3.2 Relying on economic instruments

Responding to the OECD recommendation to review *water prices*, Hungary raised water prices dramatically over the review period (Table 3.4), at similar rates as the increases in gas and electricity prices. The water prices now recover the cost of operation, maintenance and accelerated depreciation of both water and waste water services. However, the prices do not provide for future investments, and there are large tariff differences across the country. Despite targeted government support to poor households[9] such rapid and significant price increases have raised affordability issues, which have generated non-payment. As a result, overall household water consumption has remained largely unchanged. Moreover, a cross-subsidy from industry to households (Table 3.5) encourages over-consumption by households.

A further increase in water prices will be required by 2010, pursuant to the EU WFD's provision for *full cost recovery*. To improve the efficiency of water and waste water services (and thereby limit the price increase), both the Drinking Water Quality Improvement Programme (for public water supply) and the NIP (for waste water treatment) foster creation of inter-municipal companies. Establishment of joint services (water/waste water) is foreseen by most EU-funded projects in Hungary. Despite these efforts, the government anticipates that a new support scheme will have to be devised to take social aspects into account (Chapter 7).

An "*environmental load charge*" was introduced in 2004 to supplement the system of fines (waste water fine, sewer fine) for discharges in excess of effluent standards

Table 3.4 **Water and waste water prices for households**, 2000-05

(HUF/m^3)

	2000	2003	2004	2005	2000-05[a] (% change)
Water	138	172	190	209	*151*
Waste water	110	145	174	195	*177*

a) Cumulated inflation was 39% over the period.
Source: HCSO.

Table 3.5 **Breakdown of revenues from water and waste water bills**, 2006

(HUF/m^3)

	Households	Industry
Water supply	204	250
Waste water collection and treatment	186	266
Water pollution (environmental load charge)	9	9
VAT (20%)	80	105
Total	479	630

Source: Hungarian Water Utility Association.

(Chapter 5), pursuant to the polluter-pays-principle. The load charge applies to discharges covered by the permit (i.e. discharges within effluent standards) and covers COD, phosphorus, nitrogen and heavy metals (rates vary between HUF 90 000 and HUF 220 000 per kg of pollutant). As is the case for fines, dischargers are eligible for a charge rebate (of 50%) if they implement a pollution reduction programme. The environmental load charge also applies to households (Table 3.5).

The intensity of water use (as a share of available resources) nationwide is low by OECD-Europe standards (Figure 3.2), but Hungary has experienced serious droughts in recent years. Investigations are being carried out on the drought phenomenon and a national drought strategy is being prepared. Meanwhile, despite the NEP I objective to "prevent water shortages and encourage economical water use by households and enterprises" and the NEP II objective to "stop the decrease of aquifer levels due to water abstraction on 90% of the territory", the rates of the *water abstraction charge* ("water resource fee") did not increase significantly over the review period. The rate is not set according to water scarcity.

4.3 Relying on economic instruments

The sequence of severe floods in recent years generated *flood control* expenditure from the central budget (Table 3.6). Flood protection will continue to benefit from EU support in the frame of the EEOP, for which EUR 607 million have been allocated over the period 2007-13 (12% of the total EEOP budget).

The Hungarian government currently has no legal obligation to *compensate flood victims* for related damage and loss. Estimates show that losses from flooding have reached up to 7-9% of GDP (Halcrow Water, 1999). However, as is the case in most OECD countries, it is common practice to provide some degree of compensation. The "Wesselényi Fund for the compensation of damage caused by water" was established in 2003 for that purpose. The fund is guaranteed by the state. On request, the EU Solidarity Fund may cover part of government expenditures, as was the case following the extraordinary 2006 flood events.

Hungarians' willingness to pay for flood *insurance* is low, as insurance companies in Hungary tend to cover only flood damages resulting from levee breaks on major rivers. The extent and ill-defined nature of exclusions (e.g. localised flooding as a result of leakage through a flood levee) greatly reduce the value of flood insurance and need to be revised if flood insurance is to work effectively.

Table 3.6 **Flood control expenditure**, 2000-06

(EUR million)

	2000[a]	2001[b]	2002[c]	2006[d]
Flood emergency operations	53	27	16	80[e]
Restoration of flood defence	21	20	11	55

a) Middle Tisz.
b) Upper Tisza.
c) Danube.
d) Danube, Middle and LowerTisza, Hármas-Körös and Maros Rivers.
e) Including EUR 15 million from the EU Solidarity Fund.
Source: MEW.

A key problem for the years to come is the *reduction in both the size and the authority of Hungary's conservation sector.* Since 2005, 167 positions have been eliminated in the national park directorates, and Hungary now has fewer than 200 rangers covering its entire territory. This led to the elimination of the Directorate of the Őrség National Park in 2007,[4] which left a single directorate responsible for managing both the Őrség and the Fertő-Hanság National Parks.[5] In addition, as of January 2005, following the establishment of a new authority for environment, nature and water management, the national park directorates have lost their independent authority over licensing of economic activities in areas under their jurisdiction. This responsibility has been transferred to the regional inspectorates responsible for nature conservation, environmental management and water management, but these are understaffed and lack the necessary knowledge and expertise in nature conservation (Chapter 5).

Launched in 2005, the initiative of co-operation between the Public Work Council of the Ministry of Social Affairs and Labour and the MEW to create seasonal work for unemployed people in national park directorates should be emphasised (Box 4.2). NGOs frequently participate in surveys (mostly birds) and public

Box 4.2 **Public work programme at the national park directorates**

To provide *seasonal work to unemployed people* at the national park directorates, a programme was carried out in 2005 and 2006 by the Public Work Council of the Ministry of Social Affairs and Labour with the co-operation of the MEW. The main jobs, lasting one to six months, included: nature management of grasslands and forests, eradication of invasive and allergen plants, cleaning of illegal waste disposal sites in protected areas, maintenance of ecotourism buildings, and maintenance of nature conservation demonstration paths.

The two ministries consider the programme to have been *very successful*, providing both nature conservation and social benefits, as long-unemployed rural residents were able to find meaningful seasonal work. In addition, the national park directorates were able to better fulfil their nature management tasks, and to strengthen their relationships with local governments.

Financial contributions to the programme included grants from the Public Work Council (HUF 293 million and HUF 100 million in 2005 and 2006) and co-financing of the national park directorates (HUF 31 million in both 2005 and 2006). The number of people employed was 556 in 2005 and 180 in 2006.

Source: MEW.

education; they have been provided with additional funding following establishment of the National Civil Fund in 2005 (Chapter 7). A significant decrease in the number of employees dealing with nature protection took place during the review period, notably in the national park directorates, and contributed to the increasing occurrence of illegal hunting and clear-cutting of forests in protected areas (Chapter 5).

4. Integration of Biodiversity into Agriculture, Forestry and Land Use Planning

4.1 Agriculture

Since arable land occupies almost half of Hungary's surface area, measures to integrate biodiversity concerns in agricultural practices are of major importance. In 2002, areas with significant natural value (*Environmentally Sensitive Areas, or ESAs*) were addressed as "zone targets" in the National Agri-Environmental Programme (NAEP) (Chapter 6). The programme's aim is to promote farming methods adapted to local conditions, landscape management, and conservation and improvement of the environmental and natural values of the area. Farmers have been positive about ESAs as participation in NAEP has made them eligible for agri-environmental payments:[6] in 2004-05 applications were submitted for a total area (about 120 000 ha) that was three times larger than in 2002 when the programme began. In some of these sites the population of the great bustard has doubled. There is 50% overlap of ESAs with the recently established Natura 2000 network (Chapter 6).

Payments for Natura 2000 were launched in 2007, based on the new European Agricultural Fund for Rural Development (EAFRD). These payments compensate the farmers who manage Natura 2000 sites for their extra costs and foregone income. Natura 2000 payments were implemented in grassland areas in 2007. These payments are the result of the collaboration between the Ministry of Agriculture and Rural Development, the MEW and NGOs during the negotiations on how to allocate EU funding for the period 2007-13. No firm decision has been reached yet on granting payments to forest and wetland owners.

The Hungarian administration disposes of another incentive for protecting scarce bird species (particularly the great bustard and the corncrake) in agricultural lands. Farmers who report the presence of breeding corncrakes or great bustards in their fields receive *financial compensation*.

In 2000 the OECD recommended that Hungary expand *efforts to educate* farmers about nature conservation. Since 2000, the MEW has taken part in the training of inspectors of the Ministry of Agriculture and Rural Development. Special nature

conservation lectures are held by the Environment Ministry for members of the farm advisory system. Farmers learn about nature conservation during the compulsory agri-environmental training programmes.

6. Expenditure and Economic Instruments

Hungary's *public expenditure* on nature conservation grew from HUF 3 400 million (EUR 14 million) in 1998 to HUF 5 700 million (EUR 22 million) in 2006, in line with inflation. EU accession has resulted in an increase in funding of activities related to the protection of nature and biodiversity, particularly agri-environmental programmes, Natura 2000 (since 2007), as well as, to a lesser extent, eco-tourism and transboundary co-operation.

Entrance fees are charged for some of the caves as well as for visiting some of the areas with special facilities (such as observation towers and transportation services). The national park directorates carry out some tourism activities to supplement their budget. Far more effort should be made to implement *economic instruments* (e.g. fees for some of the services provided by the national park directorates) that would increase incentives for and budget of nature protection and biodiversity management.

Environmentally harmful subsidies

There is a trend towards the phasing out of *direct subsidies* in the Hungarian economy. As of 1 January 2006, only one deep mine was receiving support for operating purposes. The grant was HUF 10 billion in 2006 and is to decrease to HUF 7 billion by 2010. The total subsidy should not exceed HUF 41 billion over the period 2006-10.

A study by an NGO estimated that *environmentally harmful subsidies* account for more than 10% of the Hungarian GDP (Kiss, 2004).[4] Income tax credits for commuting by passenger car and corporate tax credits for company-owned vehicles, both of which favour passenger car use, were targeted for elimination. But there was no follow up by the government.

Transition towards implementation of the polluter-pays and user-pays principles

However, Hungary is progressively implementing the polluter-pays and user-pays principles. The *price of water and waste water services* increased respectively by 50% and 70% during the period 1999-2004, and the government set up a support scheme to help the poor (Chapter 6). Water and waste water fees nearly cover the costs of operation, maintenance and accelerated depreciation (98% for water, 88% for waste water). These fees are expected to increase further with a view to complying

with the EU full cost recovery requirement by 2010 (Chapter 3). *Transfers from the central budget to municipalities* help them finance investments in waste water infrastructure and solid waste management. Such transfers covered 25% to 50% of the costs of sewage and sewerage treatment facilities, and 40% of the cost of regional municipal disposal sites over the review period.

In line with the polluter-pays principle, *subsidies for environmental investments* in the private sector decreased steadily, from HUF 30.1 billion in 2000 to HUF 2.2 billion in 2004, and were phased out in 2005 following termination of the Earmarked Scheme for Environment and Water (successor to the Central Environment Protection Fund).

Progress has also been made in recovering the costs of solid waste management. While in 1999 the actual costs of waste services were some 40% higher than the charges, in 2002 the *user charges on municipal waste collection and disposal* practically covered the operating cost of the facilities and sometimes, in case of modern landfills, the investment cost. In 2003 the user charges were further increased pursuant to a government regulation calling for coverage of costs of the services provided, including the costs associated with site management after closing the landfill. Subsidies continue to be granted to municipalities to help them address affordability issues for the poor.

Environmentally related taxes

Revenues from environmentally-related taxes represented *2.5% of GDP in 2005*, a share that remained relatively unchanged over the review period (Table 5.2). In 2003-05 most (84%) revenues were generated from taxes on energy (mainly fuel taxes), some (9%) from transport-related taxes, and the remaining (7%) from pollution and resource taxes, a slightly higher share than the EU-15 average (less than 5%). The share of transport in environmentally-related taxes increased over the review period (it was 5% in 1998-2000), while that of energy, pollution and resource decreased slightly (from 86% and 8% in 1998-2000, respectively). A *green tax reform* is being envisaged, but it has not yet been put on the governmental agenda. A green tax commission should be established to this effect.

An *energy tax* on sales and imports of *electricity and natural gas* was introduced in 2003 and became effective 1 January 2004. In 2006, the tax was HUF 186/MWh for electricity and HUF 56/GJ for natural gas. Residential consumers were exempted from this energy tax, for social reasons. The direct *gas subsidy* to households (some EUR 500 million per year) was criticised for drawing on the government budget and also artificially increasing gas demand. In October 2006, the subsidy was abolished and replaced by a direct income support scheme for poor households. This is commendable and goes towards addressing IEA recommendations (IEA, 2007). As a

Table 5.2 **Revenues from environmentally related taxes,** 1998-2005

(at current prices, million HUF)

	1998	1999	2000	2001	2002	2003	2004	2005
Product fees	18 723	20 675	24 407	26 404	20 054	25 459	20 009	19 616
Fuel	8 735	8 274	9 570	9 904	–	–	–	–
Tyres	1 445	1 918	2 425	3 110	4 340	5 918	1 607	–45
Refrigerators	520	815	1 267	1 372	2 190	4 173	3 773	1 888
Batteries	729	797	916	1 076	1 288	1 137	354	203
Packaging material	2 750	3 503	4 631	5 191	6 081	5 572	5 663	8 520
Lubrication oil	4 543	5 368	5 598	5 753	6 156	7 049	5 691	6 041
Diluters and solvents	–	–	–	–	–	1 300	2 134	–
Paper materials for advertising	–	–	–	–	–	310	789	1 669
Electronic devices	–	–	–	–	–	–	–	1 340
Other revenues	217 705	338 158	348 511	352 625	397 344	425 732	472 304	529 121
Vehicle tax	8 842	22 269	23 422	25 671	26 853	33 864	45 941	50 030
Revenue tax on fuel	204 000	310 700	319 000	320 215	362 500	383 800	399 100	450 900
Petrol	102 200	165 700	156 000	..	189 000	199 400	200 900	226 700
Gas oil	97 300	140 700	157 000	..	171 600	182 400	196 300	221 200
Other oil products	4 500	4 300	6 000	..	1 900	2 000	1 900	3 000
Water resource fee	4 863	5 189	6 089	6 740	7 991	8 068	9 859	12 304
Energy tax	–	–	–	–	–	–	10 922	12 732
Environmental load charge	–	–	–	–	–	–	6 482	3 155
Total	236 428	358 833	372 918	379 030	417 398	451 190	492 313	548 737
Share of total revenues in GDP (%)	*2.3*	*3.1*	*2.8*	*2.5*	*2.4*	*2.4*	*2.4*	*2.5*

Source: Ministry of Finance.

result, gas prices for households rose 70% on average, leading some households to return to coal for heating. It turns out that the budgetary cost of both policies is quite similar. The Hungarian government should now make sure that the conditions for granting exemptions to these energy taxes are fully justified or fulfilled so as not to undermine the incentive effects of such taxes.

Concerning *fuel taxation*, tax rates[5] decreased in real terms by about 3% for diesel and 21% for gasoline in 1998-2007 (Figure 5.2). Differentiation of tax rates increased over the review period and the taxation of diesel fuels is now somewhat lower than that of unleaded gasoline: in 2007, at about 40% for diesel fuel for non-commercial use and at around 55% for unleaded (95 RON) gasoline. Taxes on

road fuels are similar to those of neighbouring countries. Some 3% of revenues of the excise taxes on fuels and other energy products for transport are earmarked for environmental purposes (while 28.7% are earmarked for construction and maintenance of motorways). Rail and agricultural users are exempt from such taxes. Concerning *vehicle taxation*, motor vehicles are subject to an annual circulation tax which is differentiated according to vehicle age and power/weight, with older vehicles paying less (Table 5.3). Some 40% of the revenues are earmarked for maintenance and development of the public road network. Local and intercity public transport services are exempt from the tax. There is no governmental bonus system for the purchase of energy-efficient (petrol and diesel) vehicles.

Table 5.3 **Environmentally related taxes**, 2007

Tax	Rate	Exemptions
Excise taxes		
Transport fuels	88.01 HUF/litre (diesel) 106.54 HUF/litre (unleaded gasoline); 111.80 HUF/litre (leaded gasoline and paraffin) 24.50 HUF/litre (gas hydrocarbon); 47.90 HUF/litre (liquid hydrocarbon)	Diesel-powered ships and trains, diesel used in electricity generation and in agriculture Military aircraft and international air navigation
Heating fuels	85.00 HUF/litre (residual fuel oil)	
Motor vehicle taxes		
Annual circulation tax	300 HUF/kilowatt (0- to 3-year-old cars) 260 HUF/kilowatt (4- to 7-year-old cars) 200 HUF/kilowatt (8- to 11-year-old cars) 160 HUF/kilowatt (12- to 15-year-old cars) 120 HUF/kilowatt (16-year-old and older cars) 1 200 HUF/100kg/year (lorry, bus)	

Source: Ministry of Finance; IEA-OECD.

1.3 Pollution abatement and control expenditure and financing

In the last few years Hungary has devoted around 1% of its GDP to *pollution abatement and control (PAC) investment expenditure* from both the public and the private sectors, while a further 0.6% of GDP has been devoted to PAC operating expenditure. In 2006 PAC investment expenditure amounted to 0.85% of GDP (Table 5.5), bringing *total PAC expenditure to 1.7% of GDP*. Overall, 54% of PAC investment expenditure is on water protection, 17% is on waste management and 14% is on air management. Investment expenditure relates mainly to end-of-pipe technology (71%).

The public sector was the main source of financing of the *first National Environmental Programme* (*NEP-I*). The original target of 1.7% of GDP for PAC investment was not met, and PAC investment remained around 1.1% during the whole period. On the other hand, the amount spent on other environmental matters, nature conservation and water management research and development increased from approximately HUF 6 billion/year to HUF 13 billion in 2002. Total expenditure in relation to the implementation of the objectives of *NEP-II* was HUF 588.7 billion (HUF 204.3 in 2003, HUF 149.1 in 2004, and HUF 235.3 billion in 2005). As the level of financing was lagging behind schedule, NEP-II benefited from resources from the Cohesion Fund and from Structural Funds (as part of the National Development Plan and the National Regional Development Plan). Within the context of the EU Structural Funds, an Operative Programme for Environment and Infrastructure was developed for 2004-06 with an allocation of HUF 111.2 billion (HUF 42.5 billion for environmental protection, HUF 64.2 billion for transport infrastructure, HUF 4.4 billion for technical assistance).

The *structure of financing* has changed radically since 2004. The size of *EU support* and domestic co-financing increased more than twofold, and in parallel, support from the state budget decreased. For the next EU programming period (2007-13) a new and considerable operative programme has been prepared: the Environment and Energy Operative Programme (EEOP) with an allocation of

Table 5.5 **Pollution abatement and control expenditure by sector,** 2006

(HUF billion current)

	Water protection[c]	Waste management	Air protection	Other[d]	Total
Total PAC expenditure	173.6	128.9	35.9	59.0	397.3
Share in total (%)	*43.7*	*32.4*	*9.0*	*14.9*	*100.0*
Share in GDP (%)[a]	*0.73*	*0.54*	*0.15*	*0.25*	*1.67*
of which:					
Public sector	74.8	15.7	6.3	25.4	122.1
Share in GDP (%)[a]	*0.31*	*0.07*	0.03	0.11	*0.51*
of which:					
Investment	73.4	13.6	6.1	21.0	114.2
Current expenditure	1.4	2.0	0.2	4.4	8.0
Business sector[b]	98.8	113.2	29.6	33.6	275.1
Share in GDP (%)[a]	*0.42*	*0.48*	*0.12*	*0.14*	*1.16*
of which:					
Investment	34.8	21.3	22.2	9.7	88.1
Current expenditure	63.9	91.8	7.4	23.9	187.1
of which:					
Agriculture, hunting, fishing, forestry	2.3	3.8	1.9	1.2	9.1
Mining and quarrying	0.0	0.1	0.2	0.1	0.3
Manufacturing industry	24.2	7.4	16.2	8.7	56.4
Electricity, gas and water	50.1	3.2	4.9	3.6	61.8
Other[b]	22.2	98.8	6.5	20.1	147.5

a) 1% GDP = HUF 237.6 billion in 2006.
b) Includes specialised producers of environmental services.
c) Includes waste water treatment.
d) Includes noise and protection of landscape and nature.
Source: OECD; HCSO.

EUR 4.9 billion for the period. This EEOP programme represents about 17% of the total of EU funds allocated to Hungary for the period 2007-13, which themselves represent an annual allocation of roughly 4.8% of the GDP of Hungary.[10] The largest sums have been allocated to waste water treatment (30%), the improvement of drinking water quality (15%) and waste management (9%).

It is therefore important for Hungary to ensure a high *absorption capacity for EU Funds*. Co-financing is likely to be a problem with small municipalities that could find it difficult to raise the needed matching funds. There are also concerns that applicants may lack the expertise to submit projects that pass the required criteria.

With an increase in EU funding concomitant with a downsizing of government staff, Hungary will need to ensure that the administration has sufficient *technical and economic expertise* to apply environmental impact assessment and cost-benefit analysis when setting priorities among projects submitted for EU funding, and that cost-effectiveness has a central place in decision criteria.

2.4 Economic instruments

Since the last OECD review, *Hungary has increased its use of economic instruments* and made progress in implementing the polluter-pays principle. Hungarian businesses participate in the EU emissions trading scheme for carbon dioxide (Chapters 2 and 8).

Charges for use and abstraction of water (Chapter 3), for waste collection and disposal, for mining and changes in use of agricultural land, and product charges were supplemented in 2004 by a new *environmental load charge on air, water and soil pollution*. In the first year of implementation, about HUF 6.5 billion was collected (Table 5.2). The amount due has been gradually increased, reaching 100% of the charge in 2008 for air and water and in 2009 for soil. Polluters undertaking waste recovery operations are entitled to a reduction of air and water duties in proportion to the volume of recovered waste. This is a commendable step forward since Hungary previously had no pollution charge. Nonetheless, the relatively low rates of the charge, and the exemptions and rebates offered, may hinder its effectiveness.

Concerning *air pollution*, the environmental load charge is levied on SO_2, NO_2 and non-toxic particulate emissions at a unit rate of HUF/kg 50, 120 and 30 of emitted substance, respectively. The charge is paid by the operators of installations subject to a permit. A 50% reduced charge is granted if the operator undertakes to install abatement equipment. The charge does not apply to households, district heating providers and transport.

Concerning *water pollution*, the environmental load charge applies to discharges of chemical oxygen demand (COD), phosphorus, nitrogen and heavy metals. The fee varies (HUF/kg 90-220 000 of discharged pollutant), and is lowest for COD and highest for mercury. It takes into account the vulnerability of the receiving water bodies and the sludge disposal treatment used. The charge does not apply if waste water recycling is in place, and the discharger can receive a 50% reduction if pollution reduction measures are implemented. The duty does not replace the excess discharges fines and also applies to households.

Concerning *soil pollution*, the charge is levied on disposal of waste water by means other than the local public sewerage system. The unit rate is HUF/m^3 120 and

is applied to the volume of water supply,[17] taking into account the quality of groundwater bodies. The charge aims at encouraging households to use available public infrastructures. This scheme might have contributed to the increase of the population connected to public sewerage.

The average annual *waste charge* for Hungarian households was over HUF 12 080 in 2005. Municipal waste treatment charges increased dramatically during the review period (22% in real value from 2003 to 2005), generating affordability problems. Nonetheless, they cover almost exclusively operational costs and not investment needs (CEC, 2006c).

Products charges (Table 5.10) such as packaging materials, tyres, refrigerators and refrigerants and batteries were introduced in Hungary by the 1995 Act on

Table 5.10 **Product charges**[a]

	1999	2006
Lubricants	69.90 HUF/kg (lubricating oil)	97 HUF/kg (lubricating oil)
Fuels	2.3-2.5 HUF/litre (gasoline and diesel)	n.a.
Packaging materials	2-10 HUF/kg	6-44 HUF/kg 3-25 HUF/each (plastic bags) 10-60 HUF/each (drink packaging)
Tyres	35 HUF/kg (new tyres); 140 HUF/kg (imported used tyres)	110 HUF/kg
Refrigerators and coolants	Refrigerators: 812.5-3 775 HUF/unit Coolants: 147 HUF/kg (HCFC/HCFC mix); 590 HUF/kg (imported, regenerated or regenerable HCFC/HCFC mix); 1 748 HUF/kg (imported, regenerated CFC/CFC mix)	Refrigerators: 2 443-11 344 HUF/unit Coolants: 907 HUF/kg
Batteries	45-63 HUF/kg	112-156 HUF/kg
Paper materials for advertising	n.a.	26 HUF/kg
Electronic devices	n.a.	83-100 HUF/kg
Deposit refund system for packaging	20-30 HUF/glass bottle 28-65 HUF/plastic bottle	26-60 HUF/item

n.a. = not applicable.
a) At current prices.
Source: MEW, OECD.

Environmental Product Charges. Positive waste management results have been registered from the use of product charges and from the distribution of part of related revenues to the collection of used batteries, old refrigerators, paper packaging materials and used tyres. In 2004, the product charge regime underwent a major reform with the extension of the scheme to electric appliances and electronic equipment and with changes in the payment conditions. Concerning beverage containers and plastic bags, the charge is no longer based on the weight of the product but on the number of items placed on the market, with a view to reducing waste volume. Tax exemptions can be claimed if a certain percentage of the product placed on the market is reusable (e.g. 67% for beer packaging; 20% for wine packaging; 7% for mineral water bottles; 11% for soft drink packaging) and if a certain percentage of the waste from that product is collected (e.g. 60% in the case of so-called commercial packaging). Preliminary results of the 2004 reform of the product charge system show that recycling of packaging waste increased to reach 57% in 2005, as a consequence of the co-operation with industry. However, the scope of Hungary's product charge system has been criticised by NGOs who have found it inadequate and too limited compared to other countries. They argue that other waste materials should also be made subject to these charges (e.g. building scraps or demolition materials) (Kiss, 2004).

In 2004, the *voluntary deposit-refund system* was revised. The scheme is implemented by manufacturers and distributors, with average deposit charges between HUF 26 and HUF 60. As this voluntary scheme has failed to deliver a significant change in behaviour, plans are to make deposit charges obligatory for some items.

The possibility of including *environmental requirements in public procurement procedures* was introduced in 2003. In 2006, Budapest was the first local authority to approve a green public procurement regulation, on the basis of a handbook issued by the Centre for Environmental Studies (an independent non-profit organisation) (Chapter 7).

2. Agricultural and Rural Development Policy

2.1 Key plans and programmes

Prior to EU accession

Between 1999 and 2004, Hungary was eligible for *three EU financial instruments* to help prepare for accession, along with nine other countries that joined the European Union on 1 May 2004. These were: the Instrument for Structural Policies for Pre-Accession (ISPA), the forerunner of the Cohesion Fund (focusing on transport and the environment); the Special Accession Programme for Agriculture and Rural Development (SAPARD), aiming at adjustment of the agricultural sector and rural areas; and the "Pologne, Hongrie Assistance à la reconstruction économique" (PHARE) programme, focusing on economic and social cohesion, including cross-border co-operation. The European Union was also providing assistance through loans from the European Investment Bank, technical assistance and improved administrative co-operation (twinning).

Launched in 2000 and covering the period 2000-06, SAPARD implements the Council Regulation (EC) No. 1268/1999 on Community support for pre-accession measures for agriculture and rural development in the applicant countries of Central and Eastern Europe in the pre-accession period. Environmental protection is one of SAPARD's three stated key objectives, along with increasing the competitiveness of the agricultural sector and enhancing rural development. However, only EUR 15 million was allocated to environmental protection over seven years, of which 75% was co-financed by the EU and 25% from the national budget (Ministry of

Agriculture and Rural Development, 2000). This is only 2.15% of the total budget of SAPARD and 4.27% of the EU support to SAPARD. Agri-environmental measures under SAPARD relate to organic farming (27% of the budget), pilot farms (27%), extensive grasslands (22%), orchards and vineyards (19%) and wetlands (5%). Payments are granted for practices that go beyond good agricultural practice, with a view to compensating for income foregone and extra cost incurred, while adding a 20% incentive, pursuant to Council Regulation (EC) No. 1257/1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF). Support is in the form of acreage payments, with rates varying from EUR 28/ha (extensive grasslands) to EUR 166/ha (orchards and vineyards), with organic farming being eligible for EUR 75/ha and wetlands for EUR 82/ha. Thirty pilot/demonstration farms were established in 15 ESAs across the country, entitling them to apply for a maximum of EUR 31 300 per farm. The SAPARD ceased to exist with EU accession (i.e. as of May 2004).[12]

The *National Agri-Environmental Programme* (NAEP) was approved in 1999 as a sub-programme of the NEP I (1997-2002), and started being implemented only in 2002. It was designed to introduce agri-environmental measures in ESAs, accounting for 500 000 hectares spread across the country. The NAEP promotes environmentally friendly practices through area-based support (agri-environment management, integrated farming, organic farming, grassland management, wetlands protection). It also supports creation of agri-environmental model farms.

Some EUR 9 million was allocated to the launching of NAEP in 2002. In 2003, the support requested by applicants was EUR 23 million, of which NAEP could only contribute EUR 4 million. In 2003 NAEP beneficiaries contracted in 2002 were given the choice of applying for the NRDP agri-environmental schemes by the end of 2003, or staying in NAEP until the end of the five-year contracting period. Most (over 90%) of eligible farmers opted to switch to the new co-financed NRDP scheme.

Since EU accession

Hungary as a whole is eligible under Objective 1 of the *EU Structural Funds*, which aims at "supporting development in the less prosperous regions". The entire territory is also eligible for support from the *EU Cohesion Fund* (EUR 1.13 billion for 2002-04). The first EU programming period following accession was very short (three years), covering the years 2004 to 2006.[13] The second EU programming period is longer (seven years), covering the years 2007 to 2013.

Hungary has no stand-alone *sustainable agriculture strategy*. Agricultural policy objectives are set in the National Development Plan and are implemented through specific programmes (Table 6.1). The *National Development Plan* 2004-06

Table 6.1 **Agricultural and rural development programmes**, allocated funding, 2004-06

(EUR million)

	2004		2005		2006	
	Total	EU (%)[a]	Total	EU (%)[a]	Total	EU (%)[a]
Total	620	*8*	1 650	*19*	1 622	*23*
Sectoral development	361		530		475	
SAPS[b,c]	40		597		357	
NRDP[d]	7	*83*	200	*87*	250	*79*
Market measures[c]	0		27		227	
ARDOP[e]	0		75	*71*	196	*74*
SAPARD[f]	59	*76*	120	*77*	35	*83*
National Horse Programme	109		62		30	
State aids	20		17		17	
Current expenditure and income support	0		7		17	
Compensation for the loss of animals	8		5		7	
Soil conservation	4		4		4	
Forestry activities	6		2		3	
Forest management	0		0		2	
Fisheries management	3		2		2	
National Beekeeping Programme	0		1	*0*	2	*0*
Livestock breeding	1		1		1	
Game management	0		0		0.04	
Farmers' associations	1		0		0	

a) Share of the total budget that is co-financed by EU.
b) Single Area Payment Scheme.
c) Financed directly by Treasury.
d) National Rural Development Plan.
e) Agricultural and Rural Development Operational Programme.
f) Special Accession Programme for Agriculture and Rural Development.
Source: MARD.

(NDP) sets three key objectives for Hungary's agricultural and rural development policy, namely:

- to improve the competitiveness of agricultural production and food processing;
- environmentally friendly development of agriculture, rationalisation of land use; and
- to promote the realignment (i.e. decrease disadvantages) of rural areas.

The *Agricultural and Rural Development Operational Programme* (ARDOP) primarily serves the achievement of the first and third objectives, while the second objective is included in the NRDP containing the accompanying measures financed by the EAGGF Guarantee Section. The NDP provides for EUR 1.2 billion[14] to be spent on a "more competitive agricultural sector", accounting for 31% of NDP's total budget over the three-year period (Republic of Hungary, 2003). Two-thirds of this amount (around EUR 800 million) should originate from private funding, a quarter (EUR 308 million) from EU funding and the rest (EUR 102 million) from the central budget. Thus 75% of public funding comes from the EU (essentially EAGGF). The following measures of the ARDOP will be entirely financed from the national budget: improving basic services for the rural economy and population; diversification of rural economic activities; renovation and development of villages and protection and conservation of the rural heritage.

The *NRDP* 2004-06 responds to the three key objectives of the NDP, with emphasis on the second. The NRDP provides for EUR 754 million[15] to be spent over the three-year period, of which 80% comes from the EU (Ministry of Agriculture and Rural Development, 2006). The aid consists of compensation for income forgone and costs incurred. Most (60%) of NRDP relates to agri-environmental payments (Table 6.2). The plan is applicable to the entire territory of Hungary, with identical terms and conditions except in ESAs and Less Favoured Areas.

Under NRDP, *agri-environmental payments* (AEP) are contract-based incentives for the application of environment-friendly methods for a period of at least 5 years and normally not longer than 10 years (20 years in the case of land set-aside). AEP are provided to encourage farming methods "adapted to the local environment/ agricultural conditions" (entry level scheme); integrated pest management; organic farming; and low-input farming to protect biodiversity in ESAs. Support is also provided to protect the environment, maintain the countryside and preserve the tourist potential of "*Less Favoured Areas*" (880 000 hectares or 14% of the agricultural area in use), that is, land of poor productivity whose potential cannot be increased except at excessive cost and which is mainly suitable for extensive livestock farming. The NRDP helps *meet standards* related to manure storage in areas vulnerable to nitrates, animal welfare and animal hygiene. Here eligibility of payments is on a first-come, first-served basis. *Afforestation of agricultural land* aims at increasing forest cover (and the associated environmental services) and preserving the natural and landscape heritage (e.g. by establishing close-to-nature forests and developing rural tourism) while improving timber/wood energy supply (through sustainable forest management). The NRDP financed 9 000 ha in 2004, 10 000 ha in 2005 and 11 000 ha in 2006. Support is granted for the plantation and its maintenance over a period of 5 years; it also includes a premium for loss of income over a period of 10 years (coniferous) up to 20 years (broadleaved trees).

Table 6.2 **The National Rural Development Plan**, planned expenditure, 2004-06

(EUR million)

	Total	EU contribution	
		(EUR million)	(%)[a]
Total budget	754	602	*80*
Safeguarding and improving the environment			
Agri-environmental payments	451	361	*80*
Meeting standards (e.g. nitrates, animal welfare)	25	20	*80*
Converting production to better match ecological and market conditions			
Afforestation	80	64	*80*
Improving economic viability of producers			
Semi-subsistence farms	3.5	2.8	*80*
Producer groups	28	23	*80*
Complements to direct payments[b]	94	75	*80*
Maintaining agriculture in all rural areas			
Payments to Less Favoured Areas	15	12	*80*
Other			
Technical assistance	38	30	*80*
Remaining pre-accession funds[c]	20	15	*75*

a) Share of the total budget that is co-financed by EU.
b) Top-up payments.
c) Council Regulation (EC) No. 1268/1999 on Community support for pre-accession measures for agriculture.
Source: MARD.

An annual lump sum of 1 000 EUR per farm (over five years) is deemed to help *semi-subsistence farms* (with arable land between 5 and 10 hectares, or with one to five cows) move towards market orientation of their production. There are 43 000 semi-subsistence farms in Hungary, accounting for 20% of individual farm enterprises. The NRDP seeks coverage of 13 000 such farms. The NRDP also supports establishment of *producer groups or associations* with a view to creating scale economies and thereby improving the efficiency and competitiveness of individual farmers. The NRDP provides for *complements to direct payments* granted under the Single Area Payment Scheme (SAPS).

Pursuant to Council Regulation 1698/2005/EC on support for rural development by the (newly created) European Agricultural Fund for Rural Development (EAFRD), Hungary has released a *National Rural Development Strategy* (NRDSP) for 2007-13, to create a framework for "developing agriculture and confirming the values and

economy of the rural areas". The six NRDP schemes (agri-environment, Less Favoured Areas, meeting standards, afforestation, semi-subsistence farms, producer groups) have been included in the new Strategy, which was dotted with a budget of EUR 5.2 billion over the seven-year period, i.e. around EUR 700 to 800 million a year (to be compared with the EUR 400 million a year of ARDOP plus NRDP in 2004-06). The NRDSP puts emphasis on improving competitiveness and promoting structural adjustment (45-55% of the budget), innovation and market orientation (30-37%), environmental protection (10-14%), rural development (5-6%) and developing local communities (3-4%) (Nagy, 2006). Planned budgetary expenditure on agri-environmental measures for the period 2007-13 was thus decreased compared to previous years (EUR 70 to 100 million a year under NRDSP compared to around EUR 150 million a year in 2005 and 2006).

2.2 Policy measures

Since EU accession in 2004, EU support has significantly increased[16] and now accounts for more than 30% of total budgetary expenditure on agriculture (Table 6.3). The main emphasis of the 2003 Common Agricultural Policy (CAP) reform is the introduction of a single payment, which does not require recipients to produce. In Hungary this translated into adoption, immediately after accession, of the *Single Area Payment Scheme* (SAPS) under which each eligible hectare receives the same payment rate, called Single Payment Scheme (SPS) payment.[17] SPS payment rates were set in 2004 at 25% of the EU level and are being progressively increased to reach 100% in 2013. Complementary national direct payments ("top-up payments") are paid from national funds in the form of area payments to crops and headage payments to beef and sheep, as well as payments per tonne of milk. Single payments account for around half of total payments to producers (54% in 2005, 47% in 2006), but the share of top-up payments is increasing significantly (16% in 2005, 36% in 2006). The SAPS will apply until 2010 when payments will be based on historical entitlements (at the farm or regional level), as is already the case in 15 countries.

Since EU accession, *policy emphasis has shifted from payments based on input use to payments requiring production* (including single payments and their top-up payments), though without reducing support to the former. Even though payments requiring production include SPS payments with a uniform payment rate regardless of the commodity produced, top-up payments have the potential to distort commodity production and thereby to make farmers decide based on production rather than environmental criteria (e.g. soil quality, water availability, flood-prone area, ecosystem conservation). Moreover, reliance on top-up payments to support acreage and headage payments reduces the funds available for other payments that may have less potential to distort commodity production.

Table 6.3 **Actual budgetary transfers to Hungarian farmers,**[a] 2004-06

(EUR million)

	2004		2005		2006	
	Total	EU (%)[b]	Total	EU (%)[b]	Total	EU (%)[b]
Payments to producers[c]	412	*5*	653	*32*	948	*31*
Payments based on input use	396	*5*	383	*22*	399	*32*
of which:						
Breeding improvement	10		16		40	
Soil improvement (liming)	3		1		2	
Insurance subsidies	10		0		0	
Fuel tax rebates	75		82		78	
Purchase of variable inputs	76		95		67	
Assistance to agricultural employment	17		0		3	
Investments in agricultural holdings	27	*75*	104	*75*	136	*75*
Setting-up of young farmers	2		1	*12*	4	*67*
Other capital grants	83		32		6	
Meeting standards (e.g. nitrates, animal welfare)	0		1	*80*	4	*80*
Vineyard restructuring	32		23		19	
Irrigation	4		3	*8*	0	
Drainage	0		0.3	*9*	0	
Natural disaster prevention and control	1		0		7	
Pest and disease control	51		16		7	*12*
Technical assistance	2	*8*	8	*61*	27	*77*
Payments requiring production	15		258	*46*	503	*26*
of which:						
Headage payments	0		3		61	
Acreage payments	1		101		279	
Disaster payments	8		5		0	
Agri-environmental payments	6		143	*80*	161	*80*
Payments to Less Favoured Areas	0		6	*80*	2	*80*
Payments based on non-commodity criteria	0		12	*80*	46	*67*
of which:						
Afforestation	0		12	*80*	26	*80*
Permanent abandonment of areas under vines	0		0		20	*50*
General Services	232	*17*	417	*17*	274	*33*
Research	19		26		14	
Agricultural schools	18		21	*1*	16	*5*
Inspection services	92		251		103	
Investments in infrastructure	34	*36*	3		37	*65*
Development of rural areas	16	*73*	48	*77*	30	*74*
Marketing and promotion	47	*31*	53	*61*	63	*67*
Miscellaneous	7		17		11	
Total	644	*9*	1 070	*26*	1 222	*31*

a) Excluding market price support through border protection as part of EU Common Agricultural Policy.
b) Share of the total budget that is co-financed by EU (through ARDOP and NRDP).
c) Including Single Payment Scheme (SPS) payments and their "top-up payments" from national funds.
Source: OECD PSE database.

More specifically, the amount of payments based on input use has remained relatively unchanged but their share of total payments to producers has significantly decreased (from 96% in 2004 to 42% in 2006). Payments based on input use consist mainly of subsidies to variable input use (including fuel tax rebates) and to fixed capital formation. The amount of payments requiring production has dramatically increased, both in absolute terms and relative to total payments (rising from 4% in 2004 to 53% in 2006). They consist mainly of acreage payments and, to a lesser extent, agri-environmental payments. Conversion of farmland to forest land (afforestation) is receiving increasing attention, though it remains marginal in budget (3% of total payments in 2006) and limited in scope (areas are selected because of poor agricultural productivity, with the principal aim of controlling soil erosion). In 2006, most budgetary transfers to Hungarian farmers related to acreage payments (23%), agri-environmental payments (13%) and investments in agricultural holdings (11%) (Table 6.3).

Payments based on non-commodity criteria (not requiring production) have remained marginal. The situation should change from 2010 with the expected shift from single payments (and their top-up payments) to *payments based on historical entitlements* (in the context of the CAP reform). Payments based on historical entitlements are independent of production and, as such, they are clearly less distorting (in terms of commodity production) than acreage and headage payments. As income support payments, they are paid annually, based on the sums received during a reference period and the number of hectares which conferred entitlement to those payments. Farmers are free to decide what they want to produce.

From 2009 all direct payments in Hungary will be subject to farmers meeting statutory management requirements set-up in accordance with 19 EU directives and regulations relating to environmental protection, animal and plant health, and animal welfare (*cross compliance*). Hungarian farmers are so far only committed to maintain their land in good agricultural and environmental condition (GAEC), according to national standards. However, cross compliance cannot be expected to achieve as much, in terms of its two policy objectives (farm income support and environmental outcomes), as could be achieved by two policies targeted at each of the objectives separately (OECD, 2007b). First, gradual reductions in direct payment support over time, as part of policy reform,[18] with constant or increasing compliance costs will lead to a point where farmers begin to exit the cross compliance system. Second, the environmental objective is not necessarily being served at no cost to the income support objective unless the environmental conditions are very modest. Third, compliance costs (determined by site-specific agri-ecological considerations) reduce the net income benefit of income support in an uneven way, thereby raising equity issues.

Further to payments to individual producers, policy support is provided to *general services provided to agriculture as a sector*. In 2006 most support went to inspection (40%); marketing and promotion (23%), including through the grouping of producers; infrastructure development (13%); and development of rural areas (11%), including helping semi-subsistence farms and the EU LEADER programme. Some support was also provided to research and training. All in all, budgetary expenditure on general services has not increased substantially since accession, despite the increasing availability of EU funds, thereby missing the opportunity to better help the farming sector build capacity in environmental management, regardless of impacts on farm production.

Overall, Hungary was able to *spend less than 60% of the EU funds for agriculture for which it was eligible* during the period 2004-06, i.e. EUR 522 million out of EUR 910 million (EUR 602 million from NRDP plus EUR 308 million from ARDOP).[19] This mainly reflects fiscal austerity and difficulties in co-financing from the national budget.

4. Environment and Employment

The issue of environmental and employment policy forms part of Hungary's National Sustainable Development Strategy. A recent survey conducted by the Hungarian Central Statistical Office shows a *growing number of employees in the environmental industry*: between 2002 and 2005, the total number grew by approximately 16% (Table 7.3).

Green public procurement is at an early stage of development in Hungary. To promote it, an inter-ministerial working group has been set up to establish an action

Table 7.3 **Number of employees in environmental protection**

	2002	2003	2004	2005
Agriculture, hunting and forestry	64	50	53	48
Manufacturing	2 247	2 052	2 480	2 263
Electricity, gas and water supply	4 379	4 557	4 657	4 525
Construction	670	689	520	571
Wholesale and retail trade[a]	576	594	598	646
Transport, storage and communication	98	135	104	81
Real estate, renting and business activities	605	609	634	657
Public administration, defence; social security	149	251	556	407
Education	17	8	128	342
Other community, social and personal services	7 526	6 721	8 105	8 494
Other	28	97	222	916
Total	16 359	15 763	18 056	18 950

a) Includes repair of motor vehicles, motorcycles and personal and household goods.
Source: Hungarian Central Statistical Office.

plan in line with the EC recommendations. The plan will determine targets and deadlines for five product groups and services: IT and office equipment, stationary, cleaning services, construction and vehicles. In July 2006 the General Assembly of Budapest approved a "green public procurement regulation", the first local authority green procurement regulation in Hungary. It is based on the Green Procurement Manual for Local Authorities 2002 by the Centre for Environmental Studies, an environmental NGO. The Procurement Department of Budapest Municipality expects at least 40% of the calls for tender – the share recommended by the EU – to include environmental criteria. To achieve this, environmental aspects must as a rule be incorporated in all procurement deals, except for cases when the urgency of the project or the excessive (more than 20% higher) price of environmentally friendly alternatives make it impossible. In all other cases, a waiver must be obtained from the Environmental Department.

4. Trade and Environment

Hungary has been *actively involved* in the relevant international negotiations, including those of the World Trade Organisation (WTO), and has very *strict criminal penalties* for environmental crime. The scope and content of criminal offences underwent a comprehensive revision in 2004-05. For illegal transport of hazardous waste or illegal trafficking of wildlife, a maximum penalty of five years of imprisonment could be

imposed. To enhance the efficiency of criminal investigation, special teams dedicated to environmental crimes have been established in the criminal prosecution service and in the police. Their work is supplemented by the so-called "green commando", an ad hoc co-operation among environmental authorities, the customs guard and the police. However, the *enforcement capacities* are still not sufficient.

4.1 Ozone-depleting substances

Hungary has ratified the Montreal Protocol and all its amendments. Having received GEF support, Hungary has made good progress in phasing out ozone-depleting substances (ODS). As of 1996 Hungary used only regenerated chlorofluorocarbons (*CFCs),* and their consumption ceased completely in 2000. Since 1996 there has also been no use of *carbon tetrachloride* or *methylchloroform*. Hungary still uses hydrochlorofluorocarbons (*HCFCs),* but the consumption rapidly declined between 1998 and 2004, falling almost 90%, from 1 350 tonnes to 147 tonnes annually. The consumption of *methyl bromide* dropped in the same period by 88%, from 53 to 6.5 tonnes per year. Methyl bromide was used for soil fumigation in 2004, but this was the last year that this use was permitted. Since 2005 it has been phased out, although from time to time quarantine and pre-shipment uses are permitted. Hungary now focuses on the controlled substances encapsulated in different products (e.g. foams, refrigerators, fire extinguishers). As an EU member state, Hungary is obliged to meet more ambitious targets than those set by the Montreal Protocol and its amendments. Customs officers undergo training in enforcement of ODS trade regulations. No cases of illegal traffic or trade were detected in the last ten years, but data on the numbers of checks are not available.

4.2 Hazardous waste

Hungary is a party to the Basel Convention, and the country's Act on Waste Management 2000 reflects OECD requirements. The *National Waste Management Plan 2003-08* seeks to minimise the generation of waste, including hazardous waste. The plan's quantitative targets include: to reduce by 20% the quantity of hazardous waste for final disposal and to increase by at least 30% by 2008 the recovery and reuse of hazardous waste. The total amount of hazardous waste generated declined by almost 22% between 2003 and 2005 from 1.18 million tonnes to 0.92 million tonnes.[8] However, the *export of hazardous waste* more than *doubled* in the same period from 31 458 tonnes to 76 044 tonnes. In 2005, the main exported hazardous wastes were lead and lead compounds, acidic solutions or acid in solid form. They were exported to Austria, the Czech Republic, Germany, Italy and Slovenia. In the same year, 17 300 tonnes of hazardous waste were imported, mainly from Germany. One case of

illegal import of hazardous waste into Hungary was discovered during the review period. Data on checks on waste shipments were not available.

4.3 Endangered species

Hungary ratified the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) in 2001 and adopted its implementing decree in 2002. The illegal trade of articles has been largely influenced by Hungary's accession to the EU. Although there was no significant change in the total volume of illegal wildlife trade between 2000 and 2006, the pattern of trade has only slightly changed. Smuggling of *live tortoises* (mainly from Turkey, Macedonia, Serbia and Romania) continues. The intended destinations of these shipments are mainly the EU member states. Several hundred or sometimes more than a thousand animals in a single shipment are being seized each year. Illegal killing for food purposes and trade of *songbirds* protected by domestic legislation continue year after year. This trade is well organised and the destination of these shipments is southern Europe, where the specimens are sold for exclusive restaurants. Illegal imports in *caviar* have been discovered on several occasions recently, a relatively new field in CITES enforcement. Hungary is considered to be an important transit route for smuggled caviar to other EU member states. The number of illegal imports of *traditional Asian medicinal products* has strongly increased in recent years. The products are usually smuggled in postal consignments from China.

5. Official Development Assistance and the Environment

5.1 Hungary as donor

Before the political transformation, Hungary provided considerable aid to developing countries, mainly for education and training, *close to the UN goal of 0.7% of GNI*. A new phase in the Hungarian international development policy started with the government decision 2319/1999 calling for formulation of the concept of official development assistance (ODA).

Although Hungary is not a member of the OECD Development Assistance Committee (DAC), the country implements an international development co-operation policy that conforms to OECD and EU principles and practices, and has agreed to fulfil the commitments and meet the targets set in the UN Millennium Declaration and the Millennium Development Goals. Hungary's strategic partners are Serbia, Montenegro, Bosnia-Herzegovina and Viet Nam. Other partner countries include Macedonia, Moldova, Mongolia, Kyrgyzstan, Ukraine and the Palestinian Authority. Special

attention is devoted to the following "least developed" countries: Ethiopia, Yemen, Cambodia and Laos. The fourth group of partners consists of Afghanistan and Iraq.

Hungarian environment-related development assistance primarily concentrates on areas where the country has a comparative advantage, such as: contributing to water management and water resources development; planning and providing technical advice (reservoirs and barrages, water purification plants, planning of dikes, inland drainage, exploration and assessment of water stocks, etc.); and providing technical advice on environmental protection.

Hungary considers a ratio of 60% multilateral aid and 40% bilateral aid to be currently right. Whereas in 2003 the ODA/GNI rate was 0.03%, it reached 0.11% in 2006. The share of ODA devoted to environmental projects is not available.