waste produced, collected and disposed of,
- creation of uniform approach registry of landfills based on the Phare 99 landfill program.

In order to effectively fulfil the administrative tasks, the staff of the Ministry of Environment and other Ministries concerned requires further strengthening, the staffs of regional bodies and professional background institutions has to be increased, and last but not least municipalities have to be able for carrying out waste management tasks assigned to them. In addition to the expansion of personnel at national authorities the institution development plans extend to regional authority bodies operating under their supervision, such as public health, water management, consumer protection, plant health and soil protection, traffic, and customs authorities (MFA, 2002).

## **IMPLEMENTATION**

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. This document has defined a structure of activity fields, and has assigned special tasks to the relevant professional branches and territorial levels of public administration. Inadequate enforcement of environmental regulations is a major concern in Hungary. The upgrading of the institutional system of environment protection is a difficult task, which will take more time than the modernisation of the methods and the physical infrastructure of environmental protection. Implementation problems arise due to lack of resources, lack of information, problematic political decisions and problems in political culture and environmental awareness. Due to substantial lobbying force of local and sectoral interest groups environmental investments are often targeted to areas with lower priority or lower efficiency. Most of the standards that regulate governmental environment protection activities originate from the general approach of those in the EU. In particular,

- the intensity of monitoring and control functions regarding development projects
- the scope and results of educational and information activities
- the increase in social participation in environmental decision-making

are systemic features, which are attributable to European integration to a large extent (ADAPT, 2003).

Policy-making, monitoring and implementation of tasks have been heavily influenced by Hungary's EU integration process. The Environmental Acquis and the experiences of EU member states have provided a blueprint in many institution development projects. The Hungarian environment- and nature protection policy direction has been elevated to a ministerial level since April, 1988. Since the 2002 parliamentary elections environmental issues are again coupled with water management issues in the same ministry. Demands on sub-national

structures intensify with the EU integration process, in particular with the implementation of the Environmental Acquis. 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. Implementation of waste management regulations needs substantial human resources and good data bases. However local branches of the National Environment Protection Agency lack the necessary 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, 2001). 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 staff to deal properly with waste management. The related significant 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 (ADAPT, 2003).

The treatment of waste – and the collection of waste appropriate for treatment, recovery and disposal – is basically the responsibility of the waste generator, or its owner. This responsibility is met by adhering to conditions, set in legal provisions, in accordance with the “polluter pays” principle by carrying out the treatment, which is an activity requiring a license, or handing over the waste to an organisation, licensed to carry out treatment, and paying the cost of the treatment. In certain cases set down in legal provisions the producer of the product resulting in waste is responsible for waste treatment and has to bear the costs of treatment. In case of municipal waste, the local self-governments are responsible for organising municipal services, ensuring the treatment of municipal waste, so that the responsibility of the inhabitants can be enforced. Organisations gathering, recovering and disposing waste are eligible to start and carry on their activity only upon a license, granted by environmental authorities. They have to keep records of their activity, of the quantity and quality of waste they treat, and have to report annually to the authorities (NWMP, 2002).

Throughout the past decades, due to careless economic activities and waste treatment, to the regulations being far more lenient than current regulations and to occasional illegal waste dumping, contaminated areas appeared in many parts of the country. Some 500 million tons of industrial waste was dumped in currently abandoned, mostly re-cultivated waste disposal sites, of these 99 per cent originated from mining industry, metallurgy of ferrous metals, power plants and construction industry. Some 10 per cent of the waste dumped still represents a hazard or a source of contamination to the environment. Currently only 0.3 per cent of the dumped volume is recovered annually, despite the fact that a much larger volume is reusable. 7 per cent (35 million tons) of waste collected at landfills is classified as hazardous; more than 90 per cent of this is red mud, while most of the remaining amount is drilling sludge. The estimated volume of

hazardous waste dumped at landfills, which do not meet the modern requirements of waste disposal, is approximately 270 thousand tons. Elimination of these sites is in progress. According to preliminary data from the landfill survey program supported by PHARE, there are approximately 620 illegal landfills and waste dumps with a volume over 3-500 m<sup>3</sup>, while the number of closed, but not adequately re-cultivated landfills amounts to 1250. These represent a hazard to the environment with some 10 million tons of collected waste. Abandoned landfills, not meeting safety requirements are to be eliminated on the one hand within the framework of the National Environmental Remediation Program – by the enforcement of the responsibilities set down in Government Decree no. 33/2000 (III. 17.) – and on the other hand within the framework of the re-cultivation program of municipal landfills; as a result of these programs annually 50-100 landfills will be closed, eliminated or re-cultivated (data from NWMP, 2002).

### **State-of-the-art: the Hungarian landfills**

In Hungary the typical form of managing waste is disposal: 85 per cent of collected waste is disposed of into landfills. According to a PHARE project designed to assess all landfills in the country, there were 2700 operational landfills, out of these only 728 were registered landfills serving all the municipalities in Hungary in 2002 (European Commission, 2001). Only 6 are so far in line with the *acquis* and a further 67 seem to be aligned to a large extent. In particular, a great number of low capacity local landfills do not conform to the *acquis* and there are a large number of illegal ones. Measures are being implemented to close down all the illegal or non-EU compliant landfills. The objective laid down in the National Waste Management Plan is to establish regional collection and management systems with a maximum of 100-120 landfills. At the end of 2004, the regional collection and management systems planned in the framework of ISPA programme cover one-third of the country. A further objective is that the abovementioned cover-rate should reach 100 per cent by 2009.

The enforcement of the Act on waste management is designed to ensure that there will be no operational landfills after 2009, which fails to fulfil the Directive's specifications. Enforcement tasks include arrangements for depositing non-hazardous waste, mainly municipal waste. Therefore, a new larger capacity for regional collection, related management systems and landfills has to be established. In addition, former landfills have to be closed down and recultivated in a proper manner. The revision of existing landfills and required measures began in 2000. The concrete steps to be taken for properly arranging or shutting down inappropriate landfills were defined in the so-called „landfill” project. The revision of existing landfills, gradual shutting down, modernisation or replacement of non-compliant ones until 2009 requires a total of 92 million HUF, while the reduction of biodegradable organic components to the ratio specified in the Directive, including costs of selective collection and recycling will cost nearly 45 million HUF until 2014 (MFA, 2002). This underlines the costs for the new member states in implementing the environmental *acquis*.

The professional interest organisations of business associations operating in waste management play a significant role. The task of these organisations is to collect, coordinate and represent requests and opinions surfacing in their fields during the elaboration of the regulation and policy

of waste management, and the presentation of any problems. Their tasks should include elaboration of programs for waste management tasks in their sector, collection and registration of relevant sectoral information, helping members with specialist advice, the wording of professional ethics and norms and checking compliance with those. They can play a key role in raising environmental awareness among the profession and the population, and in organising campaigns. The other large group of non-governmental organisations is represented by self-organised environmental protection, „green“ organisations, which have a key role in conveying waste-related problems and opinions appearing among the population, collection and representation of social opinions regarding either the regulation of waste management, professional area concept or policy, or concrete implementation program or action plan. In addition they have a key role in shaping consumer customs, the attitude of the population to waste, and in organising information and knowledge-spreading programs and campaigns (MFA, 2002). Each of these sets of organisations play a key role in making information public and supplying authorities with information. Support for their operation is to some extent a state task with coverage provided by the public purpose funds of the Environmental Protection Fund (Hungarian abbreviation: KAC) in the past, which will have a share in future support also.

#### **CASE STUDY:**

##### **The “garbage-circus” or the “doomed project”**

The quantity of waste removed from public sources increased by 30 per cent between 1992 and 2000; therefore, the collection and disposal of approximately 4.6 million tons of municipal solid waste is a high priority. In 2000, over 90 per cent of municipal solid waste was collected, only about 3 per cent of which was recycled, 14 per cent incinerated, and the vast majority (83 per cent) was deposited (see Table 1). In 2000, there was no organised waste collection for 4 per cent of the population. In 2001, municipal solid waste was neutralised in 665 registered landfill sites. There are 1,284 small landfill sites of between 300 and 500 m<sup>3</sup>, of which only 291 had an operating license in 2001. It is estimated that there are a further 2000 abandoned, closed or illegally used landfill sites in the country, 1,323 of which began operation after 1950 but are now abandoned and containing between 300 to 500 m<sup>3</sup> of waste. This means that a considerable proportion of waste is returned to the environment with no sufficient neutralisation, resulting in increased environmental loads (MET, 2003).

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 (See table 2). 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. In Hungary local self-governments that are obliged to assume the major

responsibility for solid waste management, but well-defined, less significant responsibilities exist at the county and region level as well. Local self-governments provide waste management services either through their fully owned local utility companies, and/or through private utility firms. In some cases, local actors have entered into inter-municipal co-operation schemes to organise the collection, processing and disposal of wastes in order to benefit from economies of scale (ADAPT, 2003).

Ninety nine municipalities from Pest and Nógrád prepared a regional programme contained the project on establish a complex regional collection and management system of waste. The project costs 25 million euros, to which the EU contributes with about 12 million euros, because it is implemented with the help of ISPA, and the Hungarian government with 10 million euros. This programme comprises three different activities: the recultivation of two non-EU conforming landfills in that region, the introduction of separate collection of waste, and the establishment of a central landfill with high capacity with about 7 million euros cost.

Beside the central administrative institutions and their territorial organization, the local self-governments also have significant environmental responsibilities. Among others, they are responsible for the operation of drinking-water supply and the sewage-network, the treatment of municipal wastes, and they mark off and protect local natural areas. The local self-governments have tasks concerning environmental policy formulation as well as implementation. As regards implementation, they have to implement legal rules serving the protection of the environment; perform the authority tasks assigned to them and co-operate with other authorities in charge of environmental protection, with other local governments and NGOs. The Act on environmental protection charges local governments with environment policy formulation: they have to work out, in accordance with the objectives in the National Environment Programme and the development plan of the locality, a self-contained municipal environmental programme for their area of competence. Furthermore, they have to enforce the requirements of environmental protection during the attainment of development objectives and promote the improvement of the state of the environment. According to the *Act on Local Governments*, which also regulates the tasks, concerning environmental protection, of local self-governments, the treatment and establishment of communal waste belong to the responsibility of local self-governments, thus this task is not financed by the central government. Thus, this ISPA project is a good opportunity for settlements to "cheaply" comply with domestic and EU environmental standards. (Besides these, the Hungarian support objectives include the establishment of regional municipal waste management systems, shutting down and recultivating old, outdated landfills, implementation of facilities for reducing the production, recovery or disposal production wastes (including hazardous wastes). In 2002, the action plan of the National Environment Programme planned to allocate a total of 4.54 billion HUF from KAC sources for supporting the above mentioned objectives.)

According to Hungarian and EU law, there is one main prerequisites which is necessary to establish the abovementioned waste facility: an environmental impact assessment to explore whether the site is appropriate. Besides this, regarding every potential site, the agreement of local inhabitants was also a significant, but not necessary condition: holding a referenda

depended on the local politicians and mayor. However, if it was held, and the result was negative, the facility was not allowed to build there. On the other hand, if the result was positive, it did not mean a commitment to build it on that site. This is important to note, because later on, the ambiguity of this question led to an argument and conflict between Valkó and the Ministry.

From December 2003 to January 2004, there were referenda in nine municipalities concerning the issue on placing of the regional landfill. The inhabitants of eight municipalities voted against hosting the proposed facility, and only the inhabitants of Valkó voted to allow a regional waste landfill to be located near their village. Even though the referenda was affirmative in Valkó because of a negative Environment Impact Assessment the village could not establish the landfill.

### ***Campaigns or rallies?***

The local campaigns and anti-campaigns caused great tension and division within the communities. In most of the cases, it was not even clear to the people what they voted about. In all of the municipalities, the scenario was the same: the local self-government and the representatives of the self-government supported the establishment of the regional landfill. For example in Valkó, free copies of the local-newspaper were distributed in which detailed arguments for establishment of the landfill were published. In addition, the self-government organized trips to the nearest operational landfill and provided opportunities for inhabitants of Valkó to ascertain the safety of the modern landfills (NOL, 2004).

In most of the settlements the leader and supporter of the anti-campaign of the inhabitants was the so-called "*Other Side – Ecosocial Movement*". This organization agitated for establishing smaller, modern landfills and introducing the separate collection of waste. This is an unregistered movement with approximately 20 supporting members (MTI, 2003). It is important to mention that the main advocate of this organization was Zoltán Illés, who is an MP of FIDESZ, currently the largest opposition party in the parliament, and he was the chairman of the Committee on Environment of the Hungarian Parliament in the previous parliament. Thus these campaigns got a political dimension, which was no good for the issue. His main argument was that the EU does not support the disposal and he claimed that after the EU accession not only the free movement of goods and services will come true but also that of the waste. As a result of these there will be no obstacle to get waste from Western Europe to Hungarian landfills. In certain cases the political dimension was evident in other ways too. For instance in Hévízgyörk the leader of the protesters was a former mayor candidate of the opposition (MTI, 2003). Another organization involved in the anti-campaigns was the Hungarian Green Party but its role was marginal. Since the systemic change, no influential green party has been established yet. In addition to that, the political importance of environmental movements has not grown for 14 years, and most of these organizations have serious financial difficulties. The green party agitated for introducing the separate collection of waste, so the existing landfills remain appropriate to further fulfil their tasks. The anti-campaigns were not based on any professional arguments and could neither be considered correct or objective. The only common

thing in them was: they said no. The resisters showed the modern landfill as “it would be the spawn of illness, disease and crime”: they demonstrated with coffins and dog skulls.

Finally, the solution was the extension of two already existing landfills, and new facility will not be built. Valkó is considered as a reserve-site. Regarding the regional landfill projects, positive example is the case of Northern-Balaton, where a very similar facility gained public support, a positive EIA and similar funding. The newly built landfill will serve 172 settlements. The overall opinions of ministry officials were that more attention needs to be paid to the preparation phase. The site must be more carefully chosen and PR activities need to be enhanced in order to provide correct information to all stakeholders, including citizens. The third point is that people have a dual attitude to environment issues (NIMBY syndrome) (Magyar Narancs, 2003). On the one hand they expect to have clean environment whereas on the other hand they cannot accept that the environmental facility be operational near their locations. The reason for this attitude is lack of information and distrust. The Act on Environment Protection contains the partnership principle that is local citizens have equal rights to participate in environment policy issues.

## REFERENCES

- ADAPT (2003): The impact of EU integration on Hungarian environmental policies: Social Network Analysis of waste management in the Region Central Hungary. Hungarian part of the international comparative ADAPT research project (Greece, Hungary, Ireland, Poland, Portugal). Work done on behalf of the Research Institute for World Economy of the Hungarian Academy of Sciences. Budapest, 2002-2003.
- Ágh, Attila (2002), *Demokratizálás és európaizálás*, [Democratization and Europeanization], (Budapest: VKSZA).
- Bándi, Gyula, László Bencze and Andrea Elek (1998), 'Az Európai Unió és a hazai környezeti jogi szabályozás intézményi rendje', [The institutional framework of the legislation on environment in the EU and Hungary] in *Gazdaság és Környezet Útban az EU felé Műhelytanulmányok* (Budapest: MTA)
- Bándi, Gyula (2000) „Környezetvédelmi Politika' [Environment Policy] in Kende, Tamás and Tamás Szűcs (eds.) (2000).
- Bándi, Gyula (2001), *Az Európai Unió környezetvédelmi szabályozása* [The environmental regulation of the European Union], (Budapest: KJK-KERSZÖV Jogi és Üzleti Kiadó Kft).
- Bándi, Gyula (2002), *Környezetjog* [Environment Law] [Budapest: Osiris].
- Börzel T.A. and Risse T. (2000), 'When Europe Hits Home: Europeanization and Domestic Change', *European Integration Online Papers (EioP)*, 4/15: [eiop.or.at/eiop/texte/d000-015a.htm](http://eiop.or.at/eiop/texte/d000-015a.htm).
- Börzel, T. A. (2001), 'Pace-Setting, Foot-Dragging, and Fence-Sitting. Member State Responses to Europeanization', *Queen's Papers on Europeanization 4/2001*, Belfast: Queens University <http://www.qub.ac.uk/ies/onlinepapers/poe4-01.pdf>.
- Kende, Tamás and Tamás Szűcs (eds.) (2000), *Az Európai Unió politikái* [Policies of the European Union] (Budapest: Osiris.)
- Kerekes, Sándor and Károly Kiss (2001), *Környezetpolitikánk az EU elvárások hálójában* [Our environment policy in the net of the EU requirements] (Budapest: Agroinform Kiadóház)
- Kerekes, Sándor and Károly Kiss (eds.) (2000), „A megkérdőjelezett sikerágazat Az EU környezetvédelmi követelményeinek teljesítése [Fulfilment of EU Environmental Requirements] (Budapest).
- Knill, Christoph and Dirk Lehmkuhl D. (1999): 'How Europe Matters: Different Mechanisms of Europeanisation', *European Integration Online Papers (EioP)*, [eiop.or.at/eiop/texte/1999-007a.htm](http://eiop.or.at/eiop/texte/1999-007a.htm)
- Laffan, Brigid (2003): Multileveled Governance: Regional Policy and Environmental Policy, Discussion Document 1/03
- McCormick J. (2001), *Environmental Policy in the EU*, (Basingstoke: Palgrave).
- Sbragia, Alberta. (2000), 'Environmental Policy' in Helen Wallace and William Wallace (eds.), *Policy-Making in the European Union*, Fourth Edition (Oxford: Oxford University Press)
- Magyar Narancs (2003. november 9), Szeméthyelyzet Magyarországon  
MTI: 2003. december 2 - december 7

NOL 2004: Népszabadság On-line (www.nol.hu)

**Official Publications:**

European Commission (1997): Commission Opinion on Hungary's Application for Membership of the European Union, Brussels: European Union.

European Commission (1997a): Guide to the approximation of European Union environmental legislation 1997: Commission of the European Communities

European Commission (1998, 1999, 2000a, 2001, 2002a): Regular Report from the Commission on Hungary's Progress towards Accession, Brussels: European Union.

European Commission (2003): Fourth Annual Survey on the implementation and enforcement of Community environmental law 2002, Brussels: Commission of the European Communities.

European Commission (2003a): Comprehensive monitoring report on Hungary's preparations for membership, Brussels: European Union

European Commission (2004): Landfill of Waste, Available at:

[http://www.europa.eu.int/comm/environment/waste/landfill\\_index.htm](http://www.europa.eu.int/comm/environment/waste/landfill_index.htm)

ECOTEC (2001): Administrative Capacity for Implementation and Enforcement of EU Environmental Policy in the 13 Candidate Countries, Brussels: Ecotec Research and Consulting in association with The Institute of European Environmental Policy, London (IEEP London), FEI and experts from across the candidate countries.

"Environment 2010: Our Future, Our Choice" (The Sixth Environmental Action Programme of the European Communities 2001-2010).

National Development Office (2003): Hungarian National Development Plan 2004-2006, Budapest: Prime Minister's Office. Available on the web at: [www.nfh.hu](http://www.nfh.hu)

MET (2003): Environment Protection and Infrastructure Operational Programme 2004-2006, Budapest: Ministry of Economy and Transport. Available on the web at: [www.nfh.hu](http://www.nfh.hu)

MFA (2002): National Programme for the Adoption of the Acquis in Hungary, Budapest: Ministry of Foreign Affairs.

MFA (2003): European Booklets – Environment Protection in Hungary and the EU, Budapest: Ministry of Foreign Affairs and Prime Minister's Office.

NWMP (2002): Hungarian National Waste Management Plan, available on the web at:

[http://www.kvvm.hu/szakmai/hulladekgazd/oh\\_t\\_ang.htm](http://www.kvvm.hu/szakmai/hulladekgazd/oh_t_ang.htm)

Pest (2001): Waste Management Plan of Pest County. (Pest Megye Hulladékgazdálkodási Terv), 2001-2, Budapest. Produced by Beleconsulting N.V., Indaver N.V. and Pest County.

WRR, (2001), *Towards a Pan-European Union* Report No. 59, The Hague: Scientific Council for Government Policy.

**Regulations:**

Act XX of 1949 on The Constitution of the Republic of Hungary

Act II of 1976 on the Protection of the Human Environment

Act LIII of 1995 on the General Rules of Environmental Protection

Act LVI of 1995 on the Environmental Product Charges

Act LIII of 1996 on the Protection of Nature

Act LXXVIII of 1997 on the Formation and Protection of Urban Environment

Act XLIII of 2000 on waste management

Government Decree No. 158/1998 on The Scope of Task and Authority of the Minister of Environment

Government Decree No. 155/2002 on The Scope of Task and Authority of the Minister of Environment and Water Management

Government Decree No. 211/1997 on The National Inspectorate for Environment and Nature Conservation

Parliamentary Resolution No. 83/1997 on Hungarian National Environment Programme for 1997-2002 (NEP 1)

Decision 110/2002. (XII. 12.) of the Hungarian Parliament on the National Waste Management Plan (NWMP)

**Web reference** [consulted between April 2003 and December 2004)

Ministry of Environment and Water Management ([www.ktm.hu](http://www.ktm.hu))

National Inspectorate for Environment and Nature Conservation ([www.ktm.hu/ktff/](http://www.ktm.hu/ktff/))

Ministry of Foreign Affairs ([www.kum.hu](http://www.kum.hu))

National Council for Environmental Protection ([www.oktt.hu](http://www.oktt.hu))

National Chief Directorate of Water Management ([www.ovf.hu/OVFWEB/OVFWEB.nsf](http://www.ovf.hu/OVFWEB/OVFWEB.nsf))

REC Magyar Iroda ([www.rec.hu](http://www.rec.hu))

The European Union On-Line ([europa.eu.int/index\\_en.htm](http://europa.eu.int/index_en.htm))

Institute for Environment Management ([www.kvvm.hu/kgi](http://www.kvvm.hu/kgi))

The European Union On-line – Environment ([europa.eu.int/comm/environment/agriculture/](http://europa.eu.int/comm/environment/agriculture/))

**Interview conducted with:**

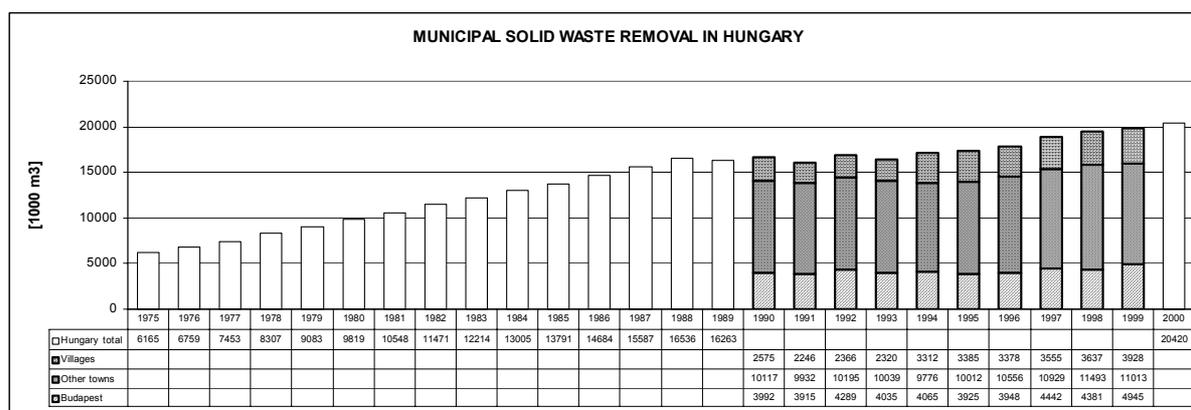
Gábor Baranyai – Head of the Department of European Community and International Law in the Ministry of Environment and Water Management.

**Table 1: Treatment of Waste Generated in 2000 (%)**

Type of waste	Recovery	Landfill	Incineration, other types of disposal
Agricultural and food-industrial, non-hazardous	35	55	10
Industrial and other business, non-hazardous	29	60	11
Municipal solid	3	83	14
Municipal liquid (not including sewage sludge)	30	22	48
Municipal sewage sludge	40	50	10
Hazardous	20	74	6
<i>Total</i>	27	52	21
Biomass	85	13	2
<i>Overall total</i>	48	38	14

Source: Ministry of Environment and Water management, National Waste Management Plan

**Table 2: Municipal solid waste removal in Hungary 1975–2000**



Source: Hungarian statistical yearbooks Central Statistical Office, Budapest

**Table 3: Authorities responsible for implementation of the waste management policy according to twelve activity fields of waste management**

<b>Activity field</b>	<b>Responsible Authorities</b>
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
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)

**Table 4: Main actors of waste management, 2002**

	<b>Public Sector</b>	<b>Private Sector</b>	<b>Civil Society / NGOs</b>
<b>Natio- nal Level</b>	<ul style="list-style-type: none"> <li>• Ministry of Environment</li> <li>• Ministry of Transport and Economic Affairs,</li> <li>• Ministry of Interior,</li> <li>• Ministry of Agriculture and Regional Development,</li> <li>• Ministry of Health,</li> <li>• Central Statistical Office</li> <li>• National Inspectorate for Environment and Nature Conservation,</li> <li>• National Authority for Consumer Protection</li> <li>• Institute for Environmental Management</li> </ul>	<ul style="list-style-type: none"> <li>• Alliance of Manufacturers (GYOSZ)</li> <li>• Individual large companies interested in the rule-making process</li> <li>• Alliance of Waste Utilisation Companies</li> <li>• 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.</li> <li>• Trade associations of various professions</li> </ul>	<ul style="list-style-type: none"> <li>• Various environment protection groups, such as:</li> <li>• Hungarian Waste Alliance "Humusz"</li> <li>• Levegő Alliance</li> <li>• Reflex Alliance</li> <li>• Alliances of Local Communities</li> <li>• National research and education institutions</li> </ul>
<b>Regio- nal Level</b>	<ul style="list-style-type: none"> <li>• Regional municipalities</li> <li>• Environmental Inspectorates,</li> <li>• Water Management Directorates,</li> <li>• Plant Health and Soil Protection Stations,</li> <li>• National Park Directorates,</li> <li>• Transport Inspectorates,</li> </ul>	<ul style="list-style-type: none"> <li>• County-based Chambers of Commerce and Industry,</li> <li>• Chambers of Agrarian Companies</li> <li>• Large companies located in the region,</li> </ul>	<ul style="list-style-type: none"> <li>• Regional research and education institutions</li> <li>• Regional groups organised for nature protection</li> </ul>
<b>Local Level</b>	<ul style="list-style-type: none"> <li>• Local municipalities</li> </ul>	<ul style="list-style-type: none"> <li>• Companies located in the settlement</li> </ul>	<ul style="list-style-type: none"> <li>• Local NGOs, single issue movements</li> </ul>

**Table 5: Costs of implementing EU environmental directives Billion HUF, on 1997 prices**

	<b>One-time investment costs</b>	<b>Yearly recurring costs of managing infrastructure and institutions</b>
<b>Air pollution</b>	500	75 to 125
<b>Noise and vibration</b>	5 to 10	-
<b>Water protection</b>	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
<b>Waste management, total</b>	230 to 250	35 to 60
<b>Environment security</b>	65	10 to 15
<b>Integrated Pollution Prevention and Control</b>	100 to 300	15 to 75
<b>Nature protection</b>	35	5 to 10
<b>Total</b>	<b>2300 to 2920</b>	<b>345 to 730</b>

Source: Kerekes-Kiss 2000