Thematic report on protected areas or areas where special measures need to be taken to conserve biological diversity

Please provide the following details on the origin of this report.

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Date of submission:	3 June 2003

Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report.

Report has been prepared by the Focal Point based on existing legislation, programmes and documents on Protected Areas (PAs) and on interviews with key persons of Nature Conservation and stakeholders in management of PAs made by Ms. H. Homoki and Mr. D. Nagy.

Further information on certain points of the Questionnaire is given with reference to the point in the box for "Further comments".

Attachments

1.Third National Report on the implementation of the Ramsar Convention
2. Hungarian Act on Nature Conservation
3. National Environment Program

Protected areas or areas where special measures need to be taken to conserve biological diversity

System of protected areas

1. What is the relative priority afforded to development and implementation of a national system of protected areas in the context of other obligations arising from the Convention and COP Decisions?					
a) High	x	b) Medium		c) Low	

2. Is there a systematic planning process for development and implementation of a national system of protected areas?	
a) no	
b) in early stages of development	
c) in advanced stages of development	
d) yes, please provide copies of relevant documents describing the process	x
3. Is there an assessment of the extent to which the existing network of protected areas covers all areas that are identified as being important for the conservation of biological diversity?	
a) no	
b) an assessment is being planned for	
c) an assessment is being undertaken	
d) yes, please provide copies of the assessments made	x

Regulatory framework

4. Is there a policy framework and/or enabling legislation in place for the establishment and management of protected areas?	
a) no	
b) in early stages of development	
c) in advanced stages of development	
d) yes, please provide copies of relevant documents	x
5. Have guidelines, criteria and targets been adopted to support selection, establishment and management of protected areas?	
a) no	
b) in early stages of development	
c) in advanced stages of development	
d) yes, please provide copies of guidelines, criteria and targets	x

6. Does the management of protected areas involve the use of incentive measures, for instance, of entrance fees for park visitors, or of benefit-sharing arrangements with adjacent communities and other relevant stakeholders?	
a) no	
b) yes, incentive measures implemented for some protected areas (please provide some examples)	
c) yes, incentive measures implemented for all protected areas (please provide some examples)	x

Management approach

7. Have the principal threats to protected areas and the biodiversity that they contain been assessed, so that programmes can be put in place to deal with the threats, their effects and to influence the key drivers?	
a) no	
b) an assessment is being planned for	
c) an assessment is in process	x
d) yes, an assessment has been completed	
e) programmes and policies to deal with threats are in place (please provide basic information on threats and actions taken)	x
8. Are protected areas established and managed in the context of the wider region in which they are located, taking account of and contributing to other sectoral strategies?	
a) no	
b) yes, in some areas	
c) yes, in all areas (please provide details)	x
9. Do protected areas vary in their nature, meeting a range of different management objectives and/or being operated through differing management regimes?	
a) no, most areas are established for similar objectives and are under similar management regimes	
b) many areas have similar objectives/management regimes, but there are also some exceptions	
c) yes, protected areas vary in nature (please provide details)	x
10. Is there wide stakeholder involvement in the establishment and management of protected areas?	
a) no	
b) with some, but not all protected areas	
c) yes, always (please provide details of experience)	x

11. Do protected areas established and managed by non-government bodies, citizen groups, private sector and individuals exist in your country, and are they recognized in any formal manner?	
a) no, they do not exist	
b) yes, they exist, however are not formally recognized	
c) yes, they exist and are formally recognized (please provide further information)	x

Available resources

12. Are the human, institutional and financial resources available adequate for full implementation of the protected areas network, including for management of individual protected areas?	
a) no, they are severely limiting (please provide basic information on needs and shortfalls)	
b) no, they are limiting (please provide basic information on needs and shortfalls)	x
c) Available resources are adequate (please provide basic information on needs and shortfalls)	
d) yes, good resources are available	
13. Has your country requested/received financial assistance from the Global Environment Facility or other international sources for establishment/management of protected areas?	
a) no	
b) funding has been requested, but not received	
c) funding is currently being requested	
d) yes, funding has been received (please provide copies of appropriate documents)	x

Assessment

14. Have constraints to implementation and management of an adequate system of protected areas been assessed, so that actions can be initiated to deal with these constraints?	
a) no	
b) yes, constraints have been assessed (please provide further information)	x
c) yes, actions to deal with constraints are in place (please provide further information)	x
15. Is a programme in place or in development to regularly assess the effectiveness of protected areas management and to act on this information?	
a) no	
b) yes, a programme is under development (please provide further information)	
c) yes, a programme is in place (please provide further information)	x

16. Has any assessment been made of the value of the material and non-material benefits and services that protected areas provide?	
a) no	x
b) an assessment is planned	
c) an assessment is in process	
d) yes, an assessment has been made (please provide further information)	

Regional and international cooperation

17. Is your country collaborating/communicating with neighbouring countries in the establishment and/or management of transboundary protected areas?	
a) no	
b) yes (please provide details)	x
18. Are key protected areas professionals in your country members of the IUCN World Commission on Protected Areas, thereby helping to foster the sharing of information and experience?	
a) no	
b) yes	x
c) information is not available	
19. Has your country provided information on its protected areas to the UNEP World Conservation Monitoring Centre in order to allow for a scientific assessment of the status of the world's protected areas?	
a) no	
b) yes	x
20. If your country has protected areas or other sites recognised or designated under an international convention or programme (including regional conventions and programmes), please provide copies of reports submitted to those programmes or summaries of them.	
21. Do you think that there are some activities on protected areas that your country has significant experience that will be of direct value to other Contracting Parties?	
a) no	
b) yes (please provide details)	x

Further comments

COMMENTS

TO 2. Relevant sections of the Act No. LIII. of 1996 on Nature Conservation (attached to the Report) on systematic planning process for development and implementation of a national system of protected areas: Art. 3. and Art. 31-41.

Relevant sections of the National Environment Program (attached to the Report - in English which is an abridged version of the original Hungarian one): 2.3. Protection of Nature 2.3.1. Nature Conservation NAT-2, NAT-3, NAT-5, NAT-7, 2.3.2., Landscape Protection LAP1-4. 4.3., Research and Development (ad)

TO 3. Establishing protected areas (PAs) has a tradition and history in Hungary, long before the establishment of the CBD. All the important biodiversity (BD) areas are represented in the PA network but there are also sites important to BD outside PAs. Relevant assessments, e.g.:

- Kaán K. 1931. Nature Conservation and Natural Values – Budapest, Révai Testvérek Rt., pp. 313. (in Hung.)
- Normativa No. MSZ 20368 (in progress) on biodiversity monitoring (in Hung.)
- Mahunka S. (ed.).1981. The Fauna of the Hortobágy National Park. Vol. 1. – Akadémiai Kiadó, Budapest, 415 pp.
- Szujkó-Lacza J. (ed.).1982. The Flora of the Hortobágy National Park. – Akadémiai Kiadó, Budapest, 172 pp.
- Mahunka, S. (ed.). 1983. The Fauna of the Hortobágy National Park. Vol. 2. – Akadémiai Kiadó, Budapest, 489 pp.
- Mahunka S. (ed.). 1986. The Fauna of the Kiskunság National Park. Vol. 1. – Akadémiai Kiadó, Budapest, 491 pp.
- Mahunka S. (ed.). 1987. The Fauna of the Kiskunság National Park. Vol. 2. – Akadémiai Kiadó, Budapest, 479 pp.
- Szujkó-Lacza J. & Kováts, D. (eds).1993. The Flora of the Kiskunság National Park. Vol. 1. The flowering plants. – Magyar Természettudományi Múzeum, Budapest, 469 pp.
- Mahunka, S. (ed.). 1993. The Fauna of the Bükk National Park. Vol. 1. – Magyar Természettudományi Múzeum, Budapest, 456 pp.
- Mahunka, S. (ed.). 1996. The Fauna of the Bükk National Park. Vol. 2. – Magyar Természettudományi Múzeum, Budapest, 655 pp.
- Béni K., Viszló L. (eds.). 1996.Vértes Mountai and vicinity – Pro Vértes Public Foundation, pp.409, (in Hung., Engl sum.)
- Rakonczay Z. (ed.). 1987-1997. (Series on PAs of landscapes and geographical regions of Hungary) – Budapest, Vol. I-VII. (all regions of Hungary assessed) (in Hung.)
- Tardy J. (ed.) 1996. Magyarországi települések védett természeti értékei (Protected natural values of human settlements in Hungary) – Budapest, Mezőgazda, pp. 663 (in Hung., Engl. preface and captions of photographs)
- Lőkös L., Rajczy M. (eds). 1999. The Flora of the Kiskunság National Park. Vol. 2. Cryptogams. – Magyar Természettudományi Múzeum, Budapest, 371 pp.
- Mahunka S. (ed.). 1999. The Fauna of the Aggtelek National Park. Vol. 1. – Magyar Természettudományi Múzeum, Budapest, 371 pp.
- Mahunka S. (ed.). 1999. The Fauna of the Aggtelek National Park. Vol. 2. – Magyar Természettudományi Múzeum, Budapest, pp. 373-775

TO 4. See: TO 2., TO 3.

The following materials are also related to the establishment and management of PAs:

- Normativa No. MI-13-39:1990 on permissible activities in PAs (in Hung.)
- Normativa No. MI-13-55:1992 on the protection of ecosystems (in Hung.)
- Normativa No. MI-13-56:1991 on management of protected values in Nature Conservation (in Hung.)
- Normativa No. MI-13-57:1991 on guidelines and management of protected values managed by nature

conservation authorities of the MERP (in Hung.)

- Ministry for Environment and Regional Policy (MERP). 1995. National Environmental and Nature Conservation Policy Concept – Budapest, pp. 92.
- Normativa No. MSZ/T 20391 (2003) on ecotourism, tourism on PAs (in Hung.)

TO 5. See TO 2., TO 3., TO 4.

TO 6. According to the Act LIII. of 1996 "conservation of natural values and areas shall also be supported by government aids, tax allovancies and a credit system supporting nature-friendly management" (Art. 71 (1)). However, detailed rules (implementation order) has not been established. Thus, the Act is implemented through individual agreements between directorates of national parks and predominantly persons who are engaged in nature-friendly management and rehabilitation of areas (Art. 2).
Entrance fees exist where the PA provides an extra service such as certain presentation, guided tour, etc.
In case of PAs which can be visited only with a permit for a definite time or period (e.g. for a day or for a year) there is a licence-fee with defined conditions.

TO 7. Principal threats and management objectives are usually determined by the departmental order or order of the competent local government which declares the area to be a protected one.
Beside these management plans for PAs should be prepared (see: TO 9.) which are based on assessed and potential threats and surveys related to the PA in question..
Several surveys and various assessments as well as comprehensive works are related to certain PAs (see TO 3.).
Some further comprehensive works, assessing threats to ecosystems including PAs and also proposals to influence key drivers, are as follows.

- Rakonczay Z., Nechay G., Temesi I. (eds) 1989. Hungarian Red Data Book - Budapest, Akadémia Kiado, pp.360. (in Hung., Engl. and Russ. sum.)
- Beliczay E., Bulla M., Vári A. (eds). 1994. Long-term Environmental Plan of Hungary – Phase 1. Natural Environment: Air, Water, Soil, Biota (in Hung., Engl. sum.) – Budapest, Hungarian Academy of Sciences,
- Committee on Ecology, Biology Section, Hungarian Academy of Sciences. 1994. Foundations for Developing a National Strategy of Biodiversity Conservation – Acta zool. hung., 40 : pp. 289.327.
- Haraszthy L. 1995. Opportunities for Conservation of Biodiversity in Hungary – WWF füzetek 8., Budapest, pp. 44. (in Hung., Engl. transl.)
- Varga Z., Balogh J., Nemes Cs. (eds) 1997. Status and conservation of biodiversity in Hungary, Country Study – Budapest, Hungarian Commission on Sustainable Development, pp. …
- Borhidi A., Sánta A. (eds) 1999. Red Data Book on Plant Associations of Hungary – Budapest, TermészetBuvár Alapitvány, Vol. I-II. pp. 362 and 404. (in Hung.)
- National Biodiversity Strategy and Action Plan (NBSAP). 1999. (Draft, in Hung.)

See also TO 3.

TO 8. PAs are established based on negotiations with various stakeholders and with their agreement and in accordance with the National as well as Regional and Local Development and Land Use Plans.
Relevant sections of Act No. LIII. of 1996 on Nature Conservation according to which PAs have to be established and managed in the context of the wider region in which they are located, taking into account of and contributing to other sectoral strategies:
in management: Art. 6. (2), Art. 7. (1), (2)d, Art.16-18., Art. 31-41.
in establishment: Art. 22-27. Art. 30.

TO 9. Many PAs have similar objectives and management regimes but there are many PAs which vary in nature. All PAs have actually an individual management plan, depending on their key natural or biodiversity values in accordance with needs of the most important species and species association living in the area, taking possibly into account the local circumstances, threatening processes as well as requirements of local communities.
Management plans are established taking into account the opinion of regional/local administrative organs, local

governments, economic chambers and other stakeholders such as owners, those who are charged in management of wealth/properties and who pursue economic activity /Art. 3 (1) of the Ministerial order No. 30/2001. (XII. 28.) KöM on the preparation of nature conservation management plans and on their content and involvement of stakeholders – in Hung. only/.
Relevant sections of the Act No. LIII. of 1996 on Nature Conservation according to which, due to the fact that PAs vary in their nature, PAs have to meet a range of different management objectives and/or have to being operated through various management regimes (Art. 22. (a, c, d, h, i, k); Art. 23, Art.36).
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TO 10. See e.g. Art. 25 (6 and 1, 5, 7) of the Act LIII. on stakeholder involvement in the establishment and management of PAs; as well as TO 8., TO 9

TO 11. PAs can be managed by various stakeholders, such as state and corporate or private institutions, NGOs, individuals. However, private individuals can not manage PAs with national importance.

TO 12. Resources are to be improved, especially the human capacity including stuff (e.g. number of rangers, and persons working on management of PAs) and education and training of stuff.
Institutional capacities are continuously improved but there are several problems to be solved, e.g. question of ownership. Other practical problems of managment, such as water supply (certain PAs are periodically in need of additional water-supplement), need for grazing animals in certain grasslands, control of invasive species including alien shrubby trees, prevention of fire hazard, require the improvement of inter-sectoral and stakeholder's cooperation as weel as strengthening financial and technical capacities of nature conservation authorities in addition to the improvement and enforcement of existing regulation.
Infrastructure development of PAs is also a permanent activity. However, several PAs are in lack of certain establishments to support their operation and to decrease impacts of tourism on PAs, such as nature trails, watching points and watching hides, visitor centres, and establishments to support the management of PAs.

TO 13. Hungary and Hungarian PAs received financial assistance from some international funding opportunities, or based on bilateral and multilateral agreements. The Fertő-Hanság and the Őrség national parks received e.g. significant support from the (European) PHARE Programme in the course of establishment of these national parks. The Aggtelek National Park is also implementing a project financed by PHARE.
The Hungarian NBSAP is a UNEP-GEF project. Another project to be financed by GEF-UNDP is a plan which is not approved yet ("Conservation of globally significant biodiversity of the Tisza river flood-plain").

TO 14. Several constraints to management of PAs have been assessed and actions are continuously taken to deal with these constraints. For example certain owners and other stakeholders are not agreed on the establishment of PAs due to the required management. Enforcement of appropriate management measures in existing PAs encounters often difficulties for the same reason.

If the Question refers only to the establishment of an adequate system of PAs than it is not relevant to Hungary since such a system has been established and managed.

TO 15. State and effectiveness of PAs are continuously monitored. Governmental assessment of the effectiveness of PAs are made by the State Audit Office.

TO 16. No valuation of PAs until now in spite of the importance of PAs and PA services and their acknowledged advantageous effects on certain activities. However, protected plant and animal species were given certain values in money, according to the ordinance No. 1/1982 (III. 15) of the Secretary of State on Nature Conservation. The recent amended regulation including this valuation is the Ministerial order No. 13/2001 (V. 9.) (in Hung.). These values have always been used in administrative and judicial trials (e.g. for calculating impacts and damages in PAs caused by various harmful activities, considering estimated population size of species and their values). These values are becoming a customary use today in Environmental Impact Assessments (EIAs) as well. Thus, valuation of material and non-material benefits and services are considered as an important issue but basic assessment has never been made except occasional assessments based on financial values of species and their populations living in PAs or outside PAs.

TO 17. Collaboration and communication in establishment and on problems of PAs became a usual activity. Examples for cooperation:

- Fertő-Hanság National Park (H) – Neusiedler See-Seewinkel National Park (A)
- Írottkő Nature-park (H) – Naturpark Geschriebenstein(A)
- Raab Naturpark (A) Goricko (Slo) and Őrség National Park (H)
- Duna-Dráva National Park, unit Béda-Karapancsa (H) and Kopácsi-rét PA (Cr)
- Körös-Maros National Park (H) – Rezervatia Komplexa 'Lunca Muresului' inferior (Ro)
- Aggtelek-Karst (H) – Slovakian-Karst (Sk)
- Ipoly-Ramsar area (H and Sk)
- Zemplén Landscape Protection Area (H) – adjacent area in Sk (planned cooperation)
- Duna-Ipoly National Park (H) – Burda PA (Sk) (planned cooperation)
- Planned transboundary PA: the Körös-ér Landscape Protection Area (H) and Subotica Forest and Puszta Area (Yu)

TO 20. Some PAs are recognised or designated under international conventions or programmes, such as the 21 Ramsar sites, 8 UNESCO World Heritage sites (5 of them PAs), 5 Biosphere Reserves.

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TO 21. - The General National Habitat Classification System enables definition, classification and mapping of any habitat type of Hungary. Based on that, the Hungarian Biodiversity Monitoring System (HBMS) monitors ecosystem diversity and its changes at landscape level by mapping at a scale of 1:25 000.

- Hungary has experience in large-scale rehabilitation of wetlands which may be useful for other projects in different countries.

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ATTACHMENT 1

THE THIRD NATIONAL REPORT OF HUNGARY ON THE IMPLEMENTATION OF THE CONVENTION ON WETLANDS (RAMSAR, IRAN, 1971)

DURING THE PERIOD BETWEEN 30 JUNE, 1995 AND 30 JUNE, 1998

IMPLEMENTATION OF THE RAMSAR CONVENTION IN GENERAL, AND OF THE RAMSAR STRATEGIC PLAN 1997-2002 IN PARTICULAR, DURING THE PERIOD SINCE THE NATIONAL REPORT PREPARED IN 1995 FOR RAMSAR COP6 AND 30 JUNE 1998

CONTRACTING PARTY: HUNGARY

DESIGNATED RAMSAR ADMINISTRATIVE AUTHORITY:

AUTHORITY FOR NATURE CONSERVATION
OF THE MINISTRY FOR ENVIRONMENT

FULL NAME OF THE INSTITUTION:

AUTHORITY FOR NATURE CONSERVATION
OF THE MINISTRY FOR ENVIRONMENT

NAME AND TITLE OF THE HEAD OF THE INSTITUTION:

DR. JÁNOS TARDY
DEPUTY STATE SECRETARY

MAILING ADDRESS FOR THE HEAD OF THE INSTITUTION:

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Ramsar Strategic Plan - General Objective 1
To progress towards universal membership of the Convention.

1.1 Describe any actions your government has taken (such as hosting regional or sub-regional meetings/consultations, working cooperatively with neighbouring countries on transfrontier wetland sites) to encourage others to join the Convention.

Since all neighbouring countries of Hungary are Contracting Parties to the Convention on Wetlands, there were no such actions taken in Hungary.

For the purpose of designation of transboundary wetlands to the List of Wetlands of International Importance and extending the already existed ones, co-operation process was started with the governments of Slovakia, Romania and Ukraine. (see section 6.7)

Ramsar Strategic Plan - General Objective 2
To achieve the wise use of wetlands by implementing and further developing the Ramsar Wise Use Guidelines.

2.1 Has a National Wetland Policy/Strategy/Action Plan been developed, or is one being developed or planned for the near future? If so:
a, What are/will be its main features?
b. Was it, or is it, intended that the Policy/Strategy/Action Plan be adopted by the whole of Government, the Minister responsible for Ramsar matters or through some other process. Please describe.
c. How does it relate/will it relate to other national environmental/ conservation planning initiatives (e.g., National Environmental Action Plans, National Biodiversity Action Plans, National Conservation Strategies)?

The text of the Ramsar Convention was adopted with amendments such as the Hungarian Act XLII of 1993 under the title "The Convention on Wetlands of International Importance Especially as Waterfowl Habitat adopted on 3 December 1982, 1987 and its amendments adopted between 3 December, 1982 and 28 May, 1987".

Although single comprehensive wetland policy or strategy has not been prepared for the country, nature conservation and other environment-related legislation and national programmes do include the conservation concept of wetlands as follows:

After having long discussion period with other responsible authorities, organisations and the wide public, the Hungarian Parliament has accepted the **Act on Environmental Protection No. LIII. of 1995**. This law has been in force since 1 January, 1996. The act is a framework law for the protection of the environmental elements by enforcing the principles of precaution, prevention and restoration. The aims of the Act are to establish a harmonic relationship between man and his environment, to protect the elements and processes of the environment, and, to ensure *the environmental conditions for a sustainable development.* The Act provides suitable scope for asserting the constitutional rights for a sound environment in accordance with the precautionary principle and equitable bearing of burdens. The purposes of Act on Environmental Protection are as follows:

a) mitigation of use, load and contamination of the environment, the prevention of causing damage to it and the improvement and restoration of the damaged environment;
b) protection of human health and the improvement of the environmental conditions associated with the quality of life;
c) conservation and maintenance of natural resources and the rational and efficient management thereof in a manner ensuring their renewal;
d) co-ordination of the Government's other duties with the requirements of environmental protection;
e) international co-operation in the field of environmental protection;
f) invitation and participation of the public in activities directed at the protection of the environment, particularly in exploring and getting acquainted with the state of the environment, and in carrying out the tasks of governmental agencies and local governments in connection with environmental protection;
g) co-ordination of the economy and of the socio-economic development with the environmental requirements;
h) establishment and development of the institutional system of environmental protection; and

i) establishment and development of a public administration serving the protection and conservation of the environment.

In addition the act states that other regulations should be established in order to preserve and maintain the biological diversity, and sustainable use of the environment (namely to provide for nature conservation, hunting, fishing and fishery activities). A National Environmental Programme should be established in order to translate the objectives of the act into measures and implement them. The National Environmental Programme should include a separate chapter on nature conservation (see Nature Conservation Master Plan).

A fundamental step was made in the Hungarian nature conservation legislation during its history in 1996, when the Parliament has accepted without a negative vote the **Act on Nature Conservation No. LIII. of 1996**. The process of drafting the *Nature Conservation Act* involved the analysis of 20 nature conservation laws from other countries, which were all translated into Hungarian. The *Nature Conservation Law* of 1982 was also analysed. The Act on Nature Conservation has been in force since 1 January, 1997. Details of the Act are as follows:

The Parliament of the Republic of Hungary, recognising that the country's natural heritage forms a specific and irretrievable part of the national wealth, and that its conservation for the present and future generations, the maintenance, management and development of the countryside, the economic and wise use of natural resources, the safeguarding of biodiversity and the establishment of a harmonic relation between man and nature, which is the basic condition for the survival of mankind, all require that provisions for the conservation of nature be made in compliance with our international obligations, adopts the following Act. Purposes of this Act are:

a) to make provision for the general conservation of natural values and areas, their natural systems and biodiversity as well as for the promotion of their scientific cognition and sustainable use; to meet the society's need for a healthy and aesthetic natural environment;

b) to foster the traditions of nature conservation and improve its achievements; to protect, conserve, maintain and enhance Hungary's natural values and areas.

Parts of the act elated to wetlands:

Article 2

(1) The provisions of this law shall be observed while-

a) evaluating, safeguarding, maintaining, restoring and developing any natural values or areas;

b) sustaining the functions of and conserving the flora and fauna as well as their habitats, biodiversity, the natural systems and natural resources, in accordance with the international conventions to which the Republic of Hungary has acceded;

c) defining the rights and liabilities of the Government, natural or legal persons as well as other organisations in relation to nature conservation.

d) enforcing the interests of nature conservation, and especially during the formation of economic, financial or educational policies or control systems;

e) exercising any registering, preventing, planning, managing, regulatory or authoritative functions in relation to nature conservation;

f) supporting research, demonstrations, and instructional, educational, propagating or scientific activities in relation to nature conservation;

g) determining nature conservation liabilities;

h) establishing and developing the institutional system of nature conservation.

(2) The task of nature conservation is-

a) to identify which natural values and areas deserve strict protection out of geological, hydrological, botanical, zoological, scenic, cultural, historical or any other public interest;

b) to determine the dangers threatening protected natural values or areas;

c) to prevent or avert any damage to protected natural values and areas, and to reduce or to eliminate damage already occurred;

d) to conserve protected natural values and areas for the present and future generations, and, if necessary, to restore them or ensure their maintenance.

Article 3

(1) Within this Act shall fall all natural values and areas, all activities connected with them and all tasks of nature conservation resulting from international conventions or cooperation, except if otherwise provided by international conventions.

(2) The provisions of Act No. LIII. of 1995 on the General Environmental Protection Rules (Environmental Law, hereafter E.L.) shall be applied to all issues connected with nature conservation that are not covered by this Act.

Article 4

(d) “near-natural “ conditions means the conditions of habitats, landscapes, and communities whose evolution has been slightly influenced by man (creating conditions similar to natural ones), but the processes that take place in them are mostly characterised by self-regulation and they re able to survive without direct human manipulation.

Article 14

It shall be prohibited to introduce non-native fish species into natural or near-natural waters, or to transfer such species from fish farms into any other wetland.

Article 15

(1) The following types of areas qualify as natural areas if they meet the conditions specified under Article 4 paragraph d) above

(a) arable land used as forest, grassland or reed bed;

(b) land withdrawn from cultivation, except if facilities are to be Sited on it or if it is exploited as a mine when this Act comes into force on the basis of a validly approved technical mining working plan;

(c) land unsuitable for agricultural or forest use.

(2) The Minister and the Minister of Agriculture shall, when they think fit, but not later than 2 years after this Act comes into force, announce by Joint Decree the register of natural areas subject to paragraph (1) above.

Article 16

(1) In the course of agricultural, forest, reed, fish farm and game management (hereafter management), it shall be ensured that sustainable use is practised, which includes long-term orientation, application of nature-friendly techniques and the protection of biodiversity.

(2) Management shall be exercised without causing permanent damage to the soil, the superficial or subsurface geomorphological values or the natural flora and fauna, destroying the protected living organisms or communities, or considerably decreasing their biodiversity.

(3) Wherever the habitat conditions make it possible, afforestation shall be exercised primarily with native tree species, in a natural species composition and using nature-friendly techniques.

(4) Grassland management shall be exercised primarily by grazing and/or cutting regimes adjusted to the type of grassland, and by a moderate, nature-friendly use of chemicals.

(5) The natural or near-natural shoreline of watercourses and lakes shall be conserved as wetland habitats. In the course of constructing waterworks, nature-friendly methods shall take priority.

Article 17

(1) Subject to Article 8 paragraph (1) above, all activities shall be exercised with due regard to preserving natural values and areas and to the protection of the habitats of wild organisms and their biodiversity.

(2) In the course of using natural areas, special attention shall be paid to the habitat type, the diversity of characteristic wild organisms and the maintenance of biodiversity.

(3) Waters, reed beds and other wetland habitats in a natural or near-natural state as well as the natural vegetation of lands whose low fertility is unfavourable for cultivation shall be preserved in the course of the following activities: using arable land, using and employing land unsuitable for cultivation, planning and executing amelioration, exercising any other agricultural activities, water management and water regulation.

(3) Experimental, temporary or final authorisation of the marketing or application of plant protecting agents, bioregulators and other pesticides as well as chemicals that favourably influence the soil's fertility shall be granted by the conditions laid down in another provision of law; the approval of the Ministry is necessary for such an authorisation.

(4) In natural areas, chemicals that favourably influence the soil's fertility may only be used in justified cases - subject to another provision of law - based on the results of soil tests and in a nature-friendly manner.

(5) In natural areas, in order to protect natural values and biodiversity, the Directorate (the National Park Directorate, hereafter the Directorate) may - by the provisions of a separate law - initiate the restriction or prohibition of the application of certain plant protecting agents and chemicals that favourably influence the soil's fertility.

Article 18

(1) In natural or near-natural wetland habitats, the water reserve ecologically necessary for the subsistence of natural values as well as for the conservation and maintenance of natural systems shall not be artificially abstracted.

(2) The volume of this ecological water reserve shall be determined by the Water Directorate, assisted by the Directorate as a professional authority. The Directorate may also initiate the determination of the volume of the ecological water reserve.

(3) In natural areas - with the exception of the populated interior area of settlements - it is prohibited to locate new buildings or any artificial facilities within 50 metres of the shoreline of natural or near-natural watercourses and wetlands, within 100 metres of the shoreline of lakes and ponds and in the flood-plain of watercourses. Any construction in water, the construction of facilities which serve shipping and the construction of fishing facilities at fish farms shall take place with the approval of the Directorate (Article 21 paragraph (3) section b) below), in such manner and in such cases as specified by another provision of law.
(4) It shall be prohibited to release or deposit - with the exception of chemicals used to prevent damages caused by flood - chemicals and plant protecting agents dangerous to water and aquatic organisms and specified in another provision of law within 1 000 metres of the shoreline of natural and near-natural watercourses and wetlands.

Article 21
(1) In natural areas, the authorisation of the Directorate shall be required for-
a) the changing of the type of cultivation of grasslands and reeds;
b) the burning of grasslands, reeds or any other aquatic vegetation;
(2) In natural areas, the approval of the Directorate (acting as the co-operating authority) shall be required for-
a) using arable land for other purposes than cultivation; re-utilising land withdrawn from cultivation;
b) conducting geological research, establishing mining scapes and approving technical mining plans for the following activities: researching, exploring and exploiting or suspending the exploitation of mineral resources, and closing mines as well as restoring the landscape after mining,
c) approving the working plans of fisheries.
(3) In natural and near-natural areas, the authorisation of the Directorate as the co-operating authority shall be required for-
a) modifying wetland habitats, and especially the shorelines of watercourses and lakes, or the conditions of natural waterside communities (plant associations);
b) reconstructing or transforming existing buildings, structures or facilities as well as for locating and constructing any water facility, port or facility serving fishing within 50 metres of the shoreline of watercourses and wetland habitats, or within 100 metres of the shoreline of lakes.
(4) The consent of the Minister shall be required for approving those parts of district game management plans which effect natural areas.
(5) Further provisions - in addition to the provisions under Articles 6-21 - apply to natural values and natural areas under special protection.

Article 23
(1) Natural values and areas shall receive special protection by the declaration of protected status.
(2) By virtue of this law, all springs, bogs, caves, sink-holes of sinking streams, salt lakes tumuli and earthen fortifications are protected. The natural areas declared protected under this paragraph qualify as protected areas of national importance (Article 24 paragraph (1) below).
(3) For the purposes of paragraph (2):
a) "cave" means any natural cavity in the Earth's crust where the longitudinal axis exceeds 2 metres and the current volume or the volume after extracting the natural speleothem (cave fill) is large enough for a person to enter;
b) "spring" means any natural issue of water from the earth provided that its discharge exceeds 5 l/min, even if it becomes temporarily dry.
c) "permanent or temporary sink-hole" means any cleft in karst which conducts a permanent or temporary watercourse underground.
(4) The Minister shall, within 3 years of the date of this Act coming into force, publish the register of bogs, salt lakes, tumuli and earthworks subject to paragraph (2) above, and revise it annually. The inventory is only a reference work, and does not concern the protection provided under paragraph (2) above, which comes into force when this Act is enacted.
(5) In case the protection of a natural value or natural area can only be ensured by taking special measures, the natural value or natural area in question shall be declared strictly protected.

Article 38
(1) The authorisation of the nature conservation authority shall be required in protected natural areas especially for:
a) conducting research, collecting or carrying out experiments;
b) ploughing, renewing, overseeding, irrigating, grazing or cutting grasslands;
c) restoring the area or changing its character or use;
d) changing the purpose of non-arable lands or the branch of cultivation of arable lands;

e) cutting or planting any tree, group or row of trees which do not fall under the laws on forest or forest conservation;

f) burning or eradicating reeds or any other aquatic vegetation, burning grasslands, fallows, stubbles or straw and setting fire in forests with the exception of designated campfire-places;

g) applying plant protecting agents, bioregulators or other pesticides, as well as chemicals that favourably influence the soil's fertility;

h) angling;

i) organising communal or mass sport events, sport races including motorsport and other technical sport events;

(2) The approval of the forestry authority as a co-operating authority shall also be required in the process subject to paragraph (1) section e) above;

(3) In the course of preventing an animal or plant epidemic or quarantine obliged disease, instead of instituting the procedure subject to paragraph (1) section g), the type of preparation to be applied shall be announced to the nature conservation authority.

(4) The management plan may define those conditions of the activities to be exercised in the protected natural area whose accomplishment grants exemption from the obligation to require an authorisation specified under Article 38 paragraph (1) above.

Article 39

(1) The nature conservation authority shall act as a co-operating authority in any authoritative procedure having direct effect to or directly concerning protected natural areas, and in particular in-

a) dividing any parcel, or changing its shape or extent;

b) parcelling out, utilising land, building, constructing facilities or commencing operations;

c) constructing linear structures or performing earthworks;

d) operating in water, constructing facilities in water or utilising water;

e) authorising the construction of any premises serving for industrial, agricultural or service activities;

f) procedures of forestry, hunting and fishing authorities;

g) approving landscape development plans or technical mining plans concerning the establishment or modification of mining areas, the exploration and exploitation of mineral resources, the utilisation of waste stockpile, the suspension of exploitation or the closing of any mine; authorising the construction and operation of mining facilities and the use of certain machines or installations within mines; furthermore, in water laws procedures in relation with mining;

h) converting the use of arable lands;

i) approving the transportation or storage of hazardous substances specified in another provision of law;

(2) In authoritative procedures for defining limits applied in environmental protection and specified in another provision of law, the Directorate shall act as a co-operating authority, provided that the procedure concerns any protected natural area.

Upon requirements stated in both Act on Environmental Protection of 1996 and Act on Nature Conservation of 1997, the Parliament has accepted the National Environmental Programme for the period of 1997-2002 on 16th of September, 1997. The programme contains several parts dealing with different elements of the environment (soil, water etc). A chapter of "waters" deals with environmental aspects of surface and subterranean water systems in Hungary. The Nature Conservation Master Plan is also included as a separate section in the National Environmental Programme. Parts of Nature Conservation Master Plan related to wetland habitats describe and evaluate the state of the Hungarian wetlands and identify the objectives as follows:

Wetland habitats

As a consequence of Hungary's geographical position, geomorphology and centripetal river network, 96 percent of its surface water reserves come from neighbouring countries, and this has a determinative effect on the quantitative and qualitative parameters of these waters. Water demands often significantly differ from available water reserves both in space and time. In addition to the above, significant factors influencing the quantity and quality of current water reserves include climate, the operation practice of water reservoirs recently established in the countries north of Hungary (upstream), the more and more intensive exploitation of subsurface waters and the quality of sewage and used water running into surface waters.

The network of watercourses is relatively thin and their water discharge is fluctuating, in some cases extremely so. It is noteworthy that before river regulations in the last century, 24 percent of what is Hungary today was a flood plain, whereas today the flood plain of embanked rivers covers 150,000 hectares; along the river stretches without dikes approximately 70,000 hectares, and along brooks and streamlets some 430,000 hectares are temporarily flooded. The decrease of water quantity in standing water bodies is getting more and more severe, sometimes disastrously so. The yield of usable surface and subsurface waters has decreased significantly and their quality has greatly deteriorated. This situation has been exacerbated by the regional amelioration program supported by substantial state subsidies, because the program neglected to

regularly retain and store big water yields and even in drought-stricken zones aimed at draining waters without offering any practical opportunity of replenishment.
There are numerous wetland habitats, especially in the lowland plains, which have preserved several elements of the original scenery, fauna and flora of primordial wetlands. It is and will be a priority task of nature conservation and water management to register and first of all save the unique (e.g. lowland *Sphagnum* bogs) or internationally rare (e.g. oxbow lakes hollowed out by floods, saline lakes and rivulets in the Great Plain) types which have survived in a near-natural state.
The various wetland habitats constitute a characteristic and determinative part of the ecological (green) corridor system. Bog meadows, bogs, fens, marshes and marsh meadows, representing a transitional stage between water bodies and terrestrial habitats, are *highly sensitive and valuable even in international comparison*. Their state has changed unfavourably. Bogs, fens, marshes and permanently or temporarily flooded wetland habitats are particularly endangered today by the combined effects of drying up, eutrophication and the formerly only technically planned interventions (drainage, embankments, reservoirs radically affecting ground water levels, concrete bedding, disconnection of oxbow lakes, etc.).

Nature conservation target and tasks:

- The flora and fauna of wetland habitats particularly endangered by drying and eutrophication (saline lakes, small watercourses, bogs, fens, marshes, oxbows rich in natural values, springs, near-natural fishponds and reedbeds) must be conserved. In order to sustain internationally important wetland habitats, the ecologically necessary amount of water is to be ensured.
- The decrease of wetland habitats preserving natural or near-natural state must be halted at the latest by the turn of the millennium.
- The inventory and classification of all Hungarian wetland habitats are to be made. The nature conservation guidelines of the different wetland habitats must be elaborated, with special regard to small watercourses and mountain brooks.
- Special attention is to be paid to the protection of the Danube, Drava and Tisza rivers, their tributaries, flood plains and oxbows and to their wise (multifold) use in line with the principle of sustainable development. The gradual implementation of oxbow restoration programs must be started without delay, first on the lower sections of the River Tisza, the Körös rivers and the River Danube.
- Activities aimed at the transformation of wetland habitats of natural standing and flowing waters and extensive water systems are to be avoided. Special attention is to be paid that interventions at these places do the least possible damage to the flora and fauna and that the near-natural state, variegated structure and species diversity of wetland habitats, an integral part of the original Hungarian landscape scenery, be the least damaged.
- Wetland habitats dried up or threatened by drying up must be restored by regular water replenishment, with special regard to the protection of the unique (e.g. lowland Sphagnum bogs) or internationally rare (e.g. oxbow lakes hollowed out by floods, saline lakes and rivulets in the Great Plain) types which have survived in a near-natural state. The restoration of wetland habitats must be a priority task of nature conservation and water management. The alkaline lakes in the Kiskunság must be restored and their continuous water supply is to be ensured.

Furthermore, the *National Biodiversity Strategy and Action Plan* will include a chapter on wetlands prepared by the Planning Team on Inland Water and Freshwater Resources Management. It is expected to be finalised by 31, December, 1998 and approved by the Hungarian Parliament or the Government.

Wise use of wetlands

The *Nature Conservation Act of 1996* provides for the sustainable use of natural resources. In addition, Article 71 of the Act provides for the use of economic incentives for 'nature-friendly management' and habitat restoration activities.

Local participation

A decree under the *Nature Conservation Act* will provide for compensation mechanisms and will define the types of agreements that will be possible with local owners.

2.2 If a policy is in place, how much progress has been made in its implementation, and what are the major difficulties being encountered in doing so?

Since the Act on Nature Conservation has been in force since 1997, it has been too short a period for evaluation of the progress that has been made on its implementation.

2.3 If a Policy/Strategy/Action Plan is in place, is the responsibility for implementing it with :
a. a single Government Ministry,
b. a committee drawn from several Ministries, or
c. a cross-sectoral committee?
Please provide details.

The responsible governmental body for the implementation of the Act is the Ministry for Environment. For implementation of the wetland policy the executive plan of the National Environmental Programme has been elaborated and approved indicating the time schedule of the measures, responsible ministerial bodies (in the case of surface and subterranean waters they are the Ministry for Environment together with Ministry for Transport, Telecommunication and Water Management). Although privatisation process still has some negative effects to wetlands, the most important Sites are already under protection. The National Ramsar Committee and the Nature Conservation Advisory Board (of the Authority for Nature Conservation) assist the implementation of the policy as cross-sectoral bodies.

2.4 For countries with Federal systems of Government, are there Wetland Policies/Strategies/Plans in place, being developed or planned for the provincial/state or regional levels of Government?

The Republic of Hungary has no federal system of government.

2.5 Has a review of legislation and practices which impact on wetlands been carried out, and if so, has this resulted in any changes which assist with implementation of the Ramsar Convention? Please describe these.

I. In general

There are many different laws in the Republic of Hungary relating to wetlands that set out the utilisation and regulate all kind of activities being carried out on this type of habitat. In general, most of the acts and decrees state at the very beginning that they were created by the Hungarian Republic recognising the fact that living creatures are essential parts of the World's renewable natural resources and the of the whole ecosystem. Moreover, the Parliament is aware that species, special habitats, landscape and natural movements of water, and the ecosystem in general also bear intrinsic, aesthetic, cultural, scientific, genetic, and economic values and people of Hungary are to save them for the next generations. A total of 4 acts deal with issues that may have impact on wetland as follows:

1. Act on Environmental Protection (No LIII of 1995)
2. Act on Water Management (No LVII of 1995)
3. Act on Game Management, Game Protection and Hunting (No LV of 1996)
4. Act on Fishing and Angling (No XLI of 1997)

1. Act on Act on Environmental Protection (No LIII of 1995)
See 2.1

2. Act on Water Management (No LVII of 1995)
This legislation specifies the basic rights and obligations related to the use of waters, further the maintenance of the exploitation and prevention of damage, according to the requirements of environmental protection also occupies a considerable part, which attempts to prevent, minimise and eliminate contamination arising from human activity.

3. Act on Game Management, Game Protection and Hunting (No LV of 1996)
The Act was issued in unified structure with the executive decree No 30/1997 (IV.30) of the Ministry for Agriculture. In the interest of nature conservation and rational exploitation of the game population, the Act obliges the person entitled to hunting to conserve the game population in his hunting ground and its biological diversity. Furthermore, the above mentioned person must take care of the game and its habitat. The Act also regulates to permission the release of bred game and non-indigenous species into Nature.

4. Act on Fishing and Angling (No XLI of 1997)
Although nature conservation and fishery activities have many issues in common (conservation and maintenance of the quality of water, maintenance of wetlands in a natural status) Hungary has problems arising between the aforementioned fields, due to the contradiction that fishery activity aims to make a profit that is definitely not an objective of nature conservation. No sooner was the concept of nature conservation developed than such problems have arisen a hundred years ago.
The very first legal instrument, namely the act on fishing activity, was formulated in 1888 and was modified in 1925. A modern and widely accepted act was formulated and accepted in 1977. As an addition, the list of protected and strictly protected species was included in the law of 1977. Furthermore, fishing times and the size of fish to be caught have been limited. The rules were intended to promote the reproductive potential of wetlands. The Act on Fishing and Angling (No. XLI of 1997) is enacted for the specification of the fishing conditions, in the interests of conservation and permanent revival of the natural diversity of the fauna and flora, further the harmonisation of exercising the right to fish with the requirements of the market and protection of aquatic wildlife and natural environments of waters. The section referring to biodiversity declares that the authorised person is obliged to protect the fish population and the aquatic biocoenosis and habitat within his fishing waters, and to promote natural feeding and reproduction of fish, including the saving of young fish in the event of flooding. The Act binds to permission the release of reared and non-indigenous animals into Nature.

2.6 Describe the efforts made in your country to have wetlands considered in integrated land/water and coastal zone planning and management processes at the following levels:
a. national
b. provincial
c. local

a, The Authority for Nature Conservation has been working on that the responsible governmental bodies consider the wetland conservation in general and wetland reconstruction in particular high priority.

b, and c,

Biharugra Fishponds Ramsar Site

At Biharugra Fishponds Ramsar Site responsible national park directorate discusses continuously in measures implemented by the fishery company.

Lake Balaton Ramsar Site

For Lake Balaton Ramsar Site there is no nature conservation management plan. Protected parts of the lake are under assessment and detailed nature conservation management plans are in preparation.

Gemenc, Béda-Karapancsa Ramsar Sites

A large-scale revitalisation project was launched in 1997 aiming to restore and reconstruct the previous (natural) water regime, floods and in order to keep a high level of water on the flood-plain system.

Hortobágy Ramsar Site

When the restoration project was elaborated of the swamps of Egyek-Pusztakócs part of the Ramsar Site, the flood retention point of view was also taken into account, consequently the wetland system also serves as a water reservoir.

At Lake Tisza (former names are Tiszafüred or Kisköre water reservoir, hereafter Lake Tisza) water part of the Ramsar Site of Hortobágy, irrigation and possible water reservoir points of view were taken into account. Management of the wetland is carried out by consulting water management authorities and water users.

2.7 Have there been any publications produced, or practices documented, which could assist other countries to promote and improve the application of the Ramsar Wise Use of Wetlands Guidelines?

Since 1994, the Authority of Nature Conservation has been producing books on management practices of various nature conservation issues. The very first two publications were dealing with flora of the Hungarian Great Plain, and the state and future prospects of the agriculture on the Great Plain, respectively.

Since 1995 the following publications has been published by the Authority:

- I. Keszthely, I. Csapody, L. Halupa: Guidelines for management of protected forests, Budapest, 1995 (in Hungarian)
- J. Kelemen (ed.): Nature conservation management of grasslands, Budapest, 1977
- J. Kelemen, P. Warner : Nature Conservation Management of Grasslands of Hungary, 1996
- E. Láng (ed) : National Biodiversity Monitoring System, Volume 1-10., Budapest, 1997

The next publication of the *nature conservation guide series* is expected to be published in 1999 dealing with management of wetlands. Kiskunság National Park Directorate has published „Habitat maintenance and management of core areas of Kiskunság National Park" in 1995, which is also available in English.

Further publications (see also references):

János Tardy (in press): Nature Conservation Index of Hungary.

Nechay, G. és Faragó, S.(szerk.): The Convention on biological diversity of UN. 1992, Budapest, ENSZ Környezet és Fejlődés Konferenciájának Magyar Nemzeti Bizottsága (In Hungarian)

Nechay, G. (szerk.): Caring for the Earth, Hungarian edition, KTM, Budapest, 1992.

Nechay, G. (eds): Hungary: first national report on the implementation of the Convention on Biological Diversity, KTM, Budapest, 1998.

Ö. Rádai (ed.): River Corridors-Élővízfolyosók Magyarországon. (In English and Hungarian) IUCN-Magyarország, Budapest

IUCN-Magyarország (1995): Nature Conservation on fishponds (In Hungarian) Budapest

IUCN-Magyarország: (1997): National Ecological Network (ed: F., Németh, in Hungarian)

IUCN (1997): Fishing for a Living: The Ecology and Economics of Fishponds in Central Europe. IUCN, Gland, Switzerland and Cambridge

WWF-Hungary has published several booklets dealing with management of grasslands, floodplains and also dealing with relationship between agriculture and nature conservation, possibilities for maintaining the biological diversity as follows (all are in Hungarian):

D., Dobrosi, L., Haraszthy, G., Szabó (1993): Conservation problems of Hungarian floodplains
F., Márkus (1994): Environmental impacts of pesticides in Hungary
F., Márkus (1993): Extensive agriculture and its nature conservation importance in Hungary
L., Haraszthy (1995): Possibilities to conserve the biological diversity in Hungary
F., Márkus, Sz., Nagy (1995): Harmonisation of nature conservation and agricultural policy in Hungary.

2.8 Noting COP6 Recommendation 6.14 relating to toxic chemicals and pollution, please advise of the actions taken since then "to remedy and to prevent pollution impacts affecting Ramsar Sites and other wetlands" (Operative paragraph 9).

In Hungary the decree of Government (1988) regulates the utilisation of chemicals. Using chemicals on wetlands are regulated both by the Act on Environment Protection No. LIII. of 1996 of 1995 and the Act on Nature Conservation No. LIII. of 1996 the latter one particularly articles 18 and 38, section1, respectively.

2.9 Describe what steps have been taken to incorporate wetland economic valuation techniques into natural resource planning and assessment actions.

The Act on Regional Development and Physical Planning No. XXI. of 1996 states that the point of view of environmental protection, nature conservation and landscape conservation should be incorporated into any process of development planning. The National Regional Development Council as one of the most important body for planning process include all representative of ministries including the Hungarian Ministry for Environment as well. In development planning processes the National Ecological Network shall play a fundamental role. The basic principles of NEECONET will be elaborated by the Ministry for Environment with significant inputs of other ministries. For elaboration of the NEECONET a nature conservationists-economists expert team was appointed in 1998.

2.10 Is Environmental Impact Assessment for actions potentially impacting on wetlands required under legislation in your country? Yes/No

The very first need for environmental impact assessment has been expressed by the Act No. II. of 1976. Afterwards, Decree of Government No. 86. of 1993 (VI.4.) has also expressed the necessity of impact assessments. Later on it was amended by the Decree of Government No. 67 of 1994 (V.4.).Having incorporated the requirements concerning the matter of Act on Environmental Protection, a unified Decree of Government no. 162 of 1995 (XII. 12.) sets the regulation for activities related to environmental impact assessment and authorisation procedure in connection with the issue. In accordance of the Decree of Government, a total number of 112 activities are listed that must have environmental impact assessment prior to carrying out the activity. Activities include establishing facilities (buildings, companies, factories, etc.) changing of technology, expanding or finishing industrial activities, or basic amendments of them. An Environmental impact assessment has to be carried out in two stages as follows:

- Preliminary environmental assessment. It should be elaborated on the base of predicted impacts of the planned activity to the environment.
- Detailed environmental assessment. Based upon the preliminary one, this assessment must examine all kind of impacts that may effect the surroundings. Field investigations are needed for it. The planned technology should be compared with those that are considered to be the most efficient one. Impacts that may be expected from the activity should be assessed from the point of view of public health, economy and socio-economic aspects.

2.11 Is wetland restoration and rehabilitation considered a priority in your country? Yes/No. If Yes, describe the actions that have been taken to identify wetlands in need of these actions and to mobilise resources for restoration or rehabilitation.

As the Nature Conservation Authority considers wetland restoration a high priority one among the activities, it aims to identify a list of wetlands in need of restoration. This processes is carried out by consulting other relevant organisations, mainly with national park directorates. Following the steps that have been made in wetland restoration in the past years (on Lake Velencei, Ócsa Ramsar Site, Dinnyés-Fertő and Lake Fertő Ramsar Sites) the following wetland restorations have been made since 1995:

- In Hortobágy Ramsar Site a large-scale restoration began that may have international recognition. At the first stage, the Jusztus-Feketerét has been restored, than swamps of Egyek-Pusztakócs were restored with a Danish support and as the final past, restoration has begun at Zám puszta with a Dutch fund. In the latter case the fund is available for the rehabilitation of former seasonally inundated wetland (total area is approximately 200 ha) using a water supply system that makes use of the original natural flow-paths.
- At Lake Fehér at Kardoskút Ramsar Site surrounding lands have been bought in order to restore the wetland system. There is also a plan and fund available to create a visitor and exhibition centre which fit to the objectives of Ramsar Strategic Plan.
- At saline lakes of Kiskunság restoration projects include creation saline lakes, wet grasslands since 1990. The following localities has been rehabilitated within the framework of the project: Kelemenszék (in 1991), Büdösszék (in 1995), Fehér-szék (in 1997).

2.12 Describe what actions have been taken to "encourage active and informed participation of local communities, including indigenous people, and in particular women, in the conservation and wise use of wetlands." (refer to Actions 2.7.1-4 in the Strategic Plan).

<u>At Lake Velencei, Dinnyés, Ócsa, Rétszilas Fishponds and Old Lake (Tata) Ramsar Sites</u>

The responsible national park directorate considers it an important issue to involve local communities thus maintain good relationship with educational organisations, and local governments as well.

BIHARUGRA FISHPONDS RAMSAR SITE

An information booklet will be published on the values, functions and practical information of the area. This is aimed to achieve better understanding of the wetland Site among local inhabitants and visitors.

AT KIS-BALATON RAMSAR SITE

An extremely good relationship is between Balaton Uplands NP Directorate and Kis-Balaton Regional Association. Local NGOs play significant role in scientific surveys of the Ramsar Site. Involvement of local communities is in progress, a good example for it is harvesting the reed by manpower and establishing recreational centre on an island near the wetland Site.

BALATON RAMSAR SITE

Since Lake Balaton is not under protection except a few small bays of it, involving local communities into nature conservation activities is rather difficult. Good relationship may be expected from the connection to certain angling clubs based on mutual benefits.

GEMENC

A study path and some birdwatching towers have been built on the Ramsar Site in order to strengthen the awareness of the wetland Site.

<u>Béda-Karapancsa</u>

A few bird watching towers has been built on the Ramsar Site with the same purpose that those of Gemenc.

PACSMAG FISHPONDS

An educational centre is operated throughout the year by a local NGO (local organisation of BirdLife Hungary).

SZAPORCA

Fishery activities and measures of the fishery company are planned in co-operation with responsible national park directorate.

LAKE TISZA (TISZAFÜRED OR KISKÖRE WATER RESERVIOR)

Since the Ramsar Site is also important for tourism and recreational points of view, Association of Local Governments of Lake Tisza is interested in conservation the wetland Site.
On Ágota-puszta wetland Site a wetland restoration project has been finished in 1997. During the project a local group of National Foundation of Children and Youth has been involved. A birdwatching tower has also been constructed.

LAKE FERTŐ

Around the Ramsar Site, NP directorate manages the grasslands in co-operation with farmers. Farmers can use grasslands for grazing in an extensive way.

2.13 Describe what actions have been taken to "encourage involvement of the private sector in the conservation and wise use of wetlands" (refer to Actions 2.8.1-4 in the Strategic Plan). Has this included a review of fiscal measures (taxation arrangements, etc.) to identify and remove disincentives and introduce incentives for wetlands conservation and wise use? Yes/No

Rétszilas Fishponds

Although the fishpond system is privately owned the wise use concept is being implemented on the Ramsar Site. An exhibition and visitor centre are under construction that will not only exhibit the traditional fishery activities but also the fauna and flora of the nature reserve as well as the Ramsar Site. NP directorate offers advice for the fishery company continuously.

SALINE LAKES OF KISKUNSÁG, PUSZTASZER, MÁRTÉLY AND LAKE KOLON RAMSAR SITES

On the Ramsar Sites of Kiskunság National Park Directorate, the relationship and the co-operation is excellent with local governments, particularly on the field of eco-tourism and educational and public awareness campaigns.

LAKE BALATON, KIS-BALATON RAMSAR SITES

Involvement of private sector in management of wetland sites is carried out by two ways: harvesting reed and grazing grassland around and inside the Ramsar Sites.

GEMENC

The water management authority is involved in the implementation of the wetland restoration project.

HORTOBÁGY

Around the Ramsar Site management measures are carried out with the involvement of farmers and landowners. Farmers are far interested in nature conservation measures due to the benefits of spring flooding to the meadows.

On the territory of NP directorate, at Kecskéri-puszta Nature Reserve an 8 ha swamp has been restored by a private fishery company and a local NGO (NIMFEA Nature Conservation Society). Fishery activities are carried out as a part of nature conservation management of the wetland.

Although almost the total territory is state-owned, farmers and fishermen play role in management of the wetland.

Ramsar Strategic Plan - General Objective 3
To raise awareness of wetland values and functions throughout the world and at all levels

3.1 Is there a government-run national programme for Education and Public Awareness in your country which focuses on, or includes, wetlands? Yes/No?
If yes, what are the priority actions under this programme and who are the target groups? (Refer also to question 9.4)

Among the governmental activities, the Ministry for Environment is the responsible body to develop and implement projects aiming at educational and public awareness campaigns on wetland conservation. However, there is no such project focusing exactly on wetlands. Among PR activities of the Ministry for Environment, project on Outstanding Days should be noted. In accordance with the tradition and international requirements, world days, including World Wetland Day is are celebrated every year.
The National Environmental Strategy was initiated by 13 NGOs in June, 1997. The strategy has been elaborated and approved and it contains guidelines, guidance for education in the point of view of ecosystem and conservation.

3.2 Describe the steps taken to have wetlands issues and ramsar's Wise Use principles included as part of the curricula of educational institutions. Has this been at all levels of education (primary, secondary, tertiary and adult)? Please give details.

The National Educational Master Plan deals with environmental issues, however the extent of nature conservation and protection of wetlands are far from the required level . The Master plan has been elaborated by the Ministry responsible for education for the primary, secondary levels of the educational system.

Ramsar Strategic Plan - General Objective 4
To reinforce the capacity of institutions in each Contracting Party to achieve conservation and wise use of wetlands.

4.1 Describe the mechanisms in place, or being introduced, to increase cooperation between the various institutions responsible for actions which can have an impact on the conservation and wise use of wetlands. If one of the mechanisms is a National Ramsar/Wetlands Committee, please describe its composition, functions and modus operandi.

Based on Recommendation c. 5.7. of the Convention on Wetlands (Ramsar, Iran, 1971) Authority of Nature Conservation has established the Hungarian Ramsar Committee in 1995. The committee is composed of ministerial bodies that are concerned in conservation, management of wetland, scientific institutions and NGO-s. Terms of reference of the committee are listed below.

Reasons for establishing the committee:

- requirements arising from increased need for understanding related to the implementation of Ramsar Convention, in response and putting together responsible bodies into an organisation;
- to promote the distribution of decisions taken by Conferences of the Contracting Parties in Hungary;
- to help the work on implementation of the decisions of the Ministry for Environment.

The aims of operation of the committee:

- implementation of the above-mentioned objectives;
- to promote better understanding of the Convention;
- to create forum on which both governmental and non-governmental organisations may provide inputs for conservation of the wetlands;
- to create possibilities for ongoing consultation with the Secretariat (Ramsar Bureau);
- to develop guidelines for the ownership of wetland Sites on a strategic way;

- to elaborate and put forward for approval of the strategy for wise use and conservation of wetlands;
- evaluation of reports, reviews and plans related to Hungarian Ramsar Sites,
- to introduce and assist for the implementation of management practices recommended by the Convention;
- to prepare the introduction of zonation system recommended and approved by the Convention;
- to identify and evaluate wetlands that may be designated for the list of International Importance;
- to help to formulate unified position for matters related to the Convention;
- to assist and support the Hungarian Chair of the Ramsar Standing Committee;
- to assist the Hungarian member in the STRP.

The Committee is more an informal body holding its meeting twice or three times a year, the last one was held in November, 1997.

The other cross-sectoral committee that should be noted is the Nature Conservation Advisory Board of Authority for Nature Conservation.

4.2 Of the following, indicate which have been undertaken:
a. a review to identify the training needs of institutions and individuals concerned with the conservation and wise use of wetlands Yes/No? If yes, please indicate the major findings of the review.
b. a review to identify training opportunities for these people both within your country and in other countries. Yes/No?
c. the development of training modules or a training programme specifically for wetland managers. If yes, please give details.
d. people from your country have gained wetland-related training either within or outside the country. Yes/No? If yes, please give details.

a) and b) There were no such actions taken in Hungary.

c) A „training for trainers" course was held in 1995 by the Kiskunság National Park Directorate.

d) Staff members were participating on the International Course on Wetland Management, namely one from the Ministry for Environment, two from Hortobágy and Duna-Ipoly NP Directorates. A staff member has participated on a study tour in Canada on which he was asked to lead a wetland monitoring project. Following are listed the study tours and conferences on which staff members of national park directorates participated:

- Conference on River Dráva;
- Conference on River Dráva and Mura, presentation on principles of oxbow lake rehabilitation;
- Workshop on wetlands organised by the Academy of Sciences, Pécs;
- Study tour in Camargue, France (supported by FNNP);
- Conference of International Mire Conservation Group in Norway, 1995;
- Study tour and working in British Columbia, Canada;
- Raising Public Awareness for Nature Conservation organised by ECNC, 1995;
- 1996, Tiszafüred Meeting of STRP;
- Research Management and Nature Conservation in Aggtelek, Hungary, 1996;
- NATO Advanced Research Workshop Contribution of National Parks and Protected Areas to Heritage Conservation (Cracow, 1996);
- Water Quality and Environmental Management (University of Kossuth, 1996, in the framework of the 1st International ICER TEMPUS Ph.D. Seminar);
- Hungarian Managers Visit to UK National Parks;
- Study tour in Spain organised by EUROPARC;
- EUROSITE Matra Workshops in Czech Republic, 1998.

Ramsar Strategic Plan - General Objective 5
To ensure the conservation of all Sites included in the List of Wetlands of International Importance (Ramsar List).

5.1 Of the Ramsar Sites in your country, how many have formal management plans:
a. being prepared?
b. fully prepared?
c. being implemented?
Please indicate in the attached table of Ramsar Sites which Sites these are and what category they fall into.

a) Under preparation for 13 Ramsar Sites
b) and c) Completely prepared and being implemented for 6 Sites (see attachment)
Among the 19 Hungarian Ramsar Sites in total 6 have thoroughly elaborated nature conservation management plan that are based on EUROSITE guidelines on management planning. Since EUROSITE guidelines are quite similar to those of Ramsar, there was no reason to formulate management plan based on Ramsar guidelines. For the Dinnyés Fertő, Saline lakes of Kiskunság, Mártély, Pusztaszer and Lake Kolon Ramsar Sites nature conservation management plans have been prepared in 1996 therefore they are now under implementation. For Lake Fertő, a detailed MP has been prepared in 1997, thus they have already one year experience of implementation.

5.2 Of the management plans referred to above, which ones have included a monitoring scheme or programme to allow changes in ecological character to be detected? Please indicate this in the attached table of Ramsar Sites also.

All of the prepared and being implemented nature conservation management plans of Ramsar Sites include monitoring schemes and those of under preparation will include such activities. In addition for two Ramsar Sites (Gemenc and Lake Fertő) there are water quality monitoring surveys. Moreover, at Pacsmag Fishponds Ramsar Site there is a monitoring scheme of waterbirds and passerines (including census and ringing). In order to monitor the ecological character, a complex monitoring has been implemented since 1993 at Kis-Balaton Ramsar Site. At Ramsar Sites of Béda-Karapancsa and Gemenc: waterbird and raptor census, moreover fish monitoring and water plant monitoring schemes are being carried out. At lake Balaton an intensive monitoring survey is carried out to investigate the changes in water quality. In total there are 29 sampling plots on the lake. In 1994 a rather intensive hydrobiological activity has been observed with high algae content. Neither in 1995 nor in 1996 has not been observed such movements, thus water quality has been improved a bit.

5.3 Has there been a change in the ecological character (either positive or negative) at any of your Ramsar Sites or is this likely to occur in the near future? Yes/No.
If Yes, please give details.

<u>Lake Velencei, Dinnyés Fertő, Ócsa, Rétszilas Fishponds and Old Lake (Tata)</u>
During the past triennium there has not been negative ecological change taken place on these Ramsar Sites. However, as a result of proper management measures of water level, wetland restoration (small-scale) works and harvesting of reed in accordance with nature conservation point of view positive ecological changes occurred.
Kardoskút

The wetland has been designated as a Ramsar Site since 1979. On the buffer zone of the Ramsar Site there are still agricultural canals that were created in the end of the sixties. By filling up these canals a significant positive change would be happen on the wetland Site.

BODROGZUG

Neither positive nor negative ecological changes has taken place in the Ramsar Site. The management planning process which is underway will include a monitoring scheme for the wetland Site.

GEMENC, BEDA-KARAPANCSA, PACSMAG FISHPONDS, SZAPORCA

One of the most important adverse factor is the drying out of the floodplains (Gemenc, Béda-Karapancsa) along the main water course due to the deepening of riverbeds, rapid process of succession (as a consequence of shortage of water and nutrient rich water), intensified activities of forestry. Succession of vegetation is slowly

approaching its final, climax stage at Szaporca, thus turning the habitats less diverse. At Pacsmag fishponds reedbeds are expanding and deposition of sediment may have impacts to the ecological character.

HORTOBÁGY

Having finished the wetland restoration project of the Egyek-Pusztakócs swamp in 1997, flooding of the all swamp areas of Hortobágy that are designated to the List of Wetlands of International Importance became possible creating positive impact on the ecological character of the habitats.

SALINE LAKES OF KISKUNSÁG, PUSZTASZER, MÁRTÉLY, LAKE KOLON AT IZSÁK

NO CHANGES TOOK PLACE ON THESE SITES.

KIS-BALATON

The filling up section 1 resulted adverse habitat changes since 1992. Some parts of the system is less diverse in terms of biology than it was before 1992.

LAKE FERTŐ

A wetland restoration project launched in 1989 resulted significant positive changes on the south-eastern part of the lake. The agricultural canals network has been designed in the way that no polluted water (either fertilizer or chemical polluted) is allowed to enter the lake. On the catchment of the only inlet watercourse of Lake Fertő (called streamlet Rákos) a water purification station was built and a biological filter is being built at Sopronkőhida town with American support.

5.4 In the case of Montreux Record Ramsar Sites where the Management Guidance Procedure has been applied, what is the status of the implementation of the MGP report recommendations? What is the expected time-frame for removing the Site from the Montreux Record?

Hungary has no Ramsar Site that is on the Montreux Record.

5.5 For those countries referred to in COP6 Recommendations 6.17.1-4, "Ramsar Sites in the Territories of Specific Contracting Parties", please provide advice on the actions that have been taken in response to the issues raised at that time.

Since COP6 that was held in 1996, Brisbane, Hungarian authorities has had taken further steps for the extension of seasonally designation of two Ramsar Sites. Although at the Lake Balaton there are a great number of tourism and economic interests, discussions are still going on for achieving the Ramsar status on year-round basis. Fulfilling the requirements stated in Recommendation 6.17, Hungary has announced the full-year Ramsar status for Lake Old at Tata, when 6 new Sites and two extensions had been added to the List.

Ramsar Strategic Plan - General Objective 6
To designate for the Ramsar List those wetlands which meet the Convention's criteria, especially wetland types still under-represented in the List and transfrontier wetlands.

6.1 Has a national inventory of wetlands been prepared for your country? Yes/No.

The national wetland inventory project mentioned in the 2nd National Report of Hungary prepared for the COP6, will be implemented in different stages in accordance with the new nature conservation legislation (Act on Nature Conservation No. LIII of 1996) and will be elaborated by Hortobágy National Park Directorate. Inventories for *ex lege* protected wetlands (springs, bogs, swallow holes and saline lakes-stated in the 1996 nature conservation act) shall be announced by the

Minister responsible for nature conservation. Inventories for **saline lakes** and **bogs** are expected to be finalised by 1999. An inventory of Hungarian **springs** has been published by VITUKI (Scientific Institute for Water) in 1960 however this work needs to be updated. **Oxbow lakes** should be inventorised according to the Decree of Hungarian Parliament No 24 of 1997. In the scope of the project the list of oxbow lakes has been finalised for the Valley of Tisza, the hydrological aspects of Valley of Danube. This latter should be extended with nature conservation aspects. The manual on wetland management mentioned above will include a description of the types of wetland habitats of Hungary.

6.2 Does there exist a list or directory of "important" wetlands for your country or region? Yes/No.
If yes, please provide details of when it was finalised, where it is kept, what criteria for "important" were used, and the types of information it contains.

The above mentioned inventories (see 6.1.) have been completed or under preparation. The criteria for identification of the important wetlands have been incorporated in the text of Act on Nature Conservation (1996) as follows:
"**Ex lege**" protected wetlands are clarified in Article 23 (see2.1.). **Strictly protected wetlands** are those nature reserves that require higher level of protection. **Protected natural areas** are any area declared to be protected or strictly protected by the Act on Nature Conservation or any other provision of law. **Natural areas** are primarily characterised by near-natural conditions. Natural areas and **locally protected areas** are on similar status of protection. The list of natural areas will be announced by the ministers responsible for both agriculture and nature conservation.

6.3 If it is known, please provide an estimate of the area of wetlands in your country at present and any information on rates of loss or conversion to other activities.
If this information is available, please indicate what definition of "wetland" was used.

Wetlands cover approximately 2% of the territory of the country, which is incomparably less, to those of before large river regulations. More details can be found in 2.1. The rate of wetland loss is unknown.
One of the accepted wetland definition is as follows (by ecologist professors dr. Gy. Dévai, dr. Cs. Aradi, dr. A. Tóth, dr. S. Nagy):

With special respect to Hungary, the term wetland refers to water bodies having an area-related mean water depth below 2 m at mean water level, parts of deeper waters overgrown or fringed by a macrophyte cover (hydrophyte and/or marginal vegetation) on at least on-third of their whole extent, as well as areas with hydromorphic soils the upper layer of which being continuously or seasonally waterlogged and therefore supporting characteristic vegetation (reedswamp, fen, tall sedge and tall herb vegetation, marshy meadows, marsh weed communities, vegetation of salty shores and shoals/sandbanks, wet saline meadows (puszta) and sheer alkali Sites, forested fen (peat swamp forest), willow carr, soft and hard wood riparian forest, riparian alder grove) or their clearly recognisable remains.

6.4 Have any actions been taken in response to the COP6 Resolutions and Recommendations that Contracting Parties should give priority to listing Wetlands of International Importance which:
a. meet the criteria for fish habitat (Resolution VI.2),
b. meet the 1% criterion for waterbird populations using data provided by the International Waterfowl Census (Resolution VI.4),
c. are subterranean karst or cave wetland systems (Resolution VI.5),
d. are peatland ecosystems (Recommendation 6.1)
e. are coral reefs and associated systems (Recommendation 6.7)
f. are under-represented wetland types (which apart from d. and e. above include mangroves and sea grass beds) (Strategic Plan Action 6.2.3)

Yes/No? If yes, please describe these actions.

Hungary has designated 6 new sites and 2 extensions to the List of Wetlands of International Importance. Although the new criteria were not the main reasons for the designation of the above mentioned sites, Hungary has started the preparatory work for the designation of Aggtelek subterranean hydrological system to the Ramsar List. During this project, Hungary has proposed a Modified Information Sheet for Ramsar (elaborated by Dr. Ödön Rádai) and participated actively in the subregional workshop on "karst and subterranean wetlands" held in Slovenia, 1998.

6.5 If your government indicated at COP6 that it would be proceeding to list further specific Sites, please advise of the status of this action.

Hungary has significantly extended its territory of Ramsar Sites in 1997 by adding 6 new sites and 2 extensions for the List of Wetlands of International Importance. It made the Hungarian list a total number of 150,000 hectares.

6.6 Please advise which of the Sites included in the Ramsar List from your country are transfrontier wetlands (Refer also to 7.1).

Since Lake Fertő, the Hungarian part has been designated to the List and extended in 1997, the whole lake became Ramsar Site. The Austrian part of the lake has been already designated to the List.

6.7 Describe any plans, or actions being taken for further transfrontier Sites to be listed (Refer also to 7.1).

Hungary has exceptionally good relationship with Austrian, Slovenian, Romanian, Croatian, Serbian, and Ukranian ministerial bodies responsible for nature conservation. Cooperation covers transboundary nature reserves, Ramsar Sites, exchange of expertise.

Biharugra Fishponds

Close to the wetland site on the Romanian territory there is an important wetland (Cséfai fishponds) and natural forest (Radványi-erdő) that are expected to be protected in Romania. After declaration as protected areas a transboundary wetland (Ramsar Site) can be formulated. There is an agreement on the level of state secretaries of the Ministries for Environment of Romania and Hungary.

Béda-Karapancsa

Co-operation is based on agreement between Hungarian and Croatian state secretaries to designate "Kopaczki Rit" to the list establishing transboundary Ramsar wetland and to establish a transboundary national park network.

Upper-Tisza

Based on an NGO proposal for establishing a transboundary wetland area in the Upper Tisza region there is an intention to build cross-ministerial co-operation between Romanian, Ukrainian, Slovakian and Hungarian nature conservation authorities.

River Ipoly

A co-operation process has been started for establishing transboundary Ramsar Site along the river (River Ipoly-Poiplia).

Ramsar Strategic Plan - General Objective 7
To mobilise international cooperation and financial assistance for wetland conservation and wise use in collaboration with other conventions and agencies, both governmental and non-governmental.

7.1 Briefly describe any bilateral or multilateral activities that have been taken, are under way, or are planned for the management of transfrontier wetlands or their watersheds/catchments (Refer also to 6.6 and 6.7).

Both side of the Lake Fertő of Hungary /Neusidlersee of Austria are under protection creating a transboundary national park system. Co-operation, planing processes and joint strategies are governed by the Austrian-Hungarian National Park Committee. Water level management are regulated by an agreement on Austrian-Hungarian Convention on Water management. In the field of joint submission of proposals to international organisations, for instance to PHARE CBC INTERREG EU the national parks apply jointly. The monitoring surveys of waterfowl and waders are being carried out jointly as well.

7.2 Do you have Ramsar Sites that are "twinned" with others, either nationally or internationally? Yes/No.
If yes, please give details.

Lake Kolon at Izsák:
In the framework of EUROSITE Twinning Project, the UK RSPB Reserve Leghorn Moss has been designated as a twin for the Site.

Lake Fertő
Since 1982, the Austrian part of the lake has been designated to the Ramsar List, the whole lake forms a uniform Ramsar Site (Ramsar-Gebiet Neusidler See Seewinkel). Partnership is mainly between national park directorates.

7.3 Where your country is also a signatory of any of the following Conventions, describe what mechanism(s) exist to assist regular dialogue and cooperative actions between the personnel responsible for their implementation and the Ramsar Administrative Authority:
a. Convention on Biological Diversity
b. Framework Convention on Climate Change
c. Convention to Combat Desertification
d. Convention on Migratory Species
e. World Heritage Convention

As most of the administrative authorities of environment-related conventions are in the Ministry for Environment, regular dialogue and close co-operations exist between personnel responsible for the implementation of the above-mentioned conventions. In the case of a, b, d, e, the main responsibility is in the Ministry for Environment.
The Republic of Hungary has approved or ratified the nature conservation-related conventions as follows:
- Convention on Wetlands of International Importance Especially as Waterfowl habitat (since 1979),
- Convention on Concerning the Protection of World Cultural and Natural Hertiage (since 1985),
- Convention on Conservation of Migratory Species of Wild Animals (since 1983),
- Convention on Conservation of European Wildlife and Natural Habitats (since 1989),

- Convention on Biological Diversity (since 1994),
- Convention on International Trade in Endangered Species of Wild Flora and Fauna (since 1985),
- Framework Convention on Climate Change (since 1994),
- Agreement on the Conservation of African-Eurasian Migratory Waterbirds (the Final Act was approved).

The Temporary Secretariat of Danube Basin Ecological Convention (Ministry for Environment, Budapest) has been working on its mandate that was given by the previous conference of experts. Document entitled " *Declaration of the Ministers Responsible for (the) Environment on the Ecological Protection of the Danube Basin* (draft) and *Danube Basin Nature Convention* (draft) have been prepared. Both documents will be submitted to conference of experts in 1999.

7.4 Is your country cooperating as part of any bilateral or multilateral activities directed at the conservation of migratory wetland species? Yes/No.
If yes, please provide details.

Under the aegis of Bonn Convention (Convention on Conservation of Migratory Species of Wild Animals) Hungary has been working actively on the conservation of migratory species of animals. Moreover, Hungary has accepted the Memorandum of Understanding on the Conservation of Slender-billed Curlew.

7.5 Are there multilateral and/or bilateral donors supporting projects which contribute to implementation of the Ramsar Convention in your country? Yes/No.

Although the Republic of Hungary is not involved in multilateral donor supporting project, in the field of bilateral co-operation and donor supporting projects, Hungary has extremely good relationship with the Netherlands and Denmark.

7.6 Does your government make an annual budgetary allocation to support the conservation and wise use of wetlands within your country? Yes/No.

Executive plan of the National Environmental Programme sets the budgetary fund allocations related to wetlands. The following main issues are connected to wetlands:

- Executive plan for protection of ecological status and improving the water quality of lake Balaton,
- Great Plain project (establishing environmental monitoring network, objectives for water quality improvement of oxbow lakes along rivers,
- Project for water supply in Kiskunság (large sandy alluvial plain between river Danube and Tisza).
- Project of national biodiversity monitoring system.

If yes, is this a specific allocation to a wetlands programme or as part of a larger environment or natural resource management budget?

It is mainly part of a larger project which aims to improve not only the conservation status of a specific region, but also the human welfare.

7.7 If your country has a development assistance programme, does it include funds earmarked for wetland conservation and wise use in other countries? Yes/No.

Hungary has no such programme.

7.8 Is there a formal process in place for consultation between the Ramsar Administrative Authority and the development assistance programme in your country, where one exists? Yes/No

There is no consultation (see previous point)

Ramsar Strategic Plan - General Objective 8
To provide the Convention with the required institutional mechanisms and resources.

8.1 Has your government made voluntary financial contributions, other than the invoiced contributions or to the Small Grants Fund, to further the work of the Convention globally? Yes/No.
If yes, please provide details.

Republic of Hungary has made a Swiss franc 10.000 voluntary financial contribution for achieving the objectives of the Convention on Wetlands in 1997.

8.2 If your country is in arrears with the payment of its annual contributions to the Ramsar Convention, please indicate the reasons for this situation and the prospects for paying these arrears in the near future.

Hungary has paid its dues regularly.

Optional section - Participation of non-government organizations in the implementation of the Convention

These are optional questions relating to cooperation with and involvement of non-government organizations in the implementation of the Convention.
At COP6 some 42 NGOs made the "Brisbane NGO pledge of support for the Ramsar Convention". The Standing Committee agreed that for COP7 there should be an effort made to gauge the level and type of cooperation which is occurring between government Administrative Authorities and the national and international NGOs with an interest in wetlands issues.
In this optional section of the National Report, you are asked to describe the nature of the cooperation and relationship with any other international, regional, national and provincial NGOs operating within your country.

9.1 Approximately how many NGOs have wetlands as part of their regular "business" in your country?
Please break this down between international, regional and national/provincial organizations.

From the total number 538 of non governmental organisations registered in the book entitled Green Network of Hungary 1996/1997 there are approximately 160, which noted the interests to wetlands in

their names or activities. Among these, there are 20-30 on regional level (that works on or deals with two or more Hungarian counties) and about 10 with international co-operations.

9.2 Is there a regular forum or mechanism through which these NGOs express their views on wetland conservation and Ramsar implementation:
a. to each other? Yes/No
b. to the government? Yes/No
If yes in either case, please give details.

Since the leading non governmental organisations (BirdLife Hungary and WWF Hungarian Office) delegates members to the Hungarian Ramsar Committee, that is the one and most important forum to exchange and share the experiences, knowledge on wetlands.

9.3 Does your government include one or more NGO representatives on its official delegation to Ramsar COPs? Yes/No

So far there were no representatives of non governmental organisations on official Ramsar meetings.

9.4 Do any of the NGOs run programmes aimed at Education and Public Awareness about wetlands in your country? Yes/No.
If yes, please give details (Refer also to question 3.1).

BirdLife Hungary has a section called Division on Conservation of Waterbirds that runs regional education an public awareness projects.
The Hungarian Riverwatch NGO also maintains such activities.

9.5 Where they exist, do Ramsar Site management advisory committees include NGO representatives?
If yes, please give details

There are no formal advisory body for the management of Ramsar Site or other wetlands.

9.6 Describe the themes of the Convention (refer to General Objectives 1-8 of the Strategic Plan) where you perceive the national/provincial NGOs to be most active.

General Objective 2,3,5,7. (Wise use of wetlands, public awareness, conservation of wetlands, mobilisation international and national financial assistance for the conservation of wetlands.

Final comments:

10.1 General comments on implementation of the Ramsar Strategic Plan.
10.2 Observations concerning the functioning of, relations with, and services provided by:
a. The Ramsar Standing Committee
b. The Ramsar Scientific and Technical Review Panel
c. The Ramsar Bureau
d. The Ramsar NGO partners
10.3 Any other general observations and/or recommendations for the future.

c, The Republic of Hungary highly appreciates the expert activities and the efficiency of the whole staff of Ramsar Bureau (Gland, Switzerland).
d, Since the Ministry for Environment is a member of the IUCN World Conservation Union, and the Wetlands International a good relationship is maintained with those NGO Partners. The Ministry has similar connection to BirdLife International that has its own Hungarian partner (Hungarian Ornithological and Nature Protection Society).

References

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Compiled by:

…….

András Bőhm
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Approved by:

…….

dr. János Tardy PhD
Deputy State Secretary

ATTACHMENT 2

Act No. LIII. of 1996 on Nature Conservation in Hungary

The Parliament of the Republic of Hungary, recognising that the country's natural heritage forms a specific and irretrievable part of the national wealth, and that its conservation for the present and future generations, the maintenance, management and development of the countryside, the economic and wise use of natural resources, the safeguarding of biodiversity and the establishment of a harmonic relation between man and nature, which is the basic condition for the survival of mankind, all require that provisions for the conservation of nature be made in compliance with our international obligations, adopts the following Act:

Part One

General directions

The purposes of this Act

Article 1

The purposes of this Act are-

a) to make provision for the general conservation of natural values and areas, their natural systems and biodiversity as well as for the promotion of their scientific cognition and sustainable use; to meet the society's need for a healthy and aesthetic natural environment;

b) to foster the traditions of nature conservation and improve its achievements; to protect, conserve, maintain and enhance Hungary's natural values and areas.

Article 2

(1) The provisions of this law shall be observed while-

a) evaluating, safeguarding, maintaining, restoring and developing any natural values or areas;

b) sustaining the functions of and conserving the flora and fauna as well as their habitats, biodiversity, the natural systems and natural resources, in accordance with the international conventions to which the Republic of Hungary has signed;

c) defining the rights and liabilities of the Government, natural or legal persons as well as other organisations in relation to nature conservation.

d) enforcing the interests of nature conservation, and especially during the formation of economic, financial or educational policies or control systems;

e) exercising any registering, preventing, planning, managing, regulatory or authoritative functions in relation to nature conservation;

f) supporting research, demonstrations, and instructional, educational, propagating or scientific activities in relation to nature conservation;

g) determining nature conservation liabilities;

h) establishing and developing the institutional system of nature conservation.

(2) The task of nature conservation is-

a) to identify which natural values and areas deserve strict protection out of geological, hydrological, botanical, zoological, scenic, cultural, historical or any other public interest;

b) to determine the dangers threatening protected natural values or areas;

c) to prevent or avert any damage to protected natural values and areas, and to reduce or to eliminate damage already occurred;

d) to conserve protected natural values and areas for the present and future generations, and, if necessary, to restore them or ensure their maintenance.

The Scope of This Act

Article 3

(1) Within this Act shall fall all natural values and areas, all activities connected with them and all tasks of nature conservation resulting from international conventions or cooperation, except if otherwise provided by international conventions.

(2) The provisions of Act No. LIII. of 1995 on the General Environmental Protection Rules (Environmental Law, hereafter E.L.) shall be applied to all issues connected with nature conservation that are not covered by this Act.

The Terms Used in This Act

Article 4

For the purposes of this Act:

a) "natural value" means any natural resource (E.L. Article 4 paragraph c/); the flora, the fauna and their abiotic environment indispensable for their survival; any environmental element (E.L. Article 4 paragraph a/) defined as a natural value in this Act (including protected natural values), even if it is not a natural resource;

b) "natural area" means any area primarily characterised by near-natural conditions;

c) "natural conditions" means the conditions of habitats, landscapes and communities whose evolution has either not at all or only insignificantly been influenced by man - with the exception of reconstruction - and, consequently, the processes that take place in them are mostly characterised by self-regulation;

d) "near-natural conditions" means the conditions of habitats, landscapes and communities whose evolution has been slightly influenced by man (creating conditions similar to natural ones), but the processes that take place in them are mostly characterised by self-regulation and they are able to survive without direct human manipulation;

e) "protected natural value" (value subject to nature conservation) means any cave, mineral, mineral association or fossil declared to be protected or strictly protected - given high priority nature conservation status - by this Act or any other provision of law as well as any living organism with a similar status in all stages and periods of development, its derivatives and communities;

f) "living organisms" means the species, subspecies and varieties (hereafter referred to jointly as species) of micro-organisms, fungi, plants and animals;

g) "protected natural area" means any area declared to be protected or strictly protected (given high priority nature conservation status) by this Act or any other provision of law;

h) "habitat" means a confinable unit of space where a certain living organism, its population or a community of organisms occur within a natural system, and where all environmental conditions necessary for their evolution, survival and multiplication are provided;

i) "biodiversity" means the multiformity of the flora and fauna, including the genetical (introspecific) diversity and the multiformity of the various species, their communities and that of the natural systems;

j) "natural (ecological) system" means a dynamically changing and natural unit of living organisms, their communities and abiotic environment;

k) "community" means an organised unit of the flora and fauna in which the populations of different living organisms coexist in a defined habitat with a characteristic pattern of interrelations;

l) "sustainable use" means the use of nature's elements in a manner and at a rate that does not exhaust their regenerative abilities or lead to a decrease in natural resources and biological diversity, thereby maintaining their inherent potential for satisfying the demands and needs of present and future generations.

m) "nature-friendly management" (as an inherent part of sustainable use) refers to processes, methods, types of cultivation, technologies, or other forms of conduct in connection with nature that influence natural resources, natural areas and biodiversity to such an extent that their natural or near-natural state is sustained.

Basic Principles

Article 5

(1) It is the obligation of every natural or legal person as well as other organisations to protect nature. In order to do so, they are obliged to co-operate to a reasonable extent in preventing dangerous situations and damage, alleviating any such damage, eliminating the consequences of any such damage, and restoring the conditions that existed prior to the damage.

(2) Natural values and areas may only be exploited to such extent that their biodiversity, the proper functioning of their essential natural systems and the processes of these systems be maintained;

(3) The interests of nature conservation shall be taken into consideration during national economy planning and regulation, in the course of any economic, land and settlement development as well as land-use planning and also while taking authoritative measures.

(4) In the interest of nature conservation, the Republic of Hungary shall co-operate with other governments and international organisations and participate in international nature conservation conventions. The Republic of Hungary shall take into account nature conservation interests of other governments even where such conventions do not apply.

Part Two

The General Protection of Natural Values and Natural Areas

Landscape Protection

Article 6

(1) "Landscape" means a confinable part of Earth's surface with a particular structure and characteristics, specific natural values and natural systems combined with the characteristic features of human culture, where the forces of nature and the artificial (man-made) environmental elements coexist and interact.

(2) The natural or near-natural state of landscapes shall be preserved while utilising landscapes and natural values; moreover, provision shall be made for the maintenance of natural values, natural systems and unique landscape features which determine the character and aesthetic endowments of landscapes.

(3) "Unique landscape feature" means a natural value or natural formation characteristic to a particular landscape or a man-made yet inherent element of the landscape which has natural, historical, cultural, scientific or aesthetic significance for society.

(4) The determination and registration of unique landscape features shall be the task of the regional administrative bodies of nature conservation (National Park Directorates or Nature Conservation Directorates, hereafter jointly Directorates).

(5) The regional plan shall contain an inventory of the unique landscape features.

Article 7

(1) During the use and development of natural areas, it shall be ensured (taking account of traditional land use techniques) that the character of the landscape, its aesthetic and natural values as well as its characteristic natural systems and unique features are conserved.

(2) In order to conserve the character of the landscape, the natural values, unique landscape features and aesthetic endowments:

a) provision shall be made for the integration into the landscape of new facilities (buildings, structures, installations and linear structures (roads, railways, telegraph wires, etc.)) on exterior areas of settlements, in order to harmonise them functionally and aesthetically with natural values and the artificial environment;

b) provision shall be made for the determination of the new function of facilities, buildings, structures, installations and linear structures permanently withdrawn from use; in the event of a lack of such determination, provision shall be made for their liquidation, demolition or for the restoration of the territory in question in accordance with the character of the landscape;

c) in the course of regional as well as settlement planning and development, and especially in land utilisation, parcelling out, construction or land use, special attention shall be paid to the conservation of natural values, natural systems, unique landscape features and the scenery;

d) change in the use of land shall only be permitted considering the natural values, the character and structure of the landscape created by the traditional, nature-friendly land use techniques;

e) it shall be ensured that the location, size, shape, function and number of the facilities, buildings, structures and installations related to agriculture are adapted to the character of the landscape;

f) superficial damage to the landscape shall be restored in compliance with the character of the landscape;

g) motorways and other linear structures which cross the known migration routes of wild animals shall be constructed so that the safe passage of wild animals be ensured at convenient intervals;

h) the maintenance of characteristic landscape elements shall be ensured.

(3) exterior areas of settlements and especially natural areas may only be reclassified as interior areas of settlements only if it does not result in an irretrievable damage to the character, aesthetic or natural value of the landscape.

(4) In order to enforce the provisions for landscape protection, the Directorate shall co-operate act as a co-operating authority in all procedures in relation to unique landscape features as well as to the activities specified in paragraph (2) and determined by a Government Decree.

General Provisions for the Conservation of Wildlife

Article 8

(1) The conservation of wild organisms, their populations and communities shall be ensured together with the protection of their habitats.

(2) "Native organism" means any wild creature which lived or still lives in the natural geographical region of the Carpathian Basin in the last two thousand years - and not as a result of introduction (be it intentional or not).

(3) "Introduced organism" means any organism which has become part of Hungary's flora or fauna due to man's intentional or unintentional introduction.

(4) "Harmful introduced species" means any living organism which does not qualify as native from the phytogeographical or zoogeographical point of view, and in case it establishes and adapts itself, it may be capable of modifying the natural processes of the Hungarian wildlife communities unfavourably for the native species.

(5) "Resettling species" means any native living species which once became extinct in Hungary, but by ways of natural range expansion reappears in the Hungarian flora or fauna.

(6) The provisions made for wild organisms apply to each individual of the species in every stage of development, and to every form, state or part of individual specimens.

Article 9

(1) Any economic, management or commercial activities which involve the utilisation and burdening of wild organisms shall be exercised so that biodiversity and the ability of natural values and systems to function properly be maintained.

(2) It shall be prohibited to collect or destroy wild organisms, to capture or destroy wild animals with such techniques or instruments which involve torturing, indiscriminate or mass destruction or cause injury.

(3) It shall be prohibited to modify artificially the genetic material of wild organisms, distribute the individual so produced or or transfer it intentionally to another wildlife community.

(4) The introduction of any new organism (new to Hungary from a phytogeographical or zoogeographical aspect) may only be authorised if this colonisation does not harm natural processes within Hungary's communities for the disadvantage of native species.

(5) The provisions made under paragraphs (1)-(3) above do not apply to the regulation (defined in a separate provision of law) of the populations of living organisms carried out in the interest of human health care, or the protection of cultivated plants or livestock. Neither do they apply to the normal agricultural management of living organisms.

(6) The production of genetically modified organisms which influence biodiversity, the experiments carried out with them, their breeding, distribution, exportation and importation shall be exercised by the conditions and methods laid down in a separate provision of law and in compliance with the provisions of this law.

Article 10

(1) Wild organisms shall be exported, imported, transported through the country, propagated within artificial conditions, kept, bred routinely, hybridised, released into nature or marketed by the conditions and methods laid down in Government Decrees.

(2) Any new technique serving the purpose of decreasing the population of a wild organism shall only be introduced in pursuance of a consent granted by the Ministry for Environment and Regional Policy (hereafter the Ministry).

Article 11

(1) It shall be ensured in the course of game management, hunting, fishing and angling that the interests of nature conservation are enforced and sustainable use is practised (which means the maintenance of wild game animal and coarse fish species, based on biodiversity).

(2) The hunting of game animals and the fishing (angling) of coarse fish species shall not be of such extent as to threaten the survival or the diversity of the natural population of the species.

(3) The minister responsible for forest and game management, fishing and agriculture (hereafter: the Minister of Agriculture) and the minister responsible for environment and regional policy (hereafter the Minister) shall by Joint Decree provide for the range of species whose fishing (or angling) is prohibited, for prohibitions as regards fishing (or angling) and for the close seasons of the different species.

(4) The provisions of the Act on Game Protection and Game Management shall be pursued while determining the range of game species, and the time of open and close seasons.

Article 12

(1) If in any territory the population of game animal or coarse fish species becomes endangered by hunting, fishing (angling) or any other factor, the Directorate may initiate, at the authorities responsible for hunting (fishing), an order on the restriction or prohibition of hunting or fishing (angling).

(2) In the event of the over-population of game animal or coarse fish species, or in order to liquidate non-native or non-naturalised species (which are alien to the Hungarian fauna) the Directorate may initiate, at the authorities responsible for hunting (fishing), an order of population control or liquidation.

Article 13

(1) If the methods of management, and especially game management, hunting, fishing or angling used in natural areas seriously offend or threaten the interests of nature conservation, the Directorate shall initiate the restriction or prohibition of the activities in question.

(2) In order to introduce a non-native wild animal species which is not by declaration a game species or to reintroduce a wild animal species it is necessary to hold an authorisation of the Minister (which is granted with the approval of the Minister of Agriculture).

(3) The authority responsible for hunting may oblige game-licence holders to reduce or liquidate the populations of harmful introduced wild animals by hunting techniques.

(4) With the exception specified under paragraph (2) above, in order to introduce any non-native living organism or to reintroduce any living organism it is necessary to hold an authorisation of the Minister (which is granted with the approval of the Minister of Agriculture).

Article 14

It shall be prohibited to introduce non-native fish species into natural or near-natural waters, or to transfer such species from fish farms into any other wetland.

The specification of natural areas

Article 15

(1) The following types of areas qualify as natural areas if they meet the conditions specified under Article 4 paragraph d) above

(a) arable land used as forest, grassland or reed bed;

(b) land withdrawn from cultivation, except if facilities are to be sited on it or if it is exploited as a mine when this Act comes into force on the basis of a validly approved technical mining working plan;

(c) land unsuitable for agricultural or forest use.

(2) The Minister and the Minister of Agriculture shall, when they think fit, but not later than 2 years after this Act comes into force, announce by Joint Decree the register of natural areas subject to paragraph (1) above.

General Provisions for the Protection of Habitats

Article 16

(1) In the course of agricultural, forest, reed, fish farm and game management (hereafter management), it shall be ensured that sustainable use is practised, which includes long-term orientation, application of nature-friendly techniques and the protection of biodiversity.

(2) Management shall be exercised without causing permanent damage to the soil, the superficial or subsurface geomorphological values or the natural flora and fauna, destroying the protected living organisms or communities, or considerably decreasing their biodiversity.

(3) Wherever the habitat conditions make it possible, afforestation shall be exercised primarily with native tree species, in a natural species composition and using nature-friendly techniques.

(4) Grassland management shall be exercised primarily by grazing and/or cutting regimes adjusted to the type of grassland, and by a moderate, nature-friendly use of chemicals.

(5) The natural or near-natural shoreline of watercourses and lakes shall be conserved as wetland habitats. In the course of constructing waterworks, nature-friendly methods shall take priority.

Article 17

(1) Subject to Article 8 paragraph (1) above, all activities shall be exercised with due regard to preserving natural values and areas and to the protection of the habitats of wild organisms and their biodiversity.

(2) In the course of using natural areas, special attention shall be paid to the habitat type, the diversity of characteristic wild organisms and the maintenance of biodiversity.

(3) Waters, reed beds and other wetland habitats in a natural or near-natural state as well as the natural vegetation of lands whose low fertility is unfavourable for cultivation shall be preserved in the course of the following activities: using arable land, using and employing land unsuitable for cultivation, planning and executing amelioration, exercising any other agricultural activities, water management and water regulation.

(3) Experimental, temporary or final authorisation of the marketing or application of plant protecting agents, bioregulators and other pesticides as well as chemicals that favourably influence the soil's fertility shall be granted by the conditions laid down in another provision of law; the approval of the Ministry is necessary for such an authorisation.

(4) In natural areas, chemicals that favourably influence the soil's fertility may only be used in justified cases - subject to another provision of law - based on the results of soil tests and in a nature-friendly manner.

(5) In natural areas, in order to protect natural values and biodiversity, the Directorate may - by the provisions of a separate law - initiate the restriction or prohibition of the application of certain plant protecting agents and chemicals that favourably influence the soil's fertility.

Article 18

(1) In natural or near-natural wetland habitats, the water reserve ecologically necessary for the subsistence of natural values as well as for the conservation and maintenance of natural systems shall not be artificially abstracted.

(2) The volume of this ecological water reserve shall be determined by the Water Directorate, assisted by the Directorate as a professional authority. The Directorate may also initiate the determination of the volume of the ecological water reserve.

(3) In natural areas - with the exception of the populated interior area of settlements - it is prohibited to locate new buildings or any artificial facilities within 50 metres of the shoreline of natural or near-natural watercourses and wetlands, within 100 metres of the shoreline of lakes and ponds and in the flood-plain of watercourses. Any construction in water, the construction of facilities which serve shipping and the construction of fishing facilities at fish farms shall take place with the approval of the Directorate (Article 21 paragraph (3) section b) below), in such manner and in such cases as specified by another provision of law.

(4) It shall be prohibited to release or deposit - with the exception of chemicals used to prevent damages caused by flood - chemicals and plant protecting agents dangerous to water and aquatic organisms and specified in another provision of law within 1 000 metres of the shoreline of natural and near-natural watercourses and wetlands.

General Provisions for the Protection of Geological Values

Article 19

(1) The protection of geological values helps preserve the landscape, the non-living and non-regenerating natural resources. The general protection of geological values covers geological and geomorphological formations, minerals, mineral associations and fossils.

(2) It shall be ensured during the planning and execution of any activity aiming to utilise natural values, and especially during installation, building and construction, that geological values and the registered mineral assets are damaged to the least possible extent.

(3) It shall be prohibited to pollute or unlawfully modify the condition of karst rocks or karst water of uncovered karst surfaces. The Minister shall, within 3 years of the date of this Act coming into force, publish the register of uncovered karst surfaces. This inventory is only a reference work, and does not concern the protections and restrictions provided by this Act and other provisions of law.

(4) It shall be prohibited to unlawfully harm the minerals, mineral associations and fossils.

Article 20

(1) Mining activities shall burden natural areas to the least possible extent. Continuous efforts shall be made to restore the damaged surface of abandoned mining areas and - where it is possible - to re-establish near-natural conditions.

(2) In order to preserve natural values discovered in the course of mining activities, the Mining Authority may - at the initiative of the Directorate - restrict or prohibit the mining activities; or the Mining Authority may also modify the mining area.

(3) The Minister shall co-operate in designating mining concession areas and in specifying the conditions of the concession contracts as regards nature conservation and landscape protection. Should the circumstances relevant at the time of drawing up the contract change significantly, the Directorate may initiate the variation of the contract out of nature conservation and landscape protection reasons.

Provisions Relating to the Protection of Natural Values and Areas

Article 21

(1) In natural areas, the authorisation of the Directorate shall be required for-

a) the changing of the type of cultivation of grasslands and reeds;

b) the burning of grasslands, reeds or any other aquatic vegetation;

(2) In natural areas, the approval of the Directorate (acting as the co-operating authority) shall be required for-

a) using arable land for other purposes than cultivation; re-utilising land withdrawn from cultivation;

b) conducting geological research, establishing mining scapes and approving technical mining plans for the following activities: researching, exploring and exploiting or suspending the exploitation of mineral resources, and closing mines as well as restoring the landscape after mining,

c) approving the working plans of fisheries.

(3) In natural and near-natural areas, the authorisation of the Directorate as the co-operating authority shall be required for-

a) modifying wetland habitats, and especially the shorelines of watercourses and lakes, or the conditions of natural waterside communities (plant associations);

b) reconstructing or transforming existing buildings, structures or facilities as well as for locating and constructing any water facility, port or facility serving fishing within 50 metres of the shoreline of watercourses and wetland habitats, or within 100 metres of the shoreline of lakes.

(4) The consent of the Minister shall be required for approving those parts of district game management plans which effect natural areas.

(5) Further provisions - in addition to the provisions under Articles 6-21 - apply to natural values and natural areas under special protection.

Part Three

Provisions for the Special Protection of Natural Values and Natural Areas

The Procedure of Declaring Protected Status

Article 22

In order to ensure special protection, protected status shall be granted to

a) any organism living in the wild, its communities and habitats;

b) ancient Hungarian animal breeds and plant varieties;

c) natural or near-natural landscapes or parts of landscapes;

d) plantations, and especially parks, arboretums, historical and botanical gardens as well as individual plants or groups of plants;

e) live animal collections;

f) geological formations and key sections, minerals, mineral associations and fossils;

g) important places of occurrence of protected minerals or fossils;

h) superficial or geomorphological formations and the ground surface above caves;

i) standing and flowing waters, and especially lakes, streams and marshes;

j) typical and rare soil profiles;

k) cultural and historical memorials pertaining to nature;

which deserve such protection out of scientific, cultural, aesthetic, educational, economic or other public interest or in order to preserve biodiversity.

Article 23

(1) Natural values and areas shall receive special protection by the declaration of protected status.

(2) By virtue of this law, all springs, bogs, caves, sink-holes of sinking streams, salt lakes tumuli and earthen fortifications are protected. The natural areas declared protected under this paragraph qualify as protected areas of national importance (Article 24 paragraph (1) below).

(3) For the purposes of paragraph (2):

a) "cave" means any natural cavity in the Earth's crust where the longitudinal axis exceeds 2 metres and the current volume or the volume after extracting the natural speleothem (cave fill) is large enough for a person to enter;

b) "spring" means any natural issue of water from the earth provided that its discharge exceeds 5 l/min, even if it becomes temporarily dry.

c) "permanent or temporary sink-hole" means any cleft in karst which conducts a permanent or temporary watercourse underground.

(4) The Minister shall, within 3 years of the date of this Act coming into force, publish the register of bogs, salt lakes, tumuli and earthworks subject to paragraph (2) above, and revise it annually. The inventory is only a reference work, and does not concern the protection provided under paragraph (2) above, which comes into force when this Act is enacted.

(5) In case the protection of a natural value or natural area can only be ensured by taking special measures, the natural value or natural area in question shall be declared strictly protected.

Article 24

(1) Natural areas (subject to Article 15 paragraph (1) above), and other areas deserving protection on the basis of Article 22 above shall be declared protected by decree

a) of the Minister, in case the area is of national importance

b) of the Municipality (in Budapest, of the Municipality of the Capital), in case the area is of local importance.

(2) The Minister may by Decree declare natural values (e. g. wild organisms or communities) protected or strictly protected or he may declare natural areas strictly protected.

(3) The provision of law declaring protected status shall contain

a) the declaration of protected status and the names of the natural values,

b) in the case of areas, their character, extension, the reason of granting protection, the goals of nature conservation there, the parcel numbers of the cadastral survey, the contingent exemption from certain restrictions or prohibitions laid down in this Act, the range of activities requiring the authorisation or the approval of the Directorate and not regulated under Article 21 above or Articles 38-39 below, and possibly the co-ordinates of the angle points of the parcels.

(4) The protection or strict protection of any natural value or area shall be lifted, if the reason for nature conservation ceases to exist. The provisions for declaring protected status shall be appropriately applied during the process of lifting the protection; the opinion of the Directorate shall be obtained in order to lift the protection of locally protected areas.

Article 25

(1) Any person may propose the declaration of protected status. The preparations for declaring protected status shall be started *ex officio.*

(2) The Directorate shall prepare the declaration of protected areas - except for protected areas of local importance. In the course of preparing protected areas of local importance, the local Town Manager or Chief Town Manager of the Municipality (hereafter jointly Town Manager) in charge of the process shall forward the documents justifying the protection of the area to the Directorate; he shall also apply to the Directorate for a statement whether it is intended to propose the area to protected status of national importance.

(3) The Directorate shall make its statement (see paragraph (2) above) - based on the views of the Ministry - within 60 days. Should the area's protected status of national importance be justified, the Directorate shall proceed with the preparations *ex officio.*

(4) The declaration of protected or strictly protected status of natural values shall be prepared by the Ministry.

(5) In the course of the preparations regulated under paragraphs (2)-(4), the following aspects shall be examined: the justifiability of declaring protected status, the measures necessary to realise the goals of protection, the possibilities of ensuring financial and other conditions of the protection and the prospective results of the protection.

(6) The person in charge of the preparations for declaring the protected status of a natural area - in order to learn and approach the views of the parties concerned - shall appoint a date during the preparations for a co-ordinating discussion and, if necessary, for a visit to the scene to which he shall invite - at least 15 days before the appointed date - the proposer mentioned under paragraph (1) above, all authorities concerned, and all parties on whom the declaration of protected status confers rights or liabilities as well as all parties whose rightful interests are concerned by the declaration of protected status. Should the parties concerned be numerous, the invitation may be offered by placing an announcement on the notice-board of the Municipality, or otherwise according to the local customs.

(7) The person in charge of the preparations shall draw up minutes of the co-ordinating discussion and make a summary which he shall submit attached to the proposal for declaring protected status to the authority entitled to declare protected status.

(8) In the course of granting protection of national importance to a protected area of local importance the provisions under paragraphs (6)-(7) shall only be applied in case the prescriptions for protection lay down stricter regulations than the provisions of this Act or the former Municipal Decree.

(9) Municipality Decrees subject to Article 24 paragraph (1) above shall ensure, by applying the provisions for exemptions under Article 24 paragraph (3) section b), the continuation of activities of public interest to the extent necessary in order to accomplish the public purposes.

Article 26

(1) The nature conservation authority shall mark protected natural areas with signs, announcing the protected status and drawing attention to the main restrictions.

(2) The protected or strictly protected status of an area shall be recorded in the land register; should the protection be lifted, the record of protected status shall be cancelled. The recording and cancelling shall be initiated by the nature conservation authority *ex officio.*

Article 27

(1) In case any area planned to receive protected status is in danger of serious damage, the nature conservation authority may - having consulted the authorities concerned - on one occasion by an immediately enforceable resolution declare the area temporarily protected. The nature conservation authority may by the resolution impose liabilities in relation to the management of the area and the conservation of natural values and restrict, suspend or even prohibit any hazardous activities.

(2) Temporary protection may be maintained until the provision of law declaring permanent protection comes into force, but not longer than 2 months. In case the area is planned to receive protected status of national importance, the Minister may on one occasion prolong the temporary protection declared by virtue of paragraph (1) above, provided that the Ministerial Decree on declaring protected status is pending.

(3) Should any area serve temporarily as the habitat of strictly protected living organisms whose protection cannot be ensured otherwise, the Directorate may - having consulted the authorities concerned - by an immediately enforceable resolution declare the area or part of it protected for a maximum of 3 months.

Protected natural areas

Article 28

(1) Protected natural areas may - according to the comprehensiveness, objectives, national and international significance of the protection - be categorised as:

a) national parks

b) landscape protection reserves

c) nature conservation areas

d) natural monuments.

(2) National parks are such extensive territories of Hungary whose natural character has not been significantly altered, and whose primary function is to conserve the natural botanical, zoological, geological, hydrological, scenic and cultural historical values of outstanding importance, sustain biodiversity and the sound functioning of natural systems, promote education, scientific research and recreation.

(3) Landscape protection reserves are extensive and usually unitary territories of Hungary rich in natural and landscape endowments to which the interactions of Man and Nature have lent a particular aesthetic, cultural and natural character and whose primary function is the conservation of landscape features and natural values.

(4) Nature conservation areas are smaller, unitary and characteristic territories of Hungary rich in outstanding natural values whose primary function is the conservation of one or several natural values or the coherent system of these. The moors and salt lakes declared protected by virtue of Article 23 paragraph (2) above qualify as nature conservation areas.

(5) "natural monument" means any individual natural formation or value of outstanding importance and the territory serving for its conservation. The springs, sink-holes, tumuli and earthworks declared protected by virtue of Article 23 paragraph (2) above qualify as natural monuments.

(6) Exclusively the Minister is entitled to establish national parks and landscape protection reserves.

(7) The territory of all national parks shall be classified in natural, managed and demonstration zones in compliance with the international obligations and the principles pronounced by the Minister in Decrees.

(8) The Minister may designate protected natural areas of national importance subject to paragraph (1) sections a)-c) above or parts of those areas for scientific purposes (scientific reserves). He shall by this provision of designation declare the area involved as strictly protected.

Article 29

(1) The Minister may, in compliance with the international obligations of the Republic of Hungary, qualify by provision of law national parks, landscape protection reserves, nature conservation areas or certain parts of them as biosphere reserves, provided that they are of internationally outstanding scientific value.

(2) Within biosphere reserves, a core area shall be designated for the direct protection of outstanding nature conservation values.

(3) The Minister shall, with the approval of the Minister of Agriculture, grant by provision of law forest reserve status - ranging it in one of the protected natural area categories under Article 28 paragraph (1) - to any forest area which serves for the conservation of natural or near-natural forest communities, the undisturbed natural succession and the conduct of research. The core area of forest reserves shall be designated as provided for under paragraph (2) above.

(4) By virtue of this Act, the natural zone of national parks, the core areas of biosphere reserves and the core areas of forest reserves shall be declared strictly protected.

Buffer zones

Article 30

(1) Protected natural areas shall, in case of necessity, be defended by buffer zones. The provision of law declaring protected status shall also provide for the extension of the buffer zone (subject to Article 24 paragraph (3) section b)).

(2) The range of activities requiring the authorisation or approval of the nature conservation authority shall be specified by decree

a) of the Minister, in case of protected natural areas of national importance

b) of the Municipality (in Budapest, of the Municipality of the Capital), in case of protected areas of local importance

(3) The function of buffer zones is to eliminate or moderate effects which are unfavourable to the conditions or the function of protected natural areas.

(4) The buffer zones of the natural areas declared protected prior to this Act coming into force shall be designated by the provision of law specified under paragraph (2) above within 2 years of this Act coming into force.

(5) It shall be ensured by applying the provision on exemptions (Article 24 paragraph (3) section b) above) that the legal activities started prior to the provision determining the extension of the buffer zone comes into force are continued.

Provisions for protected natural areas

Article 31

It shall be prohibited to alter the conditions (substance) or the character of protected natural areas contrary to the purposes of nature conservation.

Article 32

(1) The primary function of forests in any protected natural area is nature conservation.

(2) In the case of forests declared protected after this Act comes into force the parts of the already existing forest management plans concerned by the declaration shall be supervised and if necessary verified by the forestry authority without delay after the declaration of the protected status with the co-operation of the nature conservation authority.

(3) In the case of forests declared protected before this Act comes into force, the forestry management plans - provided that they were approved before the declaration of the protected status .- shall be supervised and if necessary verified within 1 year of this Act coming into force by the forestry authority with the co-operation of the nature conservation authority.

Article 33

(1) In forests situated in strictly protected natural areas, sylvicultural management shall only be executed as a part of nature conservation management - in accordance with the forest management plan (subject to Article 36 paragraph (3) below) - and with the approval of the nature conservation authority.

(2) Burning of residues in cutting areas and ploughing shall be avoided in forests situated in protected natural areas.

(3) In forests situated in protected natural areas,

a) forests shall be managed by applying close-to-nature methods, trying to achieve a close-to-natural species composition and stand structure;

b) reforestation shall be carried out only with indigenous tree species with natural occurrence on the given site and - with the exception provided under paragraph (5) section a) below - only by natural regeneration methods (progressive regeneration or shelterwood felling and selective felling systems)

in accordance with the management plan.

In protected natural areas, afforestation shall be exercised exclusively with native tree species in a species composition typical to the habitat type and using nature-friendly methods.

(4) Logging during the growing season in forests situated in protected natural areas shall only be executed in exceptional and justified cases (e.g. for purposes of plant protection) with the approval of the nature conservation authority.

(5) In forests situated in protected natural areas,

a) clear-cutting may only be authorised in forest stands not able to naturally regenerate or consisting of non-native species and being of a maximum block size of 3 hectares.

b) the block size of final cutting following gradual reforestation shall not exceed 5 hectares;

c) final cutting or clear-cutting in blocks adjacent to final cut or clear-cut blocks shall only be carried out after the reforestation of the previously logged block has been accomplished.

(6) The permitted size of final cutting or clear-cutting areas determined under paragraph (5) sections a)-b) may be exceeded in exceptional cases - for purposes of plant protection, in order to ensure the survival of natural regeneration or out of nature conservation reasons -.

(7) In forests situated in protected natural areas, which consist of non-native tree species, efforts shall be made to establish close-to-natural conditions by replacing, complementing, restructuring such forest stands, by changing the tree species and by regulating the species composition, thus, eliminating monocultures.

(8) Final cutting may only be executed - with the exceptions specified under paragraphs (6) and (7) - when forests have approximated their biological maturity for cutting.

Article 34

(1) At the initiative of the Minister - in the interest of nature conservation - any hunting-area situated within or any part of a hunting area overlapping with

a) strictly protected natural areas,

b) national parks,

c) biosphere reserves or forest reserves,

d) areas falling under international nature conservation conventions

may be declared a specially designated hunting area subject to the provisions of a separate law.

(2) The guiding principles on declaring a hunting area specially designated for nature conservation purposes are laid down in the Act on game protection, game management and hunting.

(3) The person authorised to hunt in hunting areas specially designated for nature conservation purposes shall control the game populations (hunting) at the initiative and by the nature conservation conditions of the Directorate and in pursuance of a resolution by the hunting authority.

(4) If the conservation of the protected natural value cannot be achieved otherwise, the hunting authority shall order population control measures at the initiative of the Directorate.

Article 35

(1) The following restrictions apply to protected natural areas in addition to the provisions of Article 7 paragraph (2) above:

a) it shall be prohibited to construct or operate any building, structure, linear or other facility which endangers or damages the natural area or upsets the scenery;

b) provision shall be made for the conservation of the natural conditions (among others the edaphic conditions and the water balance) necessary for sustaining wild organisms, their communities and biodiversity;

c) aviation in the air-space of the area or a certain part of it shall be restricted or prohibited at the initiative or with the co-operation of the Directorate.

(2) The nature conservation authority or at the suit of it the authority within whose competence the case may fall shall oblige the parties concerned and determine the manner of execution, with special provisions for restoring the original conditions, ceasing an activity, as well as the time-limit.

(3) The obligation to utilise arable lands in protected natural areas shall be suspended by the nature conservation authority.

Article 36

(1) Nature conservation management techniques, restrictions, prohibitions and all other liabilities applying in protected natural areas shall be laid down in the provision of law declaring protected status.

(2) "Nature conservation management" means any activities aiming at surveying, registering, conserving, guarding, maintaining, displaying or rehabilitating protected natural values or areas.

(3) There shall be a management plan made for each protected natural area, which shall oblige every person exercising activities in the area. The management plan shall be revised every ten years.

(4) The Minister shall by Decree provide for the preparations, contents and approval of the management plan and for the person in charge of preparing it.

Article 37

(1) At the initiative of the nature conservation authority, the authority responsible for roads shall restrict or prohibit traffic on public roads crossing protected natural areas in case the traffic disturbs, endangers or damages the protected natural area. In the case of local public roads the restriction or prohibition shall be ordered by the Town Manager.

(2) The nature conservation authority may, with the exception specified under paragraph (1), restrict or prohibit trespassing (and traffic) within nature conservation areas or certain parts of them, provided that the interests of nature conservation so require.

(3) If any person damages, endangers or unlawfully disturbs protected natural areas, the nature conservation authority shall be obliged to forbid him to continue this activity.

(4) Within protected natural areas, the authority within whose competence the case may fall shall - if necessary, at the initiative of the nature conservation authority - order prohibition on construction and parcelling or other restrictions on use laid down in other provisions of law.

(5) Exterior areas of settlements holding protected natural areas may only be reclassified as interior areas if the interior area of the settlement is also a protected natural area.

Article 38

(1) The authorisation of the nature conservation authority shall be required in protected natural areas especially for:

a) conducting research, collecting or carrying out experiments;

b) ploughing, renewing, overseeding, irrigating, grazing or cutting grasslands;

c) restoring the area or changing its character or use;

d) changing the purpose of non-arable lands or the branch of cultivation of arable lands;

e) cutting or planting any tree, group or row of trees which do not fall under the laws on forest or forest conservation;

f) burning or eradicating reeds or any other aquatic vegetation, burning grasslands, fallows, stubbles or straw and setting fire in forests with the exception of designated campfire-places;

g) applying plant protecting agents, bioregulators or other pesticides, as well as chemicals that favourably influence the soil's fertility;

h) angling;

i) organising communal or mass sport events, sport races including motorsport and other technical sport events;

(2) The approval of the forestry authority as a co-operating authority shall also be required in the process subject to paragraph (1) section e) above;

(3) In the course of preventing an animal or plant epidemic or quarantine obliged disease, instead of instituting the procedure subject to paragraph (1) section g), the type of preparation to be applied shall be announced to the nature conservation authority.

(4) The management plan may define those conditions of the activities to be exercised in the protected natural area whose accomplishment grants exemption from the obligation to require an authorisation specified under Article 38 paragraph (1) above.

Article 39

(1) The nature conservation authority shall act as a co-operating authority in any authoritative procedure having direct effect to or directly concerning protected natural areas, and in particular in-

a) dividing any parcel, or changing its shape or extent;

b) parcelling out, utilising land, building, constructing facilities or commencing operations;

c) constructing linear structures or performing earthworks;

d) operating in water, constructing facilities in water or utilising water;

e) authorising the construction of any premises serving for industrial, agricultural or service activities;

f) procedures of forestry, hunting and fishing authorities;

g) approving landscape development plans or technical mining plans concerning the establishment or modification of mining areas, the exploration and exploitation of mineral resources, the utilisation of waste stockpile, the suspension of exploitation or the closing of any mine; authorising the construction and operation of mining facilities and the use of certain machines or installations within mines; furthermore, in water laws procedures in relation with mining;

h) converting the use of arable lands;

i) approving the transportation or storage of hazardous substances specified in another provision of law;

(2) In authoritative procedures for defining limits applied in environmental protection and specified in another provision of law, the Directorate shall act as a co-operating authority, provided that the procedure concerns any protected natural area.

Article 40

(1) In strictly protected natural areas - in addition to the requirements imposed in Article 38 paragraph (1) above - the authorisation of the Directorate shall be required for entering the area except for any person entitled by another provision of law to stay in the area as much as his task requires.

(2) In strictly protected natural areas, no activity shall be exercised other than activities authorised by virtue of Article 38 paragraph (1) or any intervention aiming at the direct saving of human life or assets; prior to such interventions, the Directorate shall, if possible, be consulted.

Article 41

(1) The proprietor, trustee and user shall tolerate the activities of the nature conservation authority exercised for the purposes of conservation, scientific cognition and demonstration of protected natural values and areas, and in particular the approaching, demonstrating, guarding and controlling the conditions of nature conservation values as well as the posting of informative or directive signs of the authority.

(2) The proprietor, trustee and user shall tolerate that the nature conservation authority, for the purposes of conservation or scientific cognition of natural values, temporarily uses his property, acquires the right of usufruct or restricts his proprietary rights otherwise.

(3) The actual loss caused by the activities specified under paragraphs (1)-(2) above shall be compensated for.

Protected plant and animal species and communities

Article 42

(1) It shall be prohibited to jeopardise, destroy without authorisation or damage the individuals of protected plant species, or to endanger or damage their habitats.

(2) Provision shall be made for the conservation of the natural conditions (among others the edaphic conditions and the water balance) necessary for the survival of protected plant and animal species and communities.

(3) In the case of protected plant species, or plant species falling under international conventions - unless an international convention or Act provides otherwise - the authorisation of the Directorate shall be required for-

a) the collection of any individual, flower, fruit or any other organ that can be propagated;

b) the possession, sale and purchase or exchange of any individual;

c) the exportation from, importation to or transportation through the Republic of Hungary of any individual;

d) the dissection of any individual;

e) the introduction, reintroduction, planting in gardens or botanical gardens or cultivation of any individual;

f) carrying out a breeding experiment with any individual;

g) the utilisation of any individual for biotechnological purposes;

h) the artificial gene exchange between any populations

(4) The authorisation of the Directorate shall be required for establishing any gene bank or collection of propagatable organs comprising protected plants, as well as for depositing any protected plant in such banks or collections;

(5) The authorisation of the Directorate shall be required for felling or changing the natural conditions of any tree within protected rows of trees or any single protected tree. The nature conservation authority shall inform the forestry authority about the authorisation except for the case of shrubs;

(6) The authorisation of the Directorate shall be required for removing, destroying or possessing any individual, flower, fruit or any organ that can be propagated of strictly protected plant species.

(7) In the case of strictly protected plant species or plant species falling under international conventions, the authorisation by virtue of paragraphs (3) and (6) above shall only be granted out of nature conservation or other public interest.

(8) In the case of strictly protected species, the administrative authority of first instance for the authorisation of activities subject to paragraph (3) sections c), f), g) and h) above shall be the Ministry.

Article 43

(1) It shall be prohibited to disturb, harm, torture or destroy protected animal species, or to jeopardise the success of their multiplication or any other vital functions as well as to destroy or damage their habitats, sites of occurrence, shelters, feeding, nesting, resting or roosting places.

(2) In the case of protected animal species, or animal species falling under international conventions - unless an international convention or Act provides otherwise - the authorisation of the Directorate shall be required for-

a) any population control;

b) the collection, capture, killing, possession and training of any individual;

c) the breeding in captivity of any individual;

d) the taxidermal preparation and preservation or the possession of such preparations of any individual;

e) the keeping of any individual in live animal collections;

f) the supplementing of any population with individuals from foreign populations;

g) the artificial exchange of genetic matter between populations;

h) the exchange or sale and purchase of any individual;

i) the exportation from, importation to or transportation through the Republic of Hungary of any individual;

j) the reintroduction or introduction of any individual;

k) the application of alarming methods in order to prevent any damage caused by them;

l) the transfer of the nest of any individual;

m) the domestication of any individual;

(3) The authorisation specified under paragraph (2) above shall not exempt from the requirement for veterinary authorisations subject to other provisions of law.

(4) In the case of strictly protected animal species or animal species falling under international conventions, the authorisation by virtue of paragraphs (3) and (6) above shall only be granted out of nature conservation or other public interest. In the case of animal species falling under international conventions, the authorisation may also be granted if it does not interfere with the interests of nature conservation.

(5) In the case of strictly protected species, the administrative authority of first instance for the authorisation of activities subject to paragraph (2) sections c), f), g), i), j) and m) above shall be the Ministry.

(6) In any authoritative procedure by virtue of paragraph (2) section b) above aiming at the capturing or killing of any protected animal respectively the hunting or the fishing authority shall act as a co-operating authority.

Article 44

(1) The authorisation of the Directorate shall be required for the establishment, construction and operation of any animal collection, zoological garden or any other facilities or premises serving for the keeping or training of protected animal species from the wild.

(2) The finder of any dead individual of any protected animal shall, if not provided otherwise in this Act, report and submit his finding to the Directorate.

(3) The Directorate may, to the extent of and subject to the relevant Ministerial Decree, order restrictions on utilisation and management in the area surrounding the sites of occurrence of any strictly protected plant or animal species. The compensation procedure is subject to Article 72 below.

(4) The Government shall, by Decree, determine in detail the conditions and regulations applying to the protection, keeping in captivity, exhibition and utilisation of certain protected animal species.

Article 45

(1) The declaration of protected status as regards resettling species shall be subject to Article 24 paragraph (2) and Article 25 paragraph (4).

(2) The provisions of Articles 42-44 shall be applied to resettling species unless the Minister orders otherwise.

(3) The hybrids of protected or strictly protected plant or animal species shall qualify respectively as protected or strictly protected species. The degree of protection shall be determined by the provisions pertaining to the more strictly protected parent species.

Article 46

(1) "Ancient Hungarian (native) domesticated animal species or breed" means any species or breed which evolved in the natural geographical territory of the Carpathian Basin and whose keeping and breeding have a historical past.

(2) The rules of registration and conservation as well as the principles of breeding and performance examination pertaining to protected ancient native domesticated animal species and breeds shall be provided for by a Joint Decree of the Minister of Agriculture and the Minister.

Article 47

(1) The Government shall, by Decree, specify the restrictions and prohibitions pertaining to protected and strictly protected wildlife communities. Failing statutory provision to the contrary, the provisions of this chapter shall also apply to protected wildlife communities.

(2) The provisions of Articles 42-44 above and paragraph (1) above shall also apply to any protected living organism which do not qualify as protected plant or animal species.

The protection of caves

Article 48

(1) The protection of any cave shall extend to its entrance, whole system of passages, host rock, formations, speleothem, cave fill in any physical condition, natural flora and fauna and artificially constructed passages serving as entrance or communicating between different parts of the cave.

(2) The Minister may, by Decree, declare protected any fully or predominantly artificial hollow upon whose surface scientifically significant formations have evolved subsequently, or which has outstanding importance as respects nature conservation. The provisions of this chapter shall apply to any protected artificial hollow.

(3) The Minister may by Decree lift the protection of any cave or artificial hollow subject to paragraph (2), if the interests of nature conservation no longer justify the maintenance of protected or strictly protected status.

(4) In case the conservation interests of the natural conditions of any cave so require, statutory law, the Directorate, or, at the initiative of the Directorate, another authority within whose scope of authority the case may fall, may order restrictions on the ground surface above the cave, or it may be declared a protected natural area.

(5) The Minister shall, by statutory law, define the buffer zone on the ground surface above any cave, and, by the same law, he shall determine the restrictions relevant to the buffer zone.

(6) The Minister of Public Welfare and Health shall, by statutory law and with the co-operation of the Ministry, designate the authority which may by resolution declare any cave or any part of a cave medicinal cave. They may by the same resolution determine the measures necessary for conserving the climatic conditions and ensuring the tranquility of the therapeutic activities.

(7) The conditions and rules of procedure of declaring medicinal cave status and therapeutic utilisation shall be determined by a Joint Decree of the Minister of Public Welfare and Health and the Minister.

Article 49

(1) Caves and buffer zones subject to Article 48 paragraph (5) shall, at the initiative of the Directorate and subject to the provisions of another statutory law, be registered in the Land Registry.

(2) Apart from the Land Registry, caves shall also be officially registered by the authority entitled by a Ministerial Decree; the same Decree shall include the manner of registration and the contents of the register.

(3) The discovery of any cave or part of a cave shall be reported to the Directorate within 8 days.

Article 50

(1) The proprietor, trustee and user of the property shall tolerate that the Directorate, any person entitled by the Directorate, or any person entitled by the authority exercising the property rights of the state approach the cave or visit the cave developed for tourism. The actual loss caused by this activity shall be compensated for to the proprietor, trustee or user.

(2) The proprietor, trustee and user may not jeopardise, damage or fill in the entrance of the cave; they may not disturb the animals living in the cave or impede the utilisation of the cave.

(3) The Directorate shall make provision for the safety of the cave's entrance and close it if necessary.

(4) For the purpose of ensuring the performance of activities under paragraph (1) above, the Directorate holds the right of easement over the land to which the cave opens (servitude parcel) falling upon its proprietor, trustee and user. The right of easement shall be registered in the Land Registry at the initiative of the Directorate.

Article 51

(1) The authorisation of the Ministry shall be required for-

a) using or changing the use of any cave or part of any cave;

b) developing any cave or part of any cave;

c) rescuing out, using, marketing or exporting formations of the cave.

(2) In the case of medicinal caves, the therapeutic utilisation subject to Article (1) section a) or any verification of such a utilisation requires the approval of the authority designated as a co-operating authority for declaring medicinal cave status by the Minister of Public Welfare and Health (subject to Article 48 paragraph (6) above).

(3) The authorisation of the Directorate shall be required for executing any activities not subject to paragraph (1) in the cave as well as for commencing any activities influencing the character, conditions, the natural flora or fauna of the cave, in particular for-

a) visiting caves specified by statutory law;

b) conducting research, carrying out experiments or collecting in any cave or any part of a cave;

c) scuba-diving in any cave;

d) exercising nay technical activities with the exception of those under paragraph (1) section b) above, and in particular for the closing of an entrance or any part of a cave, and for the construction, renewal or restoration of any facilities in the cave;

e) shooting films or taking any pictures by electronic device;

f) exercising any activities specified in the Ministerial Decree on the buffer zone of caves (subject to Article 48 paragraph (5) above);

(4) The Minister shall by Decree specify the range of facilities and activities used in developing caves or any part of a cave subject to paragraph (1) section b) above as well as the caves which may not be visited without authorisation by virtue of paragraph (3) section a). He shall also specify by Decree the terms of guiding tours and the qualification requirements for for conducting research in restricted caves by virtue of paragraph (3) section a).

(5) The approval of the Directorate as a co-operating authority shall be required for any explosion or commencing any activities requiring authorisation by virtue of water laws.

(6) The approval of the Directorate shall be required for exercising any activities in the buffer zone of a cave, and in particular for-

a) granting construction or existence licence;

b) storing or using any chemical or depositing any waste;

c) authorising land utilisation or parcelling out;

d) establishing any premises for industrial, agricultural, sylvicultural or service purposes, renewing the facilities of such premises, or changing the technology applied there;

e) constructing linear facilities or performing earthworks;

f) exercising any activities specified in the Ministerial Decree on the buffer zone of caves (subject to Article 48 paragraph (5) above).

Provisions on the protected mineral formations

Article 52

(1) The Minister shall by Decree determine the range and financial value of all minerals and mineral associations (hereafter minerals) noted for their rarity, extraordinary size or facies, or outstanding scientific importance.

(2) Protected minerals and fossils shall be conserved, if possible, in their original site; should it not be possible, they shall be removed from their site with the technique which causes the least possible harm and deposited where they serve for educational, scientific and demonstrational purposes

(3) Any mineral or fossil discovered in the course of mining shall be reported to the Directorate and its rescue to safety shall be ensured.

(4) The authorisation of the Directorate shall be required for collecting or marketing any protected mineral or fossil.

Part Four

Planning and organisation system of nature conservation

Nature conservation and regional planning

Article 53

(1) In order to define the state tasks and policies connected with the conservation of nature and biodiversity, to ensure the surveying, assessment, conservation and restoration of natural values and landscape assets, natural habitats, wild plants and animal species and other parts of the natural heritage, and to co-ordinate the related tasks, a National Nature Conservation Master Plan (hereafter Master Plan) shall be developed in the framework of the National Environment Protection Program (E.L. Article 40.).

(2) The Master Plan shall contain:

a) a general description of the country's natural areas, the definition of processes and activities which are important from the aspect of the conservation of biodiversity;

b) the general requirements as well as the sectoral and inter-sectoral tasks for the conservation of natural areas and values;

c) the long-term and medium-term aspects of the conservation of protected natural values and areas and of the establishment of new protected natural areas;

d) the long-term and medium-term aspects of the establishment and maintenance of an ecological network and ecological (green) corridors;

e) the long-term and medium-term aspects of the establishment and maintenance of environmentally sensitive areas (ESA-s) and systems;

f) the system of conditions and the principles of the most important measures subject to sections a)-e) of the conservation of nature;

g) the long-term and medium-term program for the research, development, educational and demonstrational tasks and the popularisation of nature conservation;

h) the principles of establishing and operating a system for the observation, data collection, registration and evaluation of natural values.

(3) For the purposes of paragraph (2) sections d) and e) above:

a) "ecological (green) corridor" means any ecological passage made up of natural and near-natural areas and strips which ensure or support the ecological connection between distant territories;

b) "ecological network" means the biological connections of natural and near-natural areas, protected natural areas and their buffer zones ensured by ecological corridors;

c) "environmentally sensitive area" means any extensively cultivated area that serves to conserve the nature-friendly cultivation methods and thereby to protect the natural habitats and to conserve biodiversity, landscape assets, cultural and historical values.

(4) The Minister, in order to execute the Master Plan shall, as circumstances may require, elaborate, have elaborated or initiate the elaboration of

a) regional plans,
b) plans referring to a given landscape or protected natural area,
c) plans referring to natural values.

(5) The Minister, in order to execute the Master Plan, shall by Decree provide for the rules pertaining to the establishment of ecological corridors and ecological networks. The rules pertaining to Environmentally Sensitive Areas shall be regulated by a Joint Decree of the Minister and the Minister for Agriculture.

Article 54

(1) Regional planning and development, water management, amelioration or any other plan which involves changing the character of the landscape may only be approved or modified, in accordance with separate legislation with the participation of the Ministry or the Directorate.

(2) Should the plans specified in section (1) be accepted in the course of authoritative procedures, they may only be approved or modified with the consent of the co-operating authorities defined in the plan.

(3) The exterior areas of settlements may only be reclassified as interior areas in accordance with Article 7 section (3) and Article 37 section (5) above, as well as the Master Plan and the environmental plan of the settlement.

(4) The prior opinion of the Directorate shall be required for the reclassification of exterior areas of settlements as interior areas. One copy of the approved order of the Municipality on such a reclassification shall be forwarded to the Directorate.

Article 55

(1) The Municipalities of the settlements- in the Capital, the Municipality of Budapest - shall prepare a plan for the maintenance of the protected natural areas of local importance in the territory under their jurisdiction. The plan shall be in accordance with the regional and national plans. The plan shall be approved by order of the Representative Assembly of the Municipality, in the Capital and cities with County status by the Capital or City Assembly (hereafter jointly as Representative Assembly).

(20 The prior opinion of the Directorate shall be required for presenting the plan to the Representative Assembly. One copy of the approved nature conservation plan of the Municipality shall be forwarded to the Directorate.

The administrative organisation of nature conservation

Article 56

The Minister shall:

a) control all activities connected with nature conservation relegated to him by Act or Government Decree;

b) control the regional administrative bodies of nature conservation;

c) participate in the organisation of the non-governmental research in the field of nature conservation;

d) provide for the planning and co-ordination of the state research related to nature conservation, for the elaboration and operation of the systems (monitoring) which help record the actual state (inventory of nature) and which provide continuous information and evaluation;

e) direct the performance of the nature conservation tasks arising from international obligations;

f) prepare and have prepared plans in connection with nature conservation;

g) exercise authority rights in the cases defined by the present Act or other relevant legislation;

h) co-operate, in the interest of nature conservation, with non-governmental organisations, Municipal Assemblies, etc.;

i) participate in the direction of the education and propagation of nature conservation as well as in the adaptation of nature conservation knowledge in the plan of tuition.

Article 57

(10) The administrative tasks of nature conservation shall be performed, by virtue of the provisions of the present Act and other relevant legislation, by the administrative bodies under the control of the Minister, by the Directorates, the Municipalities and their bodies as well as the Notaries.

(2) The tasks and competencies of the Directorates shall be defined by decree of the Government, their sphere of activity by decree of the Minister.

Article 58

The first instance authoritative tasks related to nature conservation shall be performed:

a) by the Directorate in all issues which do not fall under the authoritative competence of the Municipalities;

b) by the Town Manager (the legal persons subject to sections a) and b) are called jointly as nature conservation authorities) in all issues which fall under the authoritative competence of the Municipalities.

Article 59

(1) The Ranger Service shall operate - provided with uniform and service fire arms - in the organisation of every Directorate in order to protect, conserve and prevent the damaging of natural values, especially the protected natural values and areas.

(2) The rights and liabilities of the members of the Ranger Service and the official persons acting for the Directorate shall be defined in another provision of law.

(3) The ranger shall consult in advance with the managing bodies - with the exception of emergency procedure acts- the entrance into the properties serving exclusively military objectives and under military management.

(4) The detailed regulation for the Ranger Service and for the officers acting for the Directorate shall be defined by Decree of the Government. The service regulations of the members of the Ranger Service shall be defined by Decree of the Minister.

The role of the public prosecutor in the conservation of nature

Article 60

(1) The public prosecutor shall proceed in accordance with the provisions of the Act on Criminal Procedures in the case of any damage to natural values or areas, and in particular in the case of any damage to protected natural areas and values, which are infringements of the Criminal Code.

(2) In case any natural value, area or protected natural area is endangered, the public prosecutor may institute legal proceedings in order to prohibit the endangering activity or to reimburse the damage caused by it.

(3) The public prosecutor, in the course of exercising his legality control rights and on the basis of the relevant legislation shall co-operate in ensuring the legality of the procedures and decisions of the nature conservation authorities.

Nature conservation tasks of the Municipalities

Article 61

(1) The County Municipalities shall provide for the co-ordination of the activities connected with the conservation of the protected natural areas of local importance situated in the territory of the county.

(2) The County Municipalities, in the course of performing their tasks defined in paragraph (1) shall:

a) make recommendations for the establishment of protected natural areas of local importance;

b) participate, upon the request of the Local Municipalities, in the preparations for declaring protected natural areas of local importance;

c) support the nature conservation activities of the Local Municipalities.

(3) The County Municipalities may enter into agreements or create associations with the Local Municipalities for the maintenance of the protected natural areas of local importance.

Article 62

(1) In the cases defined by law, the Local Municipalities shall also perform nature conservation duties.

(2) The Local Municipalities shall provide for the maintenance and conservation of protected natural areas of local importance as well as for approaching the conditions there to natural conditions.

(3) The Local Municipalities may, for the purpose of performing the local and regional goals of nature conservation, separate a nature conservation fund within the environmental protection fund of the Municipality (E.L. Article 58).

Article 63

(1) The Representative Assembly of the settlements (in Budapest, the Capital Assembly) may operate a Municipal Ranger Service.

(2) The duty of the Municipal Ranger Service is to exercise the rights and perform the obligations defined in another provision of law and subject to Article 59 of this Act, in order to conserve the protected natural areas of local importance.

(3) Within the framework defined by the provisions of paragraphs (1) and (2), the Government shall determine by Decree the detailed regulations for the members of the Municipal Ranger Service. The service regulations defined under paragraph (4) of Article 59 are valid in respect of the Municipal Ranger Service as well.

The citizens' participation in nature conservation

Article 64

(1) In addition to the provisions of E.L. Articles 54-55, all educational institutions shall teach nature conservation issues, which will be an integral part of the National Basic Educational Programme. Through the teaching of that knowledge - with the participation of the Government, municipality institutions and other organisations - the society's awareness of the importance of nature conservation shall be improved.

(2) In the areas suitable for visiting and in compliance with the interests of conservation, the possibility of visiting protected natural areas shall be ensured, as a part of information propagation, education, scientific research and tourism. To this end the Directorate shall maintain educational and demonstrational facilities.

(3) The 10th of May of every year shall be the Day of Trees and Birds. The commemoration and programs held on that day shall serve to increase the commitment of the citizens - first of all the youth - to nature conservation.

Article 64

(1) In the case of damaging or endangering any natural area or value, the non-governmental nature conservation organisations are entitled to take measures to conserve nature, and may

a) request administrative bodies, Municipalities to take the appropriate measures under their competence; or

b) initiate a process in court against the person who damages, endangers or disturbs the protected natural value.

(2) In the case defined under paragraph (1) section b) above the plaintiff may request the court to-

a) prohibit the endangering or damaging person from continuing the infringement;

b) oblige him to carry out the necessary measures to prevent the damage.

Article 66

(1) The nature conservation activities of the Directorates and Municipalities may be supported by civil rangers.

(2) The civil rangers, in the area determined in their permit are entitled to:

a) enter protected natural areas;

b) wear service badge and use permit;

c) warn any person who endangers or damages natural values of the illegality of their act, of the legal consequences and demand that they leave;

d) provide information on the protected natural areas, values and on activities which require an authorisation.

(3) The Minister shall by decree specify in detail the regulations pertaining to civil rangers.

Information system of nature conservation

Article 67

(1) The Minister shall operate a uniform nature conservation information system in compliance with the international obligations, and as an independent part of the National Environment Protection Information System (E.L. Article 49).

(2) All authorities, administrative and municipal organisations shall make the data necessary during their procedures available to the nature conservation authorities.

(3) It shall be the duty of the Ministry - in accordance with the provisions determined in Decree by the Minister - to register the protected natural areas and values.

Part Five

Ownership and economic basis of nature conservation

Provisions on the ownership rights

Article 68

(1) All caves shall be owned exclusively by the state and shall not be negotiable.

(2) Any individual of the protected plant and animal species and the protected mineral formations are in state ownership.

(3) The authorisations subject to Articles 42-44 above and Article 74 paragraph (2) below shall provide for the ownership rights of the protected plant and animal species and the protected mineral formations.

(4) The ownership rights of the protected plant and animal species and the protected mineral formations to be found in collections established prior to this Act coming into force and particularly in gardens, parks, zoological gardens, etc. shall be subject to the earlier provisions.

(5) With the exception of caves, negotiation of the protected natural values and natural areas shall be restricted. The ownership of protected natural areas may not be acquired by any foreign natural or legal person.

(6) The state holds the right of pre-emption in the ownership change of protected natural values and areas, which the Directorate is entitled to exercise prior to any other entitled person. In the case of protected areas of local importance the Municipality of the settlement also holds the right of pre-emption, following the Directorate.

(7) a) State-owned protected natural areas may not be transferred from state ownership except for the case of exchange with the approval of the Minister for another protected natural area of at least similar nature conservation value,

b) State-owned protected natural values may only be transferred from state ownership (apart from the cases defined in section (3) above) with the approval of the Minister and in case the transaction serves nature conservation or public purposes.

Economic and financial regulations

Article 69

(1) The central budget, in accordance with the separated state funds shall

a) support the resolution of the prominent tasks defined in the Basic Plan and those arising from the international obligations of Hungary;

b) support nature conservation measures, especially in the area of the development and operation of the nature conservation information system, administration control, education, information propagation and increasing of awareness, research and social nature conservation.

(2) The financial funds necessary to achieve the objectives of nature conservation shall be primarily provided for in the central budget and the separated state funds, and in particular in the Central Environmental Fund, which also serve for nature conservation purposes.

(3) The monetary value of the protected living organisms, communities and mineral formations shall be defined by Decree of the Minister.

Article 70

The user shall pay a fee for the use of the names and logos of protected natural areas or the nature conservation logo as defined by the owner and user in a contract subject to the Civil Code.

Government aids and indemnification

Article 71

(1) The conservation of the natural values and areas shall also be supported by government aids, tax allowances, and a credit system supporting nature-friendly management.

(2) Government aids shall be provided principally to:

a) any person engaged in nature-friendly management;

b) any person engaged in the reconstruction or creation of habitats except if he has been obliged to do so by sanctions.

(3) The cases, amounts and conditions of the government aid as well as the terms of payment - within the framework of this Act - shall be determined by Decree of the Government.

(4) The compliance with the obligations - as the condition of payment - shall be inspected regularly, but at least once every year by the Directorate.

Article 72

(1) The proprietor shall be indemnified to the extent of the actual damage caused by field or forest management restrictions, prohibitions, or prescriptions of significant changes in the structure of production for nature conservation purposes in protected natural areas imposed after this Act comes into force. The lawful restriction or prohibition prescribed in order to prevent or obstruct natural damage shall not entitle to indemnification.

(2) The proprietor shall be indemnified to the extent of the actual damage caused by a temporary declaration of protection, in case the temporary declaration of protection does not become final for lack of justification.

(3) In case a proprietor is obliged to change significantly the structure of production, or any restriction, prohibition or any other official compulsion is imposed on him outside protected natural areas, the indemnification shall be subject to the provisions of paragraph (2) above. The detailed regulations of the indemnification subject to paragraphs (1)-(3) above shall be defined by Decree of the Government.

Insurance and security

Article 73

(1) Any legal person, other organisation, private entrepreneur or full time farmer using hazardous substances in protected natural areas or pursuing activities otherwise dangerous to the character or conditions of the natural value shall - in accordance with separate legislation - provide security or draw up an insurance contract.

(2) The detailed regulations concerning security and insurance shall be determined by Decree of the Government.

Provisions for the prevention of damage caused by protected animals and for the liability thereof

Article 74

(1) The proprietor or user of the property affected by damage shall provide with reasonable care and caution for the prevention or reduction of damage caused by protected animal species. Should the obligor be unable to prevent the damage, he may request measures to the same effect to be taken by the Directorate.

(2) The use of alarm methods or - in exceptional cases - the capture or thinning out of the overpopulated species require the authorisation and supervision of the Directorate.

(3) The Directorate shall, if necessary, or upon request by the proprietor or user participate in the alarming, capturing or thinning out, or execute it itself. In case the action is initiated by the Directorate, the expenses shall be born by the same. In case the Directorate takes measures in pursuance of a request of the proprietor or user, the division of the related expenses shall be subject to the agreement between the parties.

(4) The Directorate shall pay indemnification if damage caused by protected animal species has occurred because the Directorate:

a) has failed to comply with a justified request defined under paragraph (1) above;

b) has without just cause refused to grant consent to the use of alarm methods or the capture or thinning out of overpopulated species;

c) has failed to comply with a request defined in paragraph (3) above with no justifiable reason.

In any other case the damage shall be born by the owner of the property.

Part Six

Rules of procedure and sanctions of nature conservation

Rules of procedure

Article 75

The official procedures under the present Act shall be subject to the provisions of Act No. IV of 1957 on the General Rules of State Administration Procedures with the deviations defined in the present Act.

Article 76

(1) The time-limit of authorisation procedures of the nature conservation authorities shall be 90 days.

(2) The time-limit for the participation in procedures as a co-operating authority subject to Article 39 paragraph (1) shall be 30 days, which may be extended on one occasion for a further 15 days.

(3) In case the application for authorisation refers to activities to be pursued in the whole territory of the country, the Ministry exercises the right of first instance authorisation.

Article 77

The Directorate, or in the case of protected areas of local importance the Town Manager, in order to comply with the statutory provisions, may order the clients to restore the original conditions, and especially to repair the damaged natural values or areas as well as the protected natural values or areas.

Article 78

(1) The Directorate, or in the case of protected areas of local importance the Town Manager, may restrict, suspend or prohibit any activities damaging, severely endangering or disturbing protected natural values or areas. The resolution, in case the protected natural value or area is directly or serious damaged or endangered, may be declared immediately executable regardless of an eventual appeal.

(2) The Directorate may by resolution seize or confiscate the protected natural values acquired or owned illegally, if they are not in state ownership. In the case of state-owned protected natural values (Article 68 above), the Directorate shall confiscate them and provide for their protection until a decision with respect to the confiscation is made by the administrative body exercising the proprietary rights of the state.

(3) The confiscated protected natural values may only be utilised in accordance with the provisions of the Decree issued by the Minister.

The inventory of nature

Article 79

(1) Should the commencement of any activity specified in statutory law be bound to environment impact assessment (E.L. Article 67), an inventory of nature shall be carried out as a part of the assessment.

(2) The inventory of nature includes:

a) a survey of the natural values and their conditions in the area concerned;

b) presentation of the activities that significantly influence, endanger or damage the natural values, including the protected natural values;

c) the measures to reduce the effects of the changes resulting from the implementation of the planned activity (management), as well as the measures for the conservation of the natural values and for the reduction of the unavoidable damage.

Nature conservation penalties

Article 80

(1) Any person who with his activity or negligence infringes

a) on the statutory provisions or resolutions which serve nature conservation purposes;

b) unlawfully endangers, misuses or damages any protected natural value, or unlawfully endangers, spoils or damages the condition of any protected natural area;

c) unlawfully alters or transforms any protected natural area or cave, or performs activities there incompatible with the objectives of conservation;

d) significantly disturbs the habitat or vital functions of any protected living organism or community;

e) performs activities requiring authorisation without any such authorisation or deviates from the authorised activities;

shall pay nature conservation penalty.

(2) The nature conservation penalty shall be imposed by the Directorate, or in the case of protected areas of local importance, by the Town Manager.

(3) The nature conservation authorities may not impose penalty later than one year after becoming acquainted with the activity specified in paragraph (1) above. No penalty shall be imposed five years after the commitment of the act, except if the unlawful condition has been sustained. In this case the lapse period does not begin as long as the unlawful state remains in effect.

(4) In case the nature conservation penalty

a) was imposed by the Directorate, then it shall be paid to the nature conservation section of the Central Environmental Fund;

b) was imposed by the Town Manager (Article 80 section (2) above), then it shall be paid to the environmental fund of the Municipality or to its nature conservation section (Article 62 section (3)above). If the Local Municipality does not possess an environmental fund, then the receipt subject to section (b) shall also be paid to the Central Environmental Fund.

(5) The nature conservation penalty shall not release the offender from the Criminal Code, Petty Offence Code or compensation liability, or from the obligation to confine, suspend or terminate the activities and restore the original conditions.

(6) The rules of procedure of imposing nature conservation penalty, the sum of the penalty and the form of imposing shall be defined by Decree of the Minister.

Civil Code liability

Article 81

(1) Any person who causes damage by infringing on the statutory laws or resolutions on the conservation of nature shall reimburse the damage as specified in the provisions of Articles 345 and 346 of the Civil Code.

(2) The damage caused by infringing on the rules of nature conservation includes:

a) the actual damage of properties;

b) the unrealised profit;

c) the justified expenses of the elimination of the damage;

d) the immaterial costs resulting from the damage to natural conditions and quality;

e) the immaterial costs which appear in a deterioration of the living conditions of society, social groups or individual citizens.

(3) In case of any damage, efforts shall aim first of all the natural rehabilitation; in this case - except if the rehabilitation is carried out by the person causing the damage - the damage includes the costs of reinstating the original conditions.

(4) The prosecutor may institute legal proceedings (Article 60 paragraph (2) above) for the compensation of immaterial costs appearing in a deterioration of the living conditions of society or social groups (subject to paragraph (2) section e) above); the adjudicated compensation shall be paid to the Central Environmental Fund.

Miscellaneous and closing provisions

Article 82

(1) The present Act shall come into force on the 1st of January 1997. Simultaneously Law-Decree No. 4 of 1982 and - with the exceptions defined in paragraph (2) - Decree No. 8 of 1982.(II.15.) of the Council of Ministers (hereafter L. ex.) on its execution, amended by Decree No. 58 of 1986.(XII.10) of the Council of Ministers (CM), Decree No. 26 of 1987.(VII.30.) of the CM, Decree No. 88 of 1990.(V.30.) of the CM, Government Decree No. 24 of 1992.(I.28.) and Government Decree No. 71 of 1994.(V.7.) shall be revoked.

(2) The provisions of Article 27 of L. ex. shall be applied until the law defined in Article 59 paragraph (2) of the present Act comes into force.

(3) The provisions of the present Act shall be applied in the public administration procedures initiated after the effective date of the Act.

(4) All procedures for preparing the declaration of protection and for declaring protection which are in progress when this Act comes into force shall be subject to the statutory laws in effect at the time of commencement of the preparations.

(5) The Act does not affect the protection of the natural areas or natural monuments declared protected by decree, ordinance or resolution prior to the effective date of the Act. Where the Act refers to legislation declaring protection, it also refers to the resolutions declaring such protection.

(6) The register of protected natural areas of national importance as defined in paragraph (5) shall be published by the Minister. This register may be complemented, if necessary, with the register of protected natural areas declared after this Act comes into force.

(7) The provisions of the present Act shall apply to the protected (strictly protected) natural areas established by virtue of paragraph (5) above, provided that the resolution or law declaring the protection does not include stricter rules.

(8) The Master Plan subject to Article 53 paragraphs (1)-(3) shall be first forwarded as part of the National Environment Protection Program on the date defined in Article 110 paragraph (3) of the E. L.

Article 83

(1) The Act No. 1 of 1986 amended several times on Petty Offences (hereafter P. O. Act) shall be complemented by the following Article 32/A:

"Article 32/A.

In case of any petty offence against nature conservation, the National Park Directorate or the Nature Conservation Directorate shall proceed in the first instance and the Ministry for Environment and Regional Policy in the second instance."

(2) The P. O. Act shall be complemented by the following paragraph (3):

" (3) The competence of the National Park Directorate or the Nature Conservation Directorate shall be determined by the place of commission; if it cannot be determined, or the commission has occurred in the territory of authority of several Directorates, the Budapest Nature Conservation Directorate shall proceed in the first instance."

(3) The P. O. Act shall be complemented by the following Article 116/C.

"Article 116/C.

Petty offences in nature conservation

(1) any person who-

a) performs or makes another person perform activities bound to the authorisation or approval of the nature conservation authorities without such license or deviates from the authorised or approved terms, does not comply with the declaration obligations;

b) pursues activities which are incompatible with the objectives of nature conservation; litters or pollutes the area in any way, trespasses, travels in a prohibited way, makes a fire without permit;

c) destroys or unlawfully damages any protected living organism or its derivative, any cave formation, or significantly disturbs protected animal species in their vital functions;

d) infringes in any other way on the regulations of nature conservation;

shall be liable to a penalty of up to 50.000 HUF, in case the act is not a crime.

(2) The ranger or the person acting for and entitled by the nature conservation authorities may impose an on the spot fine on any person committing the infringements defined in paragraph (1) section b).

(3) The National Park Directorate or the Nature Conservation Directorate may by resolution confiscate any unlawfully acquired or possessed specimen of protected plant and animal species in any stage or period of its development, any protected mineral formation or cave formation. In case any protected natural value appearing in the list above is owned by the state, then the Directorate shall seize it and provide for its protection until the administrative body exercising the proprietary rights of the state makes a decision with respect to the seized natural value.

(4) The provisions of paragraph (1) shall also apply in the case of strictly protected natural areas and values, in case the act does not represent a crime.

Article 84

The following provision shall replace Article 46 paragraph (4) of Act No. LV of 1994 on the Arable Land:

" (4) Lands set aside for military or police purposes, or for the declaration of protected areas shall be subject to separate legislation."

Article 85

Authorisation is hereby granted to

a) the Government to regulate by Decree the provisions of Article 7 paragraph (3), Article 10 paragraph (1), Article 44 paragraph (4); Article 47 paragraph (1); first phrase of Article 57 paragraph (2); first sentence of Article 59 paragraph (4); Article 63 paragraph (3); Article 71 paragraph (3); Article 72 paragraph (3), Article 73 paragraph (2); Article 80 paragraph (4);

b) the Minister to regulate by Decree the provisions of Article 24 paragraphs (1) and (2); Article 28 paragraph (7); Article 29 paragraphs (1) and (3); Article 30 paragraph (2); Article 36 paragraph (4); Article 44 paragraph (3); Article 48 paragraphs (2)-(3) and (5); Article 49 paragraph (2), Article 51 paragraph (4); Article 52 paragraph (1); first phrase of Article 53 paragraph (5); Article 57 paragraph (2); Article 59 paragraph (4); Article 66 paragraph (3); Article 67 paragraph (3); Article 69 paragraph (3); Article 78 paragraph (3);

c) the Minister, to regulate by Joint Decree with the Minister of Agriculture the provisions of Article 15 paragraph (2) and the second phrase of Article 53 paragraph (5);

d) the Minister of Agriculture to regulate by Joint Decree with the Minister the provisions of Article 11 paragraph (3) and Article 46 paragraph (2);

e) the Minister of Public Welfare and Health to regulate by Joint Decree with the Minister the provisions of Article 48 paragraph (7).

ATTACHMENT 3

Resolution 83/1997. (IX. 26.) of the National Assembly on the National Environmental Program

**Resolution 83/1997. (IX. 26.) of the National Assembly*
on the National Environmental Program**

1. The National Assembly of the Republic of Hungary has discussed the National Environmental Program (Annex) submitted by the Government and, with due consideration of the state of the environment, adopted the objectives and targets earmarked in the Program and the general tasks relating to the key areas of implementation, instruments and areas requiring special measures.

The National Assembly acknowledges the general implementation plan of the National Environmental Program and its appendices submitted as informational materials. This also includes the National Environmental Health Action Programme and its implementation plan.

2. The National Assembly calls upon the Government to elaborate a detailed action plan and schedules earmarking the tasks, funds and those in charge to implement the Program on the basis of the National Environmental Program, by 30th November, 1997, thereafter by 30th April each year.

3. The National Assembly calls upon the Government to put forward proposals for the funds to realise the objectives in the National Environmental Program in the central budget in accordance with Act LIII of 1995 and give an account of the central budgetary resources used for the implementation of the Program as a part of the annual accounts.

4. The National Assembly calls upon the Government that in the course of the implementation of the National Environmental Program it should pay special attention to the requirements of OECD membership and sustainable development on the basis of the association agreement signed with the European Community on 16th December, 1991 and promulgated in Act I of 1994 with due respect for the co-operation within the framework of international organisations and with the neighbouring countries.

5. The National Assembly deems it important that the Government co-operate with local governments, actors from the scientific and economic community and non-governmental organisations during the elaboration and implementation of the action plan of the National Environmental Program.

6. The Government shall pay attention to the implementation of the National Environmental Program during the elaboration and implementation of the sectoral policies, concepts and programmes.

* The National Assembly adopted the resolution at the session on 16th September, 1997.

Annex to Resolution 83/1997. (IX. 26.)
of the National Assembly

NATIONAL ENVIRONMENTAL PROGRAM

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5. AREAS REQUIRING SPECIAL MEASURES

The protection of the environment and the conservation of natural assets has become a decisive part of socio-economic life by now. The basic reason is, on the one hand, the ever increasing utilisation of natural resources as a result of economic management unsustainable in the long run, and on the other, the growing quantity of pollution emitted from economic activities. All this - together with the clear-cut advantages of the economic changes - has led to the deterioration of almost all environmental media and is already concomitant with the limitation of utilisation. At the same time appropriate environmental conditions are indispensable for the well-being and healthy lives of the present and future generations. The problems of environmental protection are to be solved in parallel with the implementation of the socio-economic tasks. Recognising all this, the National Assembly stipulated the drafting of a National Environmental Program to realise comprehensive (continuous and socially controlled) law regulated environmental planning.

The drafting and implementation of the National Environmental Program (hereafter: Program) is stipulated by § 40 of Act LIII of 1995 on the general rules of environmental protection. As a part of the Program a National Nature Conservation Master Plan is to be drafted which is stipulated by § 53 of Act LIII of 1996 on nature conservation.

The National Environmental Program, therefore, is an intervention system plan for six years, which should result in the solution of the current environmental problems or the beginning of solutions and the prevention of future problems.

The Program is based on the following key pillars:

(a) *The Modernisation Programme of the Government;* on this basis one of the main tasks of the Program is to harmonise economic development and environmental interests. A basic condition is that future economic development should not cause the degradation of the state of the environment and the change of the environmental conditions should not become an insurmountable obstacle to further development. To this end, environmental aspects should be incorporated into economic policy and different sectoral policies;

(b) from among *the environmental policy documents forming the basis* of the Program, the Short and Medium Term Environment Protection Action Plan, adopted by Government resolution in 1991 and still in force, is to be noted. Several goals of the Action Plan are also integral parts of the Program. The other, decisive document is the National Environmental and Nature Conservation Policy Concept adopted by the Government in 1994. In addition, several specialised programmes for special tasks of environmental protection and for other branches also affecting the environment have been drafted or are being drafted;

(c) of *the international environment policy plans and programmes*, the most important are the Environmental Action Programme for Central and Eastern Europe adopted in Lucerne in 1993, the Fifth Environmental Action Programme of the European Union and the “Agenda 21” adopted within the framework of the United Nations. The above documents decisively determine the environmental obligations resulting from the accession to the integration organisations of the developed countries - from OECD membership and harmonisation with the European Union. The accomplishment of the environmental tasks relating to EU integration basically coincides with the duration of this Program;

(d) due to specific geographical characteristics of Hungary, the obligations resulting from different *international environmental conventions*, programmes and agreements first of all with

neighbouring countries also affecting environmental protection entail significant tasks concerning this Program.

The above four fields are interrelated and the tasks they determine have to be jointly taken into consideration.

According to the Program the basic objective of environmental protection is to safeguard the existing environmental assets and to prevent environmental damage. In addition, essential tasks are to limit and to stop environment damaging impacts so as to eliminate environmental damage and to restore an appropriate state of the environment.

The starting point of the Program is the identification of the environmental problems to be solved. The Program does not regard certain individual situations as problems but poses the question of why the actual or expected development of an indicator becomes a problem. Simultaneously with the survey of the problems, their causes are also determined in order to find the most efficient solutions and to enforce the principle of prevention. The process of *causes, impacts* $\rightarrow$ *the state of the environment* $\rightarrow$ *problem* $\rightarrow$ *goal* $\rightarrow$ *solutions* $\rightarrow$ *tasks* are to be seen together for a particular field. Basically it corresponds to the model used within the OECD, *pressure* $\Rightarrow$ *state* $\Rightarrow$ *response*.

In addition to problem-solving one should keep in mind that in Hungary there are still assets to be protected. There are several natural assets which Europe's economically more developed parts do not have. The Program has been drafted with due responsibility for the existing assets and the need for conserving them.

The implementation of the Program is a national issue; therefore, it cannot be the task of only one ministry. A condition of the efficient realisation of environmental tasks is to integrate the goals regarding both the sectors and the fields. The preparation and implementation of the Program should be based on continuous co-operation and agreement with different members of the society. This refers to all those who endure environmental impacts and to those responsible for the state of environment, to the local authorities, business enterprises, the affected professional and scientific communities, interest groups or environmental movements.

1. STATE OF THE ENVIRONMENT

1.1. STATE OF ENVIRONMENTAL MEDIA

1.1.1. AIR

Hungary's air quality - in spite of the reduction of "traditional" air pollutants emitted in great quantities in the recent decades - is still unsatisfactory, in several respects.

Altogether 3.9% of the country (3590 km^2) is regarded as "polluted" and 9.3 % (8674 km^2) as "moderately polluted". Almost half of the country's population, however, live in this area comprising hardly more than 13 % (12,264 km^2). The most important specific problems are the following:

(a) environmental load of the capital agglomeration and the industrial region of the North Transdanubia is great; both are polluted regions;

(b) the emissions of both sulphur dioxide and nitrogen oxides has decreased in the past decade. Contrary to this tendency the proportion of nitrogen oxide emissions from transport has increased;

(c) emissions from motor vehicles significantly contribute to the pollution of the vicinities of public roads with heavy traffic and to the pollution of larger settlements;

(d) in the centres of big cities and along public roads with heavy traffic - depending on weather and traffic - even today high pollutant concentrations can be measured in the breathing zone, with increasing frequency at certain locations;

(e) high concentrations of ground-level ozone in the summer have exceeded the permissible value several times in some towns (e.g. Miskolc, Dorog, Tata, Eger and Kazincbarcika);

(f) the proportion of emissions from motor vehicles may contribute to the more frequent high ozone concentration incidents in the summer.

1.1.2. WATER

The chapter on water introduces the state of surface and subsurface water separately. This distinction is mainly necessitated by the significantly different impact processes.

1.1.2.1. SURFACE WATER

Due to the basin-like character of the country the annual average quantity of water flowing through Hungary (120 billion m^3/year) is the highest per capita in the world. Hungary also is a typical transit country, and its water reserves, both quantitatively and qualitatively, depend on the interventions in the neighbouring countries.

(a) Temporary algal blooms in the Danube are still growing in frequency and bacterial pollution is not decreasing. The nitrate content of the Danube increases every year and extreme values exceeding even 20 mg/l are not rare. Because of river regulation and pebble dredging, sludge has accumulated in the vicinity of some bank filtered wells. The iron, manganese and dissolved organic content of water from wells has grown due to the decomposition of organic substances. In certain regions the accumulation of toxic materials in bed-deposits can be observed;

(b) Despite the improvement in several parameters, the ortho-phosphate content in the river Tisza has greatly increased;

(c) The majority of tributaries are regarded as polluted;

(d) In the case of Lake Balaton, recent measures have stopped the increase in the nutrient load. The determinant factor in eutrophication is phosphorous, within which the constant level of internal phosphorous load (re-dissolved from the lake bed sedimentts) is decisive. If the weather conditions are right for algal growth, then the low nitrogen content of the lake will favour blue-green algae propagation since they can bind nitrogen from the air. This phenomenon results in the temporary growth of the N-load of Lake Balaton. In these periods atmospheric N-load may be three times higher than the load from the shore.

(e) The irrigation canals built in the Great Plain are often used for drainage of sewage from settlements. Water polluted in this way has limited use for irrigation.

(f) Major water level decreases in the natural sodic lakes representing valuable natural assets in the Great Plain are the result of, first of all, several years of drought and, at some lakes, also the unjustifiable drainage of small gradient canals. In addition, the growing quantity of in-flowing waste water has significantly damaged water quality;

(g) A major pollution source is the result of the fact that while 96-97% of the population live in areas with public utility supply water, the percentage living in areas with sewers is only 57%, so the gap is almost 40%.

(h) The majority of sewage is either inadequately treated, or not at all. The lag in sewage treatment facilities is especially large in the capital and some large towns.

Treatment of sewage sludge coming from waste water treatment plants, and its harmless disposal is generally unsolved.

1.1.2.2. SUBSURFACE WATER

Subsurface water resurces are of vital importance for us. They have a critical role in the drinking water supply (with over 90% share), in balneological utilisation and through their relation to other media of the environment.

Quantitative aspects:

(a) The rate of sinking of the groundwater table on the plains areas of the country in the last one or two decades has been, on average, 0.1 m/year. Between the Danube and the Tisza rivers it has exceeded 0.3 m/year, resulting in some areas in a decrease of nearly 5 m till now. In the Szigetköz the groundwater has sunk as a consequence of the diversion of the Danube;
(This sinking has stopped as a result of the winter of 1995/96 which was rich in precipitation.) As a result of the sinking of the groundwater table, besides the damage to agriculture, the water reserves of wetland habitats and groundwater lakes have fallen, and buildings have been damaged in areas where near-surface layers are susceptible to collapse;

(b) the sinking of water levels in deeper strata in the basin areas of the country is 0.1-0.4 m/year expressed in water column; in the deeper thermal water reservoirs it exceeds 1 m/year;

(c) karst water sinking in the Transdanubian Mountains was 1 m/year until the end of the 1980s, but at some places much higher. Depression on average reached 30 m, at some places 100 m;

(d) the yield decrease of karst springs in the Transdanubian Mountains resulted in springs drying up, and, in the case of marginal thermal karst springs, it resulted in dangerous yield decreases in the 1980s. Regeneration began when mining water withdrawal was halted.

Qualitative aspects:

(a) pollution in subsurface water, among the regularly measured components, is mainly nitrate, primarily because of the lack of sewers at settlements and animal breeding plants, and the non-point source effects of fertilisers and manure;

(b) mining activity causes water quality problems where the threat of direct pollution exists: inappropriate transportation, disposal and storage of pollutants and waste, as well as the existence of abandoned, uncontrollable dumpsites;

(c) water quality has deteriorated at bank filtered water bases, in addition to pollution of background aquifers, as a result of anaerobic processes caused by fine particle deposits in the riverbed;

(d) for drinking water aquifers, the most important instrument of water quality protection would be the development of protection areas and structures but because of the lack of legal regulations and economic problems (e.g. lack of land use management compensation) they do not exist. Regulation is being updated;

(e) clean-up in connection with pollution and lasting environmental damage without a liable party has become a huge task which primarily falls on the state due to social, economic, political and legal causes.

1.1.3. LAND

Land protection covers the protection of the surface - with special emphasis on soil, layers under the surface, rocks and minerals, their natural and transitory forms and processes.

This environmental medium is the basis and host of the flora and fauna, water and different forms of the constructed environment.

The soil with its self-purifying and temporary buffering capacity significantly contributes to the decrease of the load on the environment and thus to the protection of subsurface water.

In the case of different land uses it is important to highlight that the natural biological, chemical, and physical processes and human activities on the one hand determine the state of this environmental medium, and on the other, affect the nature and possibilities of land and water use.

Hungary, compared to most of the European countries, is in a special situation since some 85% of its territory is suitable for the utilisation of the fertility of the soil, e.g., by forestry or agriculture. Settlements, industrial and military territories, infrastructure and mining as parts of the built environment account for the remaining 15%. In addition to this utilisation, the waste assimilation capacity of the soil is also significant.

Thus the greatest problems related to land and the preservation of this natural resource are the following:

(a) the lack of a comprehensive land protection strategy and uniform legal and professional regulations (considering that Act LV of 1994, among others, on arable soil already includes important, relevant provisions);

(b) the lack of information enabling the evaluation of the national state of this environmental medium;

(c) the surface and soil pollution caused by settlements, industrial, military and agricultural activities;

(d) deterioration of the quality of soil (soil degradation processes, soil erosion caused by water and wind, acidification, accumulation of salts from evaporation, compacting, decrease in organics);

(e) the lack of a detailed environmental geological survey.

1.2. STATE OF SETTLEMENTS AND THE BUILT ENVIRONMENT

1.2.1. SETTLEMENTS

The settlement environment is a material system constructed by humans, with the basic function to meet the basic social needs of everyday life. The main features of this system are the following:

(a) decay or devastation of parts of settlements. In certain areas the state of the buildings, settlement infrastructure and public sanitation is deteriorating. The problem is concomitant with the deterioration of the quality of life and deterioration of the state of building stock aggravated by the lack of restoration for decades, especially in economically backward regions;

(b) air pollution caused by industry and transport damages the state of whole settlements and parts of settlements;

(c) the rehabilitation of abandoned industrial areas has not been solved and, instead of rehabilitation, large scale green field investments are being completed which entail further encroachment on the natural environment, sprawling settlements and increasing needs for transport;

(d) traffic-related environmental impacts are the most difficult to handle, with their main effect on the field of environmental health;

(e) the neglected public areas in settlements, full of litter, are more and more characteristic. Less than half of the paved sidewalks and roads are cleaned regularly in towns and there are numerous illegal dumpsites in the suburbs and villages;

(f) the extent of green areas in settlements does not reach the necessary proportion and existing ones are often neglected due to lack of maintenance;

(g) the chances of survival for settlements with traditional features are disappearing. In small and medium size settlements the recent period has eliminated or forced into museums the cultural heritage which for one or another reason could be regarded as unique.

1.2.2. ENVIRONMENTAL ASPECTS OF HUMAN HEALTH

Health and, particularly, the mortality indicators characterising the Hungarian population show that in this field the problems are very grave and environmental impacts are partly to blame.

(a) In 1990 50% more people died in the 40-59 age cohort than 20 years before and premature mortality in the Hungarian population has increased significantly.

(b) Among the causes of death, the ratio of cancerous diseases clearly traceable to environmental causes is unfavourable in both Hungarian and international contexts. Of the different types of cancer, the change in head-neck and lung cancers is striking; in both sexes, the rate of mortality in the 40-59 age group has increased 3-8 fold in the past 20 years.

(c) Suspended particles in the air caused a 3-5% increase in mortality and a 7-10% increase in the occurrence of respiratory diseases.

(d) Susceptibility to allergies is up to 40%; according to statistics, asthmatic diseases have doubled between 1983 and 1992 and the number of hayfever sufferers has quadrupled.

1.2.3. THE BUILT ENVIRONMENT

The built environment is an artificially constructed part of the environment established and defined by conscious construction work, primarily to ensure the conditions of individual and community life. The constructed environment - buildings, construction groups, squares, streets, settlements - and the stock of buildings there constitute a durable and valuable part of national wealth (total value is some HUF 20,000 billion). The main problems regarding the state of the built environment are the following:

(a) decay of housing stock and buildings along with worsening conditions for housing, living conditions, quality of life and, in extreme cases, health damage;

(b) decay of public buildings, public spaces, railway stations, bus and tram stops, boat stations with operation malfunctions and unfavourable aesthetic appearance; in addition to insufficient funds human attitudes and behaviour also contribute to this state;

(c) deterioration of towns and street images has a demoralising effect because of aesthetic devaluation and environmentally unfavourable living conditions in settlements;

(d) decay of areas of historical significance, of the surroundings of monuments, monuments themselves, dereliction of historical town elements preserving settlement traditions, protected cemeteries and historical gardens. The real causes are the lack of efficient legal regulations on monuments and insufficient funds for reconstruction as well as the standard of cheap reconstruction and human carelessness. The new market expectations will underline functional utilisation which may also cause problems.

1.3. STATE OF NATURE

1.3.1. FLORA AND FAUNA

Nature conservation is aimed at safeguarding the animate and inanimate natural assets and their systems. One of its main aims is to preserve biological diversity, the basis of which is to protect natural and nearly natural habitats in operation. The protection of habitats cannot be restricted to biotopes in protected areas but should cover all types of habitats important for nature conservation. Several habitats valuable for nature conservation have been created and maintained by several centuries of human management.

In Hungary there are very few natural, absolutely intact habitats; the forests, meadows, grasslands and pastures of the country have been under cultivation for centuries. Although traditional meadow and forest management has damaged the natural state, significantly, it has not ruined it. Intensive management together with drainage in certain regions and other factors linked to human activities have

upset the balance of natural processes, the balance between human beings and natural systems. The main specific features and problems are the following:

(a) the number of endangered plant species is 670 and that of animal species is 346;

(b) water habitats are the most endangered, due to both natural drying up and biological degradation traceable to pollution by humans. One has to give up the idea that waters are natural recipients of pollution which can absorb and transport everything;

(c) forest coverage today is 18% but the extent of nearly natural forests is less than half this figure. Because of cutting maturity allowances set at a wide-scale, unjustifiably low level, the proportion of older stocks is even less favourable. Since the late 70s the so-called new deforestation (of unknown origin) caused significant tree losses and damage. Inadequate forestry practices and policy guidance and the ensuing interest of forestries in profit favoured the planting of fast growing tree species. In many cases valuable indigenous species stock was also replaced with these types;

(d) drying up of valuable bogs and bogmeadows is not simply the consequence of unfavourable climate changes or temporary fluctuation. Harmful technical interventions in the water catchment areas and the elimination of wetlands have also contributed to the problem;

(e) the state of wet and medium wet (mezophyl) meadows, grasslands and pastures has significantly deteriorated - especially in the last 20-25 years - because of unreasonable management and traditional utilisation; the areas of grasslands and meadows have also decreased significantly because of agriculture, forestry and other forms of utilisation (fishing ponds, industrial plants, urbanisation, segregation by transportation); nuisance effects of human activities have also caused degradation processes in large areas of grasslands;

(f) the disappearance and rapid impoverishment of hill and mountain meadows full of flowers is one of the striking signs of the decay of biological diversity;

(g) many of the most characteristic flora and fauna elements of “Pannonia” are the residents of dry plain and rocky meadows; the deterioration of the state here is simply the result of the disappearance of habitats: turf breakage, weeds, forestation, etc.; the spectacular growth of forest areas is due to fast-growing forestation which has eliminated unique grasses (black pine trees instead of dolomite rock meadows, Scotch pines and acacias instead of sandy meadows.

1.3.2. LANDSCAPE

The basis of environmental management ensuring the conditions of human life in a sustainable way is the co-ordination of the social activities with each other and with the environmental conditions. This is a complex task because of the conflicting interests between the division of labour and the interrelationship of natural, social and economic endowments and processes. The efficiency of environmental protection therefore can best be ensured by landscape protection incorporating natural, social and economic factors.

From a landscape protection point of view, a fundamental problem is the decrease of landscape potential appearing in differentiated forms by territories.

Of the interrelated landscape problems the most important are:

(a) decrease of the potential carrying capacity and self regulatory capacity of landscapes;
(b) unfavourable changes in spatial processes leading to problems such as the exchange of heat and water balance in the territory between the Danube and the Tisza;
(c) degradation of natural assets;
(d) degradation of individual landscape assets and the elements of landscape character, e.g. cairns, mills, farms, traditional farming methods;
(e) decrease of the landscape's aesthetic value (e.g. Lake Balaton, open mines).

The "sacrifice" of environmental quality and natural assets has become a "natural consequence" of the development of infrastructure and economic growth. National wealth invested in landscape use has not assisted the conservation or development of the landscape potential in the long run and has decreased the possibility of subsequent, different and multipurpose use of territories (e.g. in the industrial region in Borsod). Landscape problems come from the lack of environmentally sensitive attitudes and deficiencies in the opportunities and instruments to enforce landscape protection. Landscape protection for the time being has no adequate scientific, professional and executive institutional framework, instruments or resources. Real interest in landscape protection is still low and issues of liability are not clarified yet. The recurring "hunger for territory" endangers even nearly natural landscapes preserved in valuable form.

1.4. SPECIAL ENVIRONMENTAL ISSUES

1.4.1. WASTE

In Hungary almost 104 million tons of waste are generated a year. Of this amount about 4 million t/year is municipal solid waste and about 20 million t/year is treated municipal liquid waste. The rest, some 80 million t/year, is from industrial, agricultural or other economic activities. Of production waste, about 4.2 million t/year is hazardous waste of which 1.5 million tons is red mud. Waste of industrial origin is somewhat decreasing while municipal waste is slightly increasing. General problems regarding waste management are:

(a) lack of a comprehensive waste management act covering all types of waste;

(b) lack of a reliable information system for the different types of waste.

Municipal solid waste:

(a) collection of municipal solid waste is not comprehensive, selective waste collection is at a low level, and the technical level and operating state of the waste handling devices is very poor;

(b) only 30% of the 2700 municipal disposal sites meet the regulations more or less, and the number of illegal and legal dumpsites which are potential pollution sources is high;

(c) free disposal capacity is low and no modern disposal technologies are applied.

Municipal liquid waste:

(d) the quantity of the actually collected waste cannot be controlled, it is impossible to keep track of disposal due to the inappropriate collection method;

(e) only a part of the operating waste water treatment plants are suitable to receive liquide waste; waste is mostly drained to sewers or dumpsites, sometimes to designated collection basins without the right technical protection, and also directly to nature;

Other waste treated as municipal waste:

(f) furnaces transformed for incineration of hospital waste are not satisfactory technically, the state and construction of some special incinerators are not satisfactory either;

(g) utilisation of waste from construction or demolition (7-800,000 t/year) as secondary raw material is inadequate;

Industrial waste:

(h) the current quantity of industrial waste is unjustifiably high and the survey of this waste is not satisfactory;

(i) the extent of waste minimisation and utilisation is not satisfactory, the introduction of low waste technologies and production systems is slow;

(j) the survey of soil and underground water pollution caused by industrial facilities and by other waste from small scale plants, treated as production and municipal waste, has not been completed.

Agricultural waste:

(k) correct treatment of altogether about 14-15 million m^3 of liquid manure accumulated in reservoirs is unsolved at many places;

(l) composting plants operated with simple devices are missing, the operation of the existing ones is also uncertain, the application of biotechnological methods is sporadic.

Products turning into waste:

(m) the application of deposit, refund and treatment obligations has not been sufficiently thought through;

(n) there is a lack of producer and distributor liability for the life cycle of the product and insufficient information for consumers.

Hazardous waste:

(o) hazardous waste disposal capacity in Hungary is insufficient;

(p) the on-site disposal of unknown quantities of soil polluted with heavy metals and/or hydrocarbons has not been solved;

Radioactive waste:

(q) the re-evaluation of the standpoint regarding the disposal of high-activity and long-life radioactive waste from institutions as well as the reprocessing and disposal of spent nuclear fuels is in process.

Special radioactive waste:

(r) soil and groundwater pollution caused by the inert material of the Mecsek Ore Mine Company;

(s) no solution for the ion exchangers used in the Ore Mine Company in Mecsek, final disposal is expected together with the high activity waste of the reactors of nuclear power plants.

1.4.2. NOISE AND VIBRATION

Complaints about noise all over Europe indicate that noise has a detrimental influence on people's mood and quality of life for a considerable part of the urban population. The 1994 survey of the World Health Organisation about the health condition of Europe evaluated environmental noise above 65 dBA as a potential health hazard.

The main problems are as follows:

(a) according to last year's surveys main roads cutting through densely populated parts of settlements are always dominant environmental noise sources. (Daytime loads are measured above 70 dBA, night levels above 65 dBA);

(b) along railway lines running through inhabited areas daytime levels even up to 70-72 dBA can be measured and the noise does not fall below 68-70 dBA even at night;

(c) the regional environmental inspectorates investigated the noise emission of some 3,000 industrial plants between 1984 and 1992, in at least 80% of the cases as a response to inhabitants' complaints. Over 90% of the complaints were well founded;

(d) damage to buildings caused by vibration of transport origin is recurring as a special problem locally.

1.4.3. ENVIRONMENTAL SAFETY

One of the greatest challenges of human development is to create global, regional and local safety, and in this framework to provide environmental safety guarantees for sustainable development. The issue of environmental safety is regarded as a matter of high importance at the highest international fora, its actuality more and more often justified by the various grave environmental disasters of industrial origin.

(a) Hungary does not have acts on chemical substances, or on the prevention and elimination of catastrophes.

(b) Institutional safety controls, and risk analysis of industrial, (particularly chemical) facilities fundamentally affecting environmental safety are not institutionally guaranteed, nor are the activities relating to the transportation of hazardous materials fully regulated.

(c) Environmental monitoring systems are fragmented, there is no environmental safety information centre that could be connected to the operating European systems.

(d) The most important problem is caused by the fragmented structure, and in some areas even the complete lack, of executive organisations for the case of emergencies.

2. ENVIRONMENTAL OBJECTIVES AND TARGETS

The basic objective of the Program is to develop the most important environmental, social and economic conditions necessary for sustainable development and to determine the strategic tasks of environmental protection. To this end, specific interventions and a regulation system of incentives and disincentives is needed. The goal of the Program is not only to define but also to solve the most important environmental problems.

The main goals of the National Environmental Program are:

(a) to ensure the conditions for a healthy environment, to prevent, reduce and to stop the impacts damaging and endangering human health; to preserve, improve and restore environmental conditions necessary for an adequate quality of life;

(b) to preserve the nearly-natural state of the living and built environment, to safeguard natural systems and natural assets, to ensure their survival, to preserve biological diversity, to preserve information hidden in natural processes;

(c) to take the principle of sustainable development into account in natural resource management; to manage in an economical and protective way natural resources regarded as vital media (water, soil, air) and to preserve them for future generations;

(d) in accordance with the above, to realise an harmonious and realistic relationship between economic development and the environment aimed at the reasonable use of and minimum damage to the environment.

The priorities of the Program should be determined by taking the environment as a whole and coherent system. The changes in the state of the environment are currently characterised by two somewhat contradictory tendencies.

On the one hand, the state of the environment as a whole is continuously deteriorating in the long run, (decreasing life expectancy, increasing number of polluted industrial plants, etc.). On the other hand, in several special fields or in regional or local issues significant improvements can be shown, partly due to the economic recession and restructuring (e.g. sulphur dioxide emission or the total emission from an industrial region). In environmental protection, significant improvement has come about in certain fields regarding both regulation and direct investment but a comprehensive system of environmental aims and instruments becoming integral part of the decisions has not developed yet. Consequently the following main viewpoints are to be taken into consideration:

(a) the country has significant environmental assets, the protection of which is also of economic interest;

(b) in the previous decades loss of environmental assets was great, and may be traced back to domestic, regional and global environmental problems;

(c) the international environmental conventions and co-operation in force earmark several tasks for environmental protection;

(d) the protection of human health and natural assets has not been appropriately solved, due to a great extent to environmental impacts; looking at either mortality and disease indicators or natural assets the situation is highly critical;

(e) the background factors exacerbating harmful environmental hygiene effects (stress, overburden, consumption habits, etc.) are very strong.

Public participation, awareness raising and providing suitable information are fundamental to the solving of the problems.

Following the description of the problems, the general objectives for given fields and special sectors indicate the main direction of problem-solving. The more specific aims and directions determine the quantified targets and identifiable tasks for the six year period of the Program.

2.1. PROTECTION OF ENVIRONMENTAL MEDIA

2.1.1. AIR QUALITY PROTECTION

AIR-1. As for suspended particle and toxic solid substances, the extent of pollution should decrease by 20 % in six years in settlements classified ”polluted”, and it should not increase in the others.

AIR-2. On the basis of the *Air Quality Protection Intersectoral Action Programme* a highly emphasised aim is to improve the air quality of the highly polluted settlements and regions so that they reach the standard of moderately polluted, at a minimum. The continuation of the programme after 1998 should be ensured to further decrease air pollution and to maintain favourable conditions in settlements.

AIR-3. In order to reduce emissions from transport, the following are necessary:

(a) to moderate traffic and transportation demands through regional policy, informatics, logistics, industrial and commercial means;

(b) to give priority to non-motorised transport, where possible;

(c) to ensure the development of public transport, railway, water transport, to improve the level of service and competitiveness by technical, economic and fare policy measures to preserve, and where possible, to increase their share in transport and traffic in accordance with the objectives of the adopted Hungarian transport policy;

(d) to promote the modernisation of the vehicle fleet by duty and tax policy, emphasising environmental aspects with due regard to lower fuel consumption and pollutant emission;

(e) to improve the emission parameters of the existing vehicle fleet by devices to be built in; in six years 50% of the vehicles should be equipped with devices decreasing pollution through purchase and operation of modern vehicles;

(f) to improve the quality of fuels by suitable development and to stop the use of lead additives by the end of the period; regarding other parameters; to enforce the objectives of the EU adopted in June 1996;

(g) to continue - and, if possible, accelerate - building bypass roads and the missing elements of the road network co-ordinating environmental and transport priorities;

(h) to prefer vehicles that operate with lower pollutant emission and fuel consumption during public procurement.

AIR-4. In the field of the reduction of industrial and power plant emission - primarily taking into consideration the principle of prevention - preference for up-to-date and low energy technologies by elaborating and introducing legal-technical-economic incentives.

AIR-5. Reduction of harmful emissions from communal heating by reducing heating energy demand and using heating equipment of low pollutant emission and fuels of adequate quality and supporting research and development in these fields. Preference for construction and architecture resulting in the reduction of harmful emission.

AIR-6. Implementation of tasks coming from international conventions regarding sulphur dioxide, nitrogen oxides, volatile organic compounds, ozone depleting and greenhouse gases:

(a) the specific aims are related to international conventions concluded or to be concluded. Sulphur dioxide emissions compared to 1980 must be reduced by 45% by 2000, by 50% by 2005, efficient emission reduction measures must be taken for the existing and new sources;

(b) the emission of volatile organic compounds cannot exceed the 1988 level until the end of 1999; the best available technology must be used for the new technologies within two, and for the existing sources within five, years following their enactment, a national programme is to be elaborated to reduce the quantity of emissions and trans-border pollution;

(c) to stop the use of ozone depleting substances by complying with the deadlines specified in the conventions;

(d) limitation of greenhouse gas emissions; emission should not exceed the determined comparative level by 2000;

(e) reduction of sulphur and nitrogen compounds emission during the Program to a level that ensures atmospheric acid deposits remain below critical load;

(f) finalisation of the international convention on the decrease of heavy metal emissions and preparation for joining further conventions are under way.

AIR-7. According to the elaborated concept and implementation plan, development of an air quality protection information system and measurement network. 40 settlement and 10 background pollution measurement stations should be set up during the six years of the Program.

AIR-8. Elimination of the obstacles to the use of renewable energy resources and gradual elaboration of their promotion system.

2.1.2. WATER PROTECTION

2.1.2.1. SURFACE WATER

WAT-1. Decrease of critical water management problems caused by water shortages.

WAT-2. Increase of usable surface water reserves by developing runoff regulation and - if it is ecologically sustainable - by redirecting surface water to areas with water shortages, primarily in certain regions of the Great Plain.

WAT-3. Development of regulation encouraging economical water use in the sectors of both communal services and enterprises.

WAT-4. Specific water quality objectives can be set only for the long run. Those are:

(a) in the case of the Danube, water quality should be at least class III regarding micro pollutants and microbiological parameters (on the basis of the current five-class system);

(b) the water quality of the river Tisza should be in general at least of class III;

(c) the lakes should be at least of class II, and chlorophyll concentration should not exceed 75 mg/m^3;

(d) the increase in salt and toxic substance concentration in surface water must be stopped; in irrigation water aquifers, the salt content of the recipients should be decreased with further limitation of waste water and sewage intake with high salt content.

WAT-5. To realise the future aim that settlements sewers reach 65%, all waste water flowing to live water from sewers should at least be biologically purified. The nitrate and phosphorous load of highly protected water sensitive to nutrients (lakes, reservoirs, oxbows, temporary watercourses, low flow recipients) should be decreased; in these areas third degree waste water purification is also needed. According to EU guidelines waste water drainage and purification should be solved in settlements with more than 15,000 inhabitants by 2000 and in settlements with more than 2,000 by 2005.
Hungary has to fulfil these tasks by 2010. In the six years of the Program, the goal is to reach 60% sewer supply by developing waste water drainage in highly protected areas. Purification of this sewage and beginning development for waste water purification in county towns is a high priority. Where possible, individual, low capacity and nature protecting sewage disposal is to be encouraged.

WAT-6. A long term aim is that organic material load getting into living water should fall below 20% with the probable increase of waste water quantity. Proportional fulfilment is earmarked in the Program.

WAT-7. Waste water purification of industrial and agricultural plants should be gradually solved by a suitable economic regulation (disincentive, incentive) system. In the case of new plants only solutions complying with environmental regulations can be permitted. Similarly, pre-treatment of waste water getting into public sewers must be carried out. Industrial waste water containing poisonous material should not get into communal sewage.

WAT-8. For suitable waste water purification, the harmless disposal - especially composting - of waste water sludge must be ensured at every purification plant. This solution is to be used for sludge coming from sewers draining rainwater.

2.1.2.2. SUBSURFACE WATER

WAT-9. Subsurface water should be used in the area of exploitation to a greater extent and proportion, with on-site disposal and recycling of the purified waste water.

WAT-10. In the regions endangered by continual water sinking - first of all in the sand tables of the region between the Danube and the Tisza, the talus of Maros and the mountains in Transdanubia - water balance should improve.

WAT-11. Moderating, followed by stopping, the rate of pressure decrease of subsurface water, stopping excessive regional use.

WAT-12. Stopping subsurface water exploitation without permit, followed by a planned modification of those with permits (until the level given in the environmental load standard taking resupply into account is reached), determining priority areas.

WAT-13. Planned approach to the subsurface water quality targets with increased attention to the environment (protection area/structure) of vulnerable water aquifers (existing and prospective) by promoting the establishment of associations for the protection of drinking water aquifers;

WAT-14. Stopping dangers and elimination of environmental damage by detecting pollution sources threatening subsurface water, listing and detecting long term environmental damage accumulated in the past decades according to schedule, enforcing legal and financial liability of identified polluters.

WAT-15. Decrease of nitrate load and diffuse micro-pollution of non-natural origin;

WAT-16. Identification of the areas and regions where the quality of subsurface water, due to natural reasons and processes, differs from the limits given by the WHO drinking water standard;

WAT-17. Land-use changed through river regulation, water engineering, change in cultivation, mining activity (e.g. mine lakes) should not decrease the supply- quantity and quality - of subsurface water.

WAT-18. A water protection information system should be built. Development of the network for the observation of the quality of subsurface water should begin and its operation with the existing monitoring system should be ensured. These goals are to be met at least at the most endangered areas by the end of the Program period

LAN-1. Developing a land protection strategy.

LAN-2. The protection of soil quality and preservation of its fertility, investments for its improvement, maintenance of soil protecting facilities, reasonable regulation of the water management of soil, and moderation of extreme water imbalance situations should be encouraged by the modernisation of the subsidy system.

LAN-3. Development and operation of comprehensive legal and economic regulations aimed at soil protection including the minimisation of the loss of fertile soil areas.

LAN-4. Development of the conditions for rapid exchange of information between farmers and institutions, providing a professionally established consultancy to make the activities of farmers - particularly of new farmers who obtained land through privatisation - more competent in the field of soil protection (specialised materials, tenders, allowances). Modern utilisation of agricultural chemicals in accordance with the different cultivation methods.

LAN-5. Elimination of environmental damage presenting significant environmental risk and within state responsibility and completing risk reducing interventions according to schedule.

LAN-6. Recultivation of refuse dumps and open cast mines.

LAN-7. Determining those regions considered areas unavailable for open cast mining because of environmental and nature conservation interests.

LAN-8. Large scale environmental geological maps and environmental sensitivity surveys are to be made to prevent environmental damage.

2.2. PROTECTION OF SETTLEMENTS AND THE BUILT ENVIRONMENT

2.2.1. PROTECTION OF SETTLEMENTS

The Program establishes the development of human settlement with less environmental stress and better environmental indicators as a target in the long run.

Accordingly the general environmental aims for settlements are the following:

SET-1. Reduction of settlement air pollution in accordance with the environmental programmes of local authorities.

SET-2. Development of sewers, waste water purification and special waste water treatment in settlements and protection of drinking water aquifers.

SET-3. Promotion of selective waste collection. Adequate treatment and disposal of municipal solid waste and development of sanitary services.

SET-4. Reduction of the health damaging effects of noise and vibration in settlements.

SET-5. The optimal qualitative and quantitative development of green areas in settlements, maintaining the extent of urban green areas and promoting their increase in inner areas of large towns. Outstanding care for and development of sport and recreation facilities.

SET-6. Public participation in environmental decision making and implementation in settlements.

SET-7. Improvement of townscapes and the general cleanliness of settlements, elaboration of programmes and implementation of action plans for this end.

SET-8. Protection of natural assets as wildlife habitats in settlements, conservation of their diversity.

SET-9. Rehabilitation, revitalisation of parts of settlements especially historical settlement centres, cores of settlements.

The Program introduces the majority of settlement-related tasks along with the environmental media. An ideal target taking all factors into account cannot be set at present. The most important goals regarding the topic are: strengthening the environmental work of local authorities, development of the methodology of environmental planning, promotion of its realisation and ensuring accord with regional development. The National Regional Development Concept has a decisive role in solving the problems.

2.2.2. ENVIRONMENTAL ASPECTS OF HUMAN HEALTH PROTECTION

The National Environmental Health Action Programme elaborated along the WHO guidelines details the problems and tasks relating to human health within the Program. The management of these problems presents tasks on the level of each environmental medium and system. Among which the following are to be highlighted here:

HUM-1. Improvement of the present state by an at least 10% reduction of the quantity.of suspended particle fractions with important health effects (smaller than 10 or 2.5 micrometer diameter).

HUM-2. Improvement on the status of indoor air pollution, first of all by suitable regulation.

HUM-3. Regarding drinking water, adequate settlement of problems of drinking water contaminated with arsenic, bacteriological infection, nitrate and by-products of chlorination.

HUM-4. Reduction of the threat of swimming-pool epidemics from bacteriological infection.

HUM-5. Reinforcement of the social and educational importance of sports.

2.2.3. PROTECTION OF THE BUILT ENVIRONMENT

BUI-1. Elaboration of strategies for the survey and reconstruction of damaged, ruined parts of settlements and beginning implementation.

BUI-2. Draft and implementation of the medium term plan for monument protection in the field of both regulation and financing.

BUI-3. Development and application of regulations to improve the maintenance activity.

BUI-4. Development and dissemination of better planning methods taking aesthetic, historical and national aspects into account to influence the improvement of settlement image.

2.3. PROTECTION OF NATURE

2.3.1. NATURE CONSERVATION

In accordance with the National Nature Conservation Master Plan drafted on the basis of Act LIII of 1996 on nature conservation, preservation and conservation of nature is an organised, legally regulated, centrally managed and financed professional and authoritative activity. But at the same time it is the interest and task of society as a whole, local authorities and citizens. The Master Plan gives a detailed definition of nature conservation goals, targets and tasks to be achieved concerning the soil, geological-geomorphological assets, caves, wetland habitats, flora and fauna and landscape.

NAT-1. To implement the tasks in the National Nature Conservation Master Plan.

NAT-2. To establish the network of national parks in the country including Balaton, Danube-Ipoly and Körös-Maros National Parks. The economic and legal conditions of the national park organisation suitable for managing nature conservation and protected areas, based on the current conditions, should be also established. The directorates are to be made suitable for these tasks and new organisations need not be established. The criteria for nature conservation management of the areas are to be developed.

NAT-3. The state of all the conservation areas must be surveyed, and based on this survey the management and maintenance plans of the areas are to be prepared.

NAT-4. The area of the country covered by forest should achieve 20 % (in the long run 25 %), the area of nature-close forest 12%. The proportion of conservation areas should reach 11-12 %

in the country. Planned forestation should be carried out in accordance with the act on nature conservation primarily with indigenous species and in composition corresponding to natural Hungarian types of forests to improve the proportion of nature-near forests. The biodiversity of forests should be increased regarding age composition of species and by choosing better methods and technologies of forest cultivation and use of wood.

NAT-5. To ensure the protection of natural habitats especially those of endangered species of fauna and flora.

NAT-6. To establish the ecological network in the country adjusting to the Pan-European Ecological Network.

NAT-7. To save the representatives of globally or internationally rare water types in near-natural state is an exceptionally important nature conservation task in the future.

NAT-8. To establish gene banks operated by nature conservation authorities. To ensure the financial conditions for the operation of in-situ gene banks and in case of species without the possibility of in-situ protection, establishment of the system of ex-situ gene banks. In the next two years the circle of these species is to be set and ex-situ gene banks are to be developed.

NAT-9. To create the basis of economic management ensuring sustainable development. Within this framework the system of Ecologically Sensitive Areas and the related economic conditions are to be established, taking the directive of the European Council into account.

NAT-10. To ensure the financial basis of the nature conservation compensation system.

NAT-11. To establish and operate the National Biomonitoring System.

NAT-12. To elaborate a programme to survey, evaluate, declare protected, maintain and introduce the endangered artificial underground cavities (mines, etc.) and to create the implementation conditions and financial coverage.

NAT-13. In the case of caves, nature conservation organisations should become the trustee of these treasury assets to settle the question of ownership. To determine the related tasks and obligations, to elaborate the economic and legal conditions of use.
Simultaneously to operate a national registry containing official basic figures provided by the civil service on states and values, to ensure its continuous updating, data supply and archiving.

NAT-14. To elaborate an action programme for the protection of caves as well as geological, morphological assets on the surface and for co-ordinating research, conservation and demonstration tasks relating to them. To ensure the financial and organisational conditions of implementation.

NAT-15. To elaborate the way for developing the institutional system for the protection of fossils, minerals and their localities and to begin actual development by the end of the term of the Program.

2.3.2. LANDSCAPE PROTECTION

Specific aims and tasks result from causes that lead to the problems. To ensure landscape protection therefore:

LAP-1. During legislation, landscape protection authorisation must be incorporated into acts as necessary.

LAP-2. Adjusting to the framework act and relating to the other planning systems, regulation must be passed on the order of landscape planning.

LAP-3. A programme is to be launched to establish national landscape registers, particularly to provide basis for the protection of landscapes rich in traditional, natural and cultural assets and the rehabilitation of landscape degraded regarding their complex potential. To carry out protection and restoration on this basis.

LAP-4. To establish the system of landscape loading and landscape capacity tests and the measures for the enforcement of the proposals drafted as their results. To elaborate a vision of future land use taking the National Regional Development Concept and nature conservation objectives into account.

LAP-5. To elaborate efficient methods for the development of a landscape-awareness.

LAP-6. To elaborate an action plan for landscape development of abandoned open cast mines to survey and protect geological assets that decisively contribute to landscape.

2.4. SPECIAL ENVIRONMENTAL ISSUES

2.4.1. WASTE MANAGEMENT

Municipal solid waste:

WAS-1. The quantity of waste should not increase above the current level (4 million t/year), and the organic material content of waste is to be reduced gradually to a final value of 5%. During the 6 years of this Program a reduction to 20% is to be achieved.

WAS-2. The proportion of organised waste collection is to be increased to 90%, the selective collection of hazardous and usable components is to be launched with the creation of the necessary infrastructure.
The proportion of selective waste collection should be raised to at least 10% by the end of the Program by supporting the propagation and development of environmental industry and services for recycling, reprocessing and reuse.

WAS-3. At least 10-15 regional landfills of an average annual total capacity of 2 million m^3 are to be established every year. Regional landfills are to have adequate technical protection. Illegal dumping is to be reduced, and the dump sites without technical protection and permit are to be closed down.

WAS-4. The proportion of recycling is to be increased by reprocessing some 25-30% of the generated waste or using it as secondary raw material.

Municipal liquid waste:

WAS-5. To reduce the quantity of municipal liquid waste, the proportion of areas with sewers is to be increased (or a suitable solution instead of utilities is to be found).

WAS-6. In areas without sewers the proportion of waste water disposed with environmental friendly sewage drainage is to be increased, raising the most efficient solution to at least30%.

WAS-7. The proportion of waste getting into sewage purification plants and the liquid waste handling and accepting capacity is to be increased.

WAS-8. Dumpsites without adequate technical protection are to be closed down, to this end survey and ranking are necessary.

Production, non-hazardous waste:

WAS-9. The quantity of production of non-hazardous waste is to be surveyed and reduced - by regulation and economic incentives - by introducing low waste technologies, using fewer raw materials and increasing the rate of reuse and recycling.

Hazardous waste:

WAS-10. Implementation of tasks from international conventions and programmes, particularly from the Basle Convention (including survey of waste on the basis of lists adopted following the proclamation of the convention);

WAS-11. A programme is to be elaborated to survey, replace and reduce sources of hazard;

WAS-12. The proportion of recycling must be increased. In the case of hazardous waste qualified unsuitable for use, the system of waste collection must promote controllable disposal (incineration, dumping). In the next six years both incineration and dumping capacities must be increased by 25,000 t/year;

WAS-13. Temporary storage is to be phased out.

WAS-14. The proportion of thermally treated waste is to be increased;

WAS-15. Technology and product change is necessary to reduce the quantity of waste, to this end an incentive system is to be built into the economic regulation.

Waste requiring special treatment:

WAS-16. The problem of red mud piles, and other ore refuse piles is to be solved with long term projects surveying the extent of the necessary financial resources and the possibilities to provide them.

WAS-17. Incinerators serving several institutions should be established to dispose of hazardous hospital waste, on average one per county.

WAS-18. Governmental decree and detailed joint ministerial decree are needed for the full-scale treatment of hospital waste based on uniform regulation.

WAS-19. The treatment of used nuclear material and the safe disposal of low and medium activity radioactive waste from power plants are to be solved and the survey of “zero state” is to be launched.

2.4.2. NOISE AND VIBRATION ABATEMENT

NOI-1. In the case of the reduction of noise load specific quantitative aims cannot be set as they could not be realised or controlled at present.
In the medium term the goal should be to eliminate situations with load above 75 dBA which is unacceptable internationally while in the longer term maximum 65 dBA could be regarded as acceptable.

2.4.3. ENVIRONMENTAL SAFETY

SAF-1. A regulation on chemical safety is to be drafted in accordance with OECD and EU requirements and on this basis a separate programme is to be launched to reduce chemical risks and industrial accidents.

SAF-2. Establishment of a uniform environmental safety information system with the development and operation of a suitable information centre and an inspection system.

SAF-3. Establishment of a professional damage preventing organisation and the related training system.

SAF-4. The Action Programme of Environmentally Aware Management is to be elaborated. This Programme, accommodating to market expectations, should help the voluntary introduction of the idea and instruments (rules, checklists, codes of conduct) of environmentally aware management at organisations, especially in the field of industry, agriculture and local authorities.

3. KEY AREAS OF IMPLEMENTATION

3.1. CO-ORDINATION OF ENVIRONMENTAL PROTECTION WITH REGIONAL DEVELOPMENT

The significance of the new institutional system of regional policy is that it has created the responsible “owners” of the areas in the form of development councils and associations of mixed composition. In this way, there is a possibility to integrate environmental protection locally into complex development processes. This facilitates problem-solving on merit, since local and visible incorporation of problem-solving into both economic and social systems of demands makes local people interested in it. Therefore, the professional tasks of environmental protection can be achieved by separating the “levels” of realisation as national, regional or community tasks. The state supports regional and settlement tasks and environmental development as much as possible. The main form of support is to finance comprehensive regional policy programmes.

3.1.1. STATE MANAGED REGIONAL DEVELOPMENT AND ENVIRONMENTAL PROTECTION

(a) The National Regional Development Concept contains these public tasks. Environmental protection enforces its own criteria in this field

(aa) by providing adequate legal - regulation conditions;

(ab) taking part in preparation and making decisions. Not only governmental organs but citizen associations are affected that have standing under the Environmental Act;

(ac) the environmental criteria adopted in the medium term programme are development priorities in the governmental work regarding sectoral developments affecting regions.

(b) The state supports non-governmental tasks which, however, serve national interests. The specific objects of this support, possibly the affected areas are determined in the medium term by the National Regional Development Concept regarding also environmental protection.

(ba) The main form of support is contribution to the implementation of complex regional policy programmes, and therefore, the given environmental development should fit into programmes like this.

(bb) The extent of actual support is determined by the budget act. The programme financing means obligations for several years also determining the annual budgets, among others that is why a stable priority system is necessary for the medium term.

(bc) In the case of priorities environmental protection should also enforce medium term tasks in the framework of sectoral support.

3.1.2. LOCALLY MANAGED REGIONAL DEVELOPMENT AND ENVIRONMENTAL PROTECTION

(a) The local organisations of regional policy should behave as “owners of the region”. Environmental protection has a key role through increasing the value of the regions by improving value producing capacity. Therefore the complex development programmes they develop must have environmental components.

(b) The multi-channel programme financing provides the possibility to involve entrepreneurial capital in environmental developments and foreign support may also be obtained for these programmes.

(c) To integrate environmental protection into local development, a regulatory system economic instruments is required which makes it transparent and measurable. Local tax based on the value of the area is the most important in this field. This type of transformation of the tax system, therefore, is vital.

(d) The local actors of development must have clear knowledge of what public resources may be applied for in accordance with medium term priorities.

(e) Professional background materials are to be prepared which highlight the aims, their complex benefits, how environmental protection can be integrated into other development aims and how a programme containing environmental protection can be drafted as a system.

3.1.3. ENVIRONMENTAL TASKS IN REGIONAL DEVELOPMENT

All the tasks and priorities with regional aspects - a considerable number - must be compiled, indicating whether state or local tasks are concerned. On this basis a differentiated development strategy can be related to the given issues.

3.1.4. ENVIRONMENTAL TASKS IN PHYSICAL PLANNING

These are primarily different areas for nature and landscape conservation, their strategic developments aims, regions of abatement and rehabilitation, the tasks of which are to be solved within the uniform physical planning procedure. That is why the National Settlement Plan was drafted early in 1997, where adequate solutions were elaborated for the above tasks.

Act XXI of 1996 (on regional policy and settlement planning) contains several other provisions for this issue, such as the development of substantive and methodological aspects of the regional policy plans (within this framework, the evaluation of the carrying capacity and potential of the landscape and the environment - based on adequate methods - must be a substantive element of these plans.)

3.2. POLICIES AND PROGRAMMES FOR KEY SECTORS

The chapter introduces concepts, plans and action programmes which are essential to achieve the goals of the Program. A part of them is already operating, others are still drafts. The Program itself also proposes similar programmes and interventions. These steps, similar to direct interventions, are primarily related to existing pollution and other accumulated problems.

The National Environmental and Nature Policy Concept is the strategic framework for different action programmes and action plans. This Concepts puts special emphasis on the implementation of tasks requiring the co-operation of integrated, but different sectors. The listed programmes and actions are rooted in concepts fundamentally affecting environmental protection, such as transport policy, energy policy concepts or the programme to develop water management.

The tasks and actions are introduced in tabular form where the last column contains the specific goals, in the form of previously given codes, that the given programme or action (or their related groups) intend to solve. Participation of the government, local authorities, business representatives and consumers is needed to realise the above aims.

3.2.1. ENERGY

Energy generation and distribution is one of the economic sectors with the greatest effect on the environment. Thermal power plants account for almost 60% of sulphur dioxide emissions and also significantly contribute to nitrogen oxide, carbon dioxide and solid pollutants. The energy sector is the greatest water consumer in the national economy, this consumption resulting in waste water emission having heat effects. The environmental problems caused by this branch occur on local, regional (e.g. acidification) and global (e.g. increase of greenhouse gas emission) levels.

Rationalisation of energy production and use - along with adequate production, transportation, and logistic procedures and increasing the use of the best available technologies (on both producer and consumer sides) has beneficial consequences in the field of environmental protection and macroeconomics. The beneficial effects may have results regarding both environmental problems and the economy as a whole. A great challenge to Hungary is to harmonise future economic development with the environment-friendly energy sector.

Programmes (P=Planned, S=Suggested)	Measures	Period	Related aims
1. Air Quality Protection Intersectoral Action Programme 2. Short and Medium Term Environmental Action Plan	- To identify responsibilities in highly polluted regions and take technical and economic steps to reduce emissions. - To support emission reducing steps. - Development of environment friendly energy structure. - Change of fuel types.	1994-98 and on from 1991 ongoing	AIR-2., AIR-4.,5.,6., SET-1.
3. Development of Hungarian power plant system until 2010 and power plant establishment plan until the turn of the millennium. 4. Short and medium term renewable energy source development programme (S) 5. National Energy Saving Action Programme	- Modernisation of thermal power plants taking environmental protection into account. - Planning for the lowest cost. - Subsidies for renewable energy resources. - Publicising energy efficiency audits. - Development of qualification system of energy saving devices. - Elaboration of incentives for energy saving. - Publicising the concepts of “good housekeeping”.	1989-2010 1993-97	AIR-1., AIR-4.,5.,6. HUM-1., SET-1.
6. Gas supply programme	- Development of supply.	ongoing	AIR-5., SET-1
7. National project to solve the treatment and final disposal of radioactive waste from nuclear power generation; Research programme to develop the national strategy for treating spent nuclear fuels	- Safe disposal of radioactive waste of small and medium activity from nuclear power plants and later the disposal of high activity radioactive waste.	end of phase I in 1996 1995-98	WAS-19.
8. Project to process heavy fuel oil	- Switching to environment friendly fuels.		AIR-1., SET-1.
9. National Environmental Health Action Programme (NEKAP) (P)	- Promoting wider use of renewable energy sources. - Promoting wider use of more modern fuels and technologies.	from 1997	AIR-1.,5. SET-1
Other measures		Period	Related aims
Development of feedback in an environmentally sound way of thermal water utilised for energy. (P)		1997-2000	WAT-3.

3.2.2. INDUSTRY

Industry is an area where in spite of the significant environmental problems, emissions considerably decreased recently due to restructuring and the resulting closing down and liquidation of outdated plants.

Industrial activities are concomitant with air pollution, waste water discharge and generation of waste, particularly, hazardous waste. Processing industry, according to national figures, is ranking second among the sectors regarding the direct pollution of living water, first regarding total water pollution and its share in production of hazardous waste is over 50% (primarily from the chemical industry). This sector also significantly contributes to the emission of air pollutants. Pollution caused by the concentrated processing industry has a critical role in the emergence of polluted regions. The most characteristic problems caused by mining are: water table level sinking due to water withdrawal, drying up of springs, and many abandoned mining areas.
The polluting character of the building and construction industry has also changed. While this branch earlier caused problems primarily through dust pollution, today it is polluting the environment mainly with production waste.

One of the most important tasks of the industry is to introduce "cleaner" technologies in order to serve prevention and especially to reduce the quantity of air pollutants, sewage and waste. Areas without these possibilities must comply with standards and regulations by cleaning, filtering and shielding. Approaching EU regulation is also a great burden for this sector.

The environmental industry has a great significance and can contribute most directly to the prevention and solution of environmental problems. The development of environmental industry can be an important instrument of industrial restructuring and can promote the exports development and compliance with environmental regulations. A strategic objective is to make the environmental industry the driving force for other branches so that they could meet market and social expectations.

Programmes (P=Planned, S=Suggested)	Measures	Period	Related aims
1. Air Quality Protection Inter-sectoral Action Programme	- Reduction of emissions in highly polluted regions.	1994-1998 and on	AIR-2.,4.,6. SET-1.
2. Programmes of oil industry to reduce the sulphur content of diesel oil (1) and lead content of gasoline (2)	- Quality improvement of distributed fuels.	(1) 1996-1997 (2) -2002	AIR-3.,5. SET-1.
3. Programmes based on the principles of the future Waste Management Concept (P)	- Stopping temporary storage of hazardous waste. - Expansion of incineration capacity. - Support for technical development. - Solution for the treatment of red sludge.	1997-2002	WAS-9.,11.,13 WAS-14., WAS-16.,17.
4. Recultivation programme of abandoned mines (S)	- Survey and research of environmental problems. - Beginning rehabilitation in	1998-	LAN-6., LAP-6. WAS-16.

	accordance with existing conditions.		
5. Medium term industrial policy to increase the competitiveness of industry	- Development of environmental industry. - Publicising low waste technologies, increasing the proportion of waste utilisation.	from 1994 ongoing	WAS-9., WAS-12., WAS-15.
6. Short term and medium term Environmental Action Plan	- Incentive to process secondary raw materials economically.	from 1991 ongoing	WAS-9., WAS-12., WAS-15.
7. Programme to reduce chemical risk (S)	- Registration of emergencies, damage in the fields of production, transportation and storage; taking risk reducing measures.	1997-2002	SAF-1.,2.
Other measures		Period	Related aims
- Elaboration of sectoral waste utilisation guidelines.		1996	WAS-4.
- Elaboration of sectoral waste utilisation action programmes.		from 1996 ongoing	WAS-4.
- Survey of environmental industry investments by sectors, action programmes and feasibility studies to prepare domestic and foreign capital inflow.			AIR-3, AIR-4, WAT-5, WAT-7, WAS-9., WAS-12., WAS-15.
- Regional plans for the development of open mining to mark areas considered environmentally closed. (S)			LAN-7.
- Publicising structures, doors and windows with increased sound insulation. (P)		ongoing	NOI-1. SET-4.

3.2.3. AGRICULTURE, FORESTRY AND GAME MANAGEMENT

Agriculture is one of the activities which is the most directly related to nature, fauna and flora as they are the subjects of its management. Regarding the industrial-like agriculture of the developed world or the Eastern European regions in the past decades, the main goal was to increase yield, to decrease the share of labour and the maximum exploitation of the productivity-boosting potential of industry. The use of agro-chemicals has decreased first gradually, then significantly since the late 80s, organic and integrated farming began to spread and the subsidy system of the soil melioration programme developed.

As a result of the use of industrial methods large-field cultivation has significantly contributed to the decrease of biodiversity and the impoverishment of the landscape.

The improper use of chemicals in plant cultivation and the inadequate storage of liquid manure in animal breeding cause problems particularly for subsurface water but often also for the quality of soil.

The economic interests of forest and wild management are often opposed to the interests of nature conservation mainly due to the following causes: forestation alien to the landscape (in this field further scientific analyses are needed), clear-cutting, and game stock exceeding the carrying capacity of the

areas (considering the criteria relating to the maintenance of the natural state of non-domesticated animals, nature conservation and reasonable use of the game stock). The fundamental goal and task of game management, in this way, in addition to the maintenance of the natural state of non-domesticated animal species and the ones for hunting is nature conservation and the rational utilisation of the stock.

The most important task of this sector is to develop and implement the modern, environment friendly agriculture by the turn of the millennium. The adequate aim is not to apply industrialised agricultural technologies of the West but to develop a modernisation path which is aimed at the use of environment friendly technologies to cultivate produces of high value by making use of the special endowments and expertise of the country.

Programmes (P=Planned, S=Suggested)	Measures	Period	Related aims
1. Programme aimed at water retention and water supply of the sandy plain between the Danube and Tisza rivers(P) 2. Great Plain Programme	- Simultaneously with water replenishment publicising modern water saving agricultural practice. - Better accommodation to the endowments. - Publicising alternative land uses.	1997-2007	WAT-1.,2.,3., WAT-9.,10., LAN-2.,4.
3. Utilising the results of the Agro 21 research programme (S)	- Spreading modern, environment friendly agricultural technologies.		WAT-1., LAN-2.,3.,4.,
4. Afforestation programme 5. Forest reservation programme	- Increase of the area of forests. - Ensuring the protection of indigenous stock.	1991-2000 1992-2000	AIR-6., NAT-4.,5.
6. Programme aimed at the protection of drinking water aquifers (P) 7. Placing perspective aquifers under protection	- Ensuring the conditions necessary to introduce environment friendly practice on the protected areas.	1997-2002 1994-2003	WAT-13.,15., HUM-3.
8. Short and medium term Environmental Action Plan	- Realisation of the programme of "Good agricultural practice".	from 1991 ongoing	LAN-2.,3.,4.
9. Network of sensitive natural areas (P)	- Maintenance of traditional (extensive) agricultural practice in these areas.	1997-2002	NAT-5.,9.
Other measures		Period	Related aims
- Publicising horticulture based on the endowments of Hungarian landscape. - Application of cultivation technologies in accordance with macro and microstructure of soil utilisation. - Spreading nature friendly and organic agriculture. - Increasing the proportion of recycled agricultural waste. - Development of Hungary's landscape and regions for game management. - Decrease of non-point pollutants.		ongoing ongoing ongoing ongoing	LAP-3., LAN-2., LAN-3., NAT-5.,9., WAT-15.

3.2.4. TRAFFIC AND TRANSPORT

Environmental effects from traffic cause problems probably the most difficult to handle both for the sector and for environmental protection. The solution is difficult since effects are dispersed all over the country and the existing traffic systems and habits are hard to change. The area causing the greatest problems is road passenger and freight traffic. This is proved by the high proportion of car emissions among air pollutants. In the case of CO this is over 50% but nitrogen oxide also approximates this rate.

Road traffic in settlements is one of the contributors to the gravest health problems because of effects on air quality and noise emissions. Establishment of new routes might damage the fauna and flora, first by cutting habitats apart and also by the harmful effects of traffic.

Vehicle fleet is outdated, its average age is high, and favourable changes in its modernisation beginning in the early 90s have stopped short as replacement is not promoted by tax and duty regulations to the necessary extent. The poor quality and structure of roads are also decisive problems.

Toll systems can only be introduced following thorough preparation and tests so that the state of the alternative roads should not deteriorate as a result of diversions. The proportion of public transport is still favourable, but improvement of its quality and maintaining the current level are fundamental. In addition, the high ratio of transport per one unit of GDP is also a problem. The modernisation of the economy might improve this situation.

The resolution of the National Assembly No. 68/1996 (VII. 9.) OGY on Hungarian transport policy and the most important tasks necessary for implementation provide a framework for the gradual solution of these problems. One of its main development criteria is the protection of the human environment. Transport policy takes into account the consequences coming from sustainable development to develop the division of labour among the sub-sectors and to determine the technical, economic and organisational development aims. The development and performance of implementation conditions coincides with the period of the Program - providing an optimum possibility for continuous co-ordination and co-operation.

The most important task for transport is to encourage environmentally friendly means of transport (public transport, railway, combined means of transport), to create a nation-wide bicycle route network, to promote the replacement of the vehicle fleet, to introduce better traffic organisation and restrictions at settlements. These tasks can be accomplished by revolving an increasing part of taxes paid by transport for development - especially in environment friendly sectors and environmentally efficient fields.

Programmes (P=Planned, S=Suggested)	Measures	Period	Related aims
1. Air Quality Protection Inter-sectoral Action Programme 2. Short and medium term Environmental Action Plan 3. Public transport development programme (S) 4. Interventions coming from environmental concept of transport (P) 5. National Environmental Health Action Programme (NEKAP) (P)	- To ensure the priority of public transport, to maintain its current proportion. - Traffic organisation and restrictive steps at the most threatened settlements and regions. - Complying with EU directives. - Steps to reduce emissions. - To improve the conditions of railway traffic. - Support for the development of bicycle routes.	1994-1998 from 1991 ongoing 1998- 1997-	AIR-2.,3., AIR-6., SET-1.,4., HUM-1., NOI-1.
Other measures		Period	Related aims
- Supervision of the system of public administration to reduce unnecessary transport needs. - Improvement of environmental features of outdated transport means and acceleration of their replacement (in accordance with EU demands). - Construction of noise protection structures. - Development of combined transport means (road-railway, road-water).		1997-2000 ongoing ongoing ongoing	AIR-2.,3., AIR-6., SET-1.,4., HUM-1., NOI-1.

3.2.5. SERVICES

Trade, tourism, the service element of water management and utilities belong to this sector. The operation of the service infrastructure is a problem mainly because of the effects caused by waste and regarding water protection.

The disposal of municipal waste is the most frequent environmental problem in the country. Environmental aspects still do not play any role in the production and consumption habits determining the quantity and composition of generated waste.

The significant gap between water supply and sewerage, sewerage and sewage purification, sewage purification and sludge treatment and improper purification of sewage cause serious environmental problems.

These problems lead to significant pollution of surface, subsurface water, aquifers (and the soil) endangering even water use.

The growth of mass tourism along with inadequate levels of infrastructure have contributed to several environmental problems. Water quality problems of Lake Balaton, the devaluation of some important tourist regions (Lake Velence, Bükk, sodic lakes, etc.) the deterioration of landscape endowments, and the loss of biodiversity are partly caused by tourism.

The task is to develop the neglected infrastructure networks, particularly sewers and disposal of municipal waste. Regarding prevention, adequate regulation of the quantity and composition of packaging and water use may bring about results.

Programmes (P=Planned, S=Suggested)	Measures	Period	Related aims
1. Sewage disposal and sewage purification programme in Hungary (P) 2. Sewage purification programmes of the capital and other towns with county rights	- Sewer supply and sewage purification at every community with over 2000 inhabitants. - The same, in case of vulnerable aquifers at settlements with less than 2000 inhabitants. - Retention of sewage on areas poor in water reserves.	1996-2010	WAT-4.,5.,6., WAT-8.,9., WAT-13.,14.,15 HUM-4., SET-2., NAT-5., WAS-5.,7.,
3. Programme to protect drinking water aquifers 4. Programme to safeguard perspective aquifers	- Survey - putting into safety - keeping safe. - To achieve future safety of supply.	1996-2000 1994-2003	WAT-13.,14.,15., SET-2., HUM-3.
5. Interventions related to the Waste Management Concept (P)	- Decrease of raw material use. - Using less packaging material. - Creating infrastructure for selective waste collection. - Installing hospital waste incinerators. - Increasing the life cycle of products.	1997-2002	WAS-1.,2.,3.,4., WAS-17.,18., SET-3
6. Rehabilitation of closed down industrial areas in central parts of settlements (S)	- Survey of fields requiring intervention followed by the launch of rehabilitation steps.	1998-	SET-7., BUI-1., WAT-13
7. Programme to improve the water quality and ecological state of Lake Balaton	- Compliance with environmental quality standards of the EU. - Better conditions for indigenous animals and plant species. - Sewers, sewage purification including removal of phosphorus.	1996-2004	WAT-4.,5.,6., WAT-8.,15., NAT-2., WAS-5.,
8. Balaton Research and Regional Development Programme 9. Balaton Water Management Development Programme		1995-2010	WAT-4.,5., SET-7
10. National Environmental Health Action Programme NEKAP (P)	The quality of water from utilities should meet Hungarian standards and WHO recommendations.	from 1997 ongoing	WAT-17., HUM-3.
Other measures		Period	Related aims
- To supply water for those not connected to public utility, their connection to water-works on endangered areas. - Improvement of hygienic situation of natural recreation areas.		1997-2002 1997-2002	HUM-3.,4., WAT-11.,17 SET-7.

- Development of bathing water treatment procedures. - Intervention to eliminate drying-up caused by river regulation.	ongoing ongoing	

3.2.6. ENVIRONMENTAL PROTECTION

This chapter summarises the programmes that stipulate tasks for environmental protection, nature conservation, regional policy and monument protection partly because they cannot be shifted to other sectors (for example, the environmental damage with no one in charge) and partly because it is environmental protection which performs the tasks directly. Indirectly, these tasks can also affect other sectors, but here the role of environmental protection is decisive regarding both implementation and the results.

Programmes (P=Planned, S= Suggested)	Measures	Period	Related aims
1. Short and Medium Term Environmental Action Plan	- Comprehensive.	from 1991 ongoing	
2. Sewage disposal and sewage purification programme of Hungary (P)	- Building 29,400 km of sewers and 2,900 m^3/day purification capacity.	1996-2010	WAT-4.,6.,8.,9.,
3. Air Quality Protection Intersectoral Action Programme	- Phase II of Kis-Balaton.	1994-1998	WAT-13.,14.,15 HUM-4., WAS-6
4. Programme to improve the water quality and ecological state of Lake Balaton	- Environment friendly recultivation of built landscape. - Creation of favourable conditions for indigenous species.	1996-2004	SET-2., WAS-5. AIR-2.,7. WAT-4.,
5. Programme for water retention and supply of the sandy plain between the Danube and Tisza rivers (P)	- Improving the conditions of fauna and flora, stopping soil degradation, desertification, spreading alternative land use.	1997-2007	LAN-2.,
6. Great Plain Programme 7. Programme to protect drinking water aquifers (P)	- Ensuring qualitative and quantitative protection for aquifers.	1997-2002	WAT-9.,10., SOI-2.,4.,
8. Safeguarding prospective aquifers		1994-2003	WAT-13.,14.,15. SET-2., HUM-3
9. Clean-up programme of environmental damage, polluted areas under state authority (Hungarian Environmental Clean-up Programme)	- Survey of damage and adequate interventions.	1996-2026	WAT-14 LAN-5. WAS-16
10. NEKAP (P)	- Comprehensive.	1997-	
11. Action programme to eliminate noise pollution over 75 dBA (S)	- Interventions in accordance with the given situation.	1997-2002	NOI-1., SET-4.,
12. Monument protection intervention programme (S)	- Specific restoration steps.	1997-	CON-2.,

			SET-7.
13. Establishment of national network of protected areas (P) 14. Forest reserves programme 15. Green corridor network (P) 16. System of ecologically sensitive areas 17. Riverbank Ecological Corridor (P) 18. Preservation of geological, morphological values and caves (S) 19. Establishment of biogenetic reserves (S) 20. Establishment of biosphere reserves (S)	- To declare protected: Danube-Ipoly, National Parks at Balaton, Körös-Maros. - Establishment and protection of seed areas of indigenous forest stock to be preserved. - Establishment of uninterrupted network of ecologically valuable areas, maintenance of traditional agricultural activity on transitory areas. - Ensuring research, conservation, introduction. - Establishment of network. - Development of network.	1997-2002 1995-2005 1997- 1998-2002 ongoing	NAT-2., NAT -5., NAT -6., NAT -9., NAT -6., NAT -14., NAT -8., NAT -5.
Other measures		Period	Related aims
- To ensure the proper proportion of wetland habitats and their water quality conditions. - Forest protection, tree planting, grass reconstruction favourable for soil and landscape protection in accordance with new agricultural area structure. - Beginning the reconstruction of historical buildings and parts of settlements. - Stopping the discharge of highly hazardous (toxic, carcinogenic) substances into surface waters. - Establishment of disposal capacities in accordance with the waste production pattern of the country. - Introduction of waste collection by commercial methods. - Municipal solid waste management with the installation of modern regional systems. - Where necessary, removal of phosphorus from sewage at purification plants. - To improve the efficiency of sewage purification in the towns of Eger, Kaposvár, Salgótarján, Gyöngyös, Hatvan, Sopron, Békéscsaba and Veszprém. - Moderation of effects of mine lakes endangering subsurface waters. - Filling non-operating, unattended, uncontrolled wells. - Establishment of gene banks operated by the nature conservation authority. - Establishment of an environmental safety duty and emergency organisation.		ongoing ongoing until 2010 ongoing 1997-2002 ongoing 1997-2002 1997-2002 1997-2002 ongoing 1997-2002	NAT-7., NAT-4.,5.,6. SET-7., BUI-1., WAT-4., WAS-2.,3.,7., WAS-12.,17 SET-3., WAT-4.,6., WAT-17., WAT-14., NAT-8., SAF-2.,3.

4. IMPLEMENTATION TOOLS OF THE PROGRAM

4.1. STRATEGIC PRINCIPLES OF THE PROGRAM

SUSTAINABLE DEVELOPMENT

Sustainable development intends to enforce two criteria, not tangible enough for the market: the preservation of environmental assets and the principle of responsibility for future generations. The environmental aspect of the sustainable development of society means the sustainable use of the environment, i.e. the basic principle that the quality of life is to be improved while the natural resources and life supporting ecosystems remain within their carrying and renewal capacities. Sustainable development assumes that a balance between meeting the demands and preserving environmental assets is possible. The key is the need to conserve the state of the vital media (water, soil, air) and nature. Enforcement of the principle requires several non market solutions. The principle is to be enforced locally, regionally and globally.

PRECAUTIONARY PRINCIPLE

With the expansion of human activities, the greater social and geographical division of labour and with its specialisation, environmental risks coming from them are growing by leaps and bounds and are becoming more frequent. With the application of modern and more sophisticated production systems and technologies the factor of uncertainty regarding environmental impacts is growing. In order to reduce risks the precautionary principle is to be used when grave and irreversible environmental damage may occur in the future. The most characteristic examples are problems with chemical substances, issues of nuclear safety and global climate change threatening in the long run.

PRINCIPLE OF PREVENTION

Without enforcing the principle of prevention, advancement towards sustainable development is impossible. Prevention in general is a more economical solution than subsequent intervention and remediation. There are cases - especially in the field of natural assets - where the original asset cannot be restored by any means.

These assets can be conserved only by preventing the harmful impacts. It is obvious therefore that prevention is the main direction of the regulation, research and development activities determined by the Program.

The key to the strategy is enforcement of the principle of prevention. Limited resources and possibilities should be used for prevention even if the elimination of the problems relating to the existing state of the environment takes a longer time.

The principle of prevention requires that environmental protection assist and influence technological development and participate in its support. In line with the enforcement of this principle, solutions to disseminate environmentally friendly products and replacement of currently used materials causing environmental problems are needed. Technological developments, innovative steps, and product modernisation reducing environmental use and load should be supported just as direct environmental interventions. Environmental protection should

help and encourage the introduction of environmental aware management methods and technology development and support them.

PARTNERSHIP

The Program intends to create a new partnership with the different actors to develop and implement environmental policy, reflected by the strategic principles. To this end, the conditions of efficient and continuous co-operation are to be established among the different administrative levels. *Following the principle of "subsidiarity"* the local authorities and their associations will have an increasing role in solving environmental problems. The environmental policy of the central government should promote and serve these activities. On all levels of public administration open and efficient relations are to be established with voluntary citizen groups and their organisations. Co-operation with the private sectors is critically important and should be built on a new approach.

The strategy and the Program itself are to be made acceptable for the society. To ensure the efficiency of environmental interventions, to improve the relationship with the affected parties, to enforce the principle of prevention, steps are to be taken to incorporate environmental aims into the policies of other sectors. The above aims can be ensured only if the latter endeavour is successful.

The participation of businesses in environmental protection is to be improved and, therefore, solutions that provide economic benefits for the interested parties must be found. The idea, that only those developments that qualified as one hundred percent environmental "end of pipe" solutions can be supported environmentally, should be given up. This is all the more necessary since the participation of the business sector in environmental developments is not yet sufficient. Therefore one of the most important tasks of the strategy is to encourage the participation of the business sector in environmental protection.

The situation regarding taxes is a clear indicator that without consensus among the interested parties, an efficient system cannot work. Environmental protection must create this consensus at the governmental level and among regional organisations. The inspectorates must be strengthened in the long run so that the business sector may receive assistance for the solutions. Co-operation built on trust and good will is necessary. It is the responsibility of the state to launch and help these processes.

"OWNER" ATTITUDE

Environmental protection also has obligatory tasks that cannot be related to a market economy. Therefore solutions are necessary which realise the aims of environmental protection and nature conservation and provide the relevant financial resources.

A precondition is that an *"owner attitude"* and the corresponding responsibility should develop on state and local authority levels in order to preserve the assets.

The strategy requires the state and local authorities to set good environmental examples. Otherwise, sacrifices on behalf environmental protection by the inhabitants and businesses cannot be expected. This example requires not only the behaviour of an "owner" but compliance with the adopted rules. The behaviour of an "owner", the practice of "*good housekeeping"* is

more apparent if the subject of management is more specific. Appearances and practical solutions of the problems are the most characteristic on local or regional levels. Accordingly, the strategy represents solutions which create greater potential for public participation and intervention at local and regional levels.

4.2. BASIC ISSUES OF PLANNING, REGULATION AND FINANCING

Modern environmental policy requires a far-sighted, goal-oriented and integrated approach, co-ordinated planning, programme-making and implementation among different regional levels and sectors. In this spirit, the Environmental Act provides for the framework and schedule of the environmental programme-drafting by county and local governments. This Act stipulates the evaluation of the implementation of the National Environmental Program every two years and the necessary planning modifications. To co-ordinate the Program and the plans and programmes on different levels, the elaboration and regular improvement of the comprehensive methodology of environmental policy planning is indispensable. To this end, in accordance with the act, the guidelines for environmental programme drafting and the legislative framework of their application should be worked out for the local and county governments in the next two years.

The continuously applied strategic planning methods at central governmental, regional, county and local levels provide good possibilities for more accurate consideration of environmental aims, priorities and problem-solving methods. Strategic planning is appropriate to help accommodation to the new challenges of the continuously changing outside world and to acquire new solutions extending the instruments of environmental protection. At the same time, by exploring the available alternatives, it provides opportunities to reduce and prevent different environmental risks, to determine the necessary financial resources, budgetary needs and optimal utilisation of human resources.

During the implementation of the Program special attention is to be paid to the programmes already being implemented (Air Quality Protection Intersectoral Action Programme, programme aimed at water retention and water supply for the sandy plains between the Danube and Tisza, programme aimed at the improvement of water quality and ecological state of Lake Balaton, Great Plain Programme, etc.) and to the plans, programme guidelines, and programmes drafted within the National Environmental Program or along with it where the goals are closely related to the objectives of the Program. The latter are the Hungarian Environmental Clean-up Programme, Guiding Principles of Sewerage and Sewage Treatment Programme of Hungary, the National Nature Conservation Master Plan and the National Environmental Health Action Programme.

The planning system of the Program provides opportunity for the different levels of environmental management to address interests and arguments more forcefully and to utilise the scarce resources so that the cost-effective solutions would have the greatest possible environmental benefits.

The decision-making system should be built on the principle of "subsidiarity" but keeping in mind that the principle also takes into account the scientific characteristics of the affected environmental elements and systems and conditions necessary for decision-making.

In the field of regulation, a system making the realisation of strategic aims possible should be established and operated. Environmental *regulation* (legal, economic and technical) *should be*

efficient regarding the relationship between costs and environmental and ecological benefits. A condition of the development of regulations is the guarantee of enactment; to this end regulations without a possibility of enforcement should not be adopted and the professional, financial, organisational conditions for the implementation of new regulations must be guaranteed simultaneously with the enactment.

A stable and predictable regulation concept is to be enforced and it should be characterised by predictable instead of subjective elements. The concept should clarify the rights and obligations of the interested parties.

Regulation should be based on uniform legal principles. In case of punishment and fines, attribution and liability are also important criteria of the decision, while in the case of compliance with the regulations (fees, levies)"*the polluter pays" principle must be clearly enforced*.

The "polluter pays" principle can be used only in a restricted way if regulation punishes some offences as this principle is not based on attribution. To enforce uniform principles, ownership and liability relations should be clearer. Regarding liability, everybody - the state and citizens, companies and consumers - is responsible for the current situation. Their responsibilities are of a different nature and extent but everyone must have his part.

The principle of shared responsibility must be taken into account both for the solution of problems and sharing the burdens. The Program expects the participation of all actors of society but also wants to achieve benefit for all.

The economic situation of Hungarian companies and the applied tax deduction system does not leave enough resources for environmental improvements. Therefore, environmental charges or other levies may be used only together with suitable subsidies or earmarked resources. Subsidies should be normative, primarily depending on technical and scientific conditions and the payers should be able to follow and plan their payments.

At present, financing can be ensured only by creating the stake of the interested parties. Environmental self-financing possibilities of businesses are to be strengthened. The responsible parties should have the chance to solve their problems. The system, where every interested party knows under what condition support may be expected or the use of a certain amount for self-financing, is good. Opportunities to promote access to international funding mechanisms for the free associations of local governments are to be found.

During the period of the Program, the development of environmental industry, environmental investments and environmental services is to be encouraged by changing the system of taxes and duties. Environmental and deposit-refund charges are to be elaborated and introduced gradually and product charges are to be extended. At the same time the system of environmental fines is to be revised

Charges collected for the use of the environment can be utilised for the operation of monitoring and controlling systems only to a limited extent. The collected resources should be primarily used for solving the problems.

Environmental charges can be increased only carefully and if possible, these steps should be taken together with the reduction of traditional taxes.

As environmental requirements become stricter accommodation time is to be given for the operating institutions and companies for compliance and a gradual approach is to be ensured for the enforcement of new rules depending on possibilities. A gradual approach should be related to predictability so these rules should contain specific periods and extents. To enforce the principle of prevention, no time allowances can be used for new businesses and newly established investments.

The basis of regulation in most cases is the solution of a problem occurring at the local or regional level. To improve the efficiency of regulation, the chosen instruments should correspond to the character of the problem to be solved. For efficiency, certain elements of the regulation system should reflect the features of the local and regional environmental problems. Therefore the operation of the incentive and funding system of environmental protection is to be revised continuously.

Summarising, environmental regulation should constitute a uniform, consistent system, and its elements can be changed only if the logic of the system is maintained.

4.3. RESEARCH AND TECHNICAL DEVELOPMENT

Based of the strategy of the Program, research and technical development tasks have important roles. With their assistance, all the knowledge, procedures, methods, technologies, etc. can be provided which are necessary for the efficient implementation of the tasks of the Program period and, in addition, the basis of further objectives can be secured.

The strategy emphasises the prevention principle; consequently, technological processes and modernisation of marketed products are the main goals in the Program. The goals are strengthened by the fact that joining the integration organisations of the developing countries is concomitant with the application of several directives, product and production standards, and guidelines which are inconceivable without efficient R&D.

Therefore the act on “general rules concerning environmental protection” in Article 53 (2) says that environmental R&D is to be increased and the co-ordination of the work in several organisations is to be ensured. The most efficient way is to launch a national environmental R&D programme.

(a) Research and technical development relating to the state, change of state and carrying capacity of the environment. The aim is to have better knowledge on environmental processes and then to improve the efficiency of problem-prevention and reducing interventions.

(aa) Scientific basis for the development and improvement of complex measuring, monitoring and information system registering the (natural and artificial) state, changes of state, loads and pollution of the environment;

(ab) Research for the quantitative and qualitative registry of environmental, natural resources (e.g. water, air, soil), and ecological endowments with special emphasis on the analysis of their environmental sensitivity;

(ac) Investigation of environmental changes (quantitative and qualitative), and impact mechanisms coming from natural processes and interventions;

(ad) Exploration of the animate and inanimate natural assets in areas protected and requiring protection, research for the maintenance and expansion of the areas;

(ae) Scientific basis for the definition of environmental requirements, targets taking new types of pollutants into account (e.g. organic micro pollutants) synergistic effects of harmful substances;

(af) Ensuring an environment that is beneficial for health, exploration of relationship between human health and environmental pollution, proving causal links providing targets for the necessary measures;

(b) Research on global climate change. Modifications affecting natural conditions may mean substantial changes for the Hungarian economy and society. Currently, these researches are decisive for water reserve management and wildlife protection.

(c) Exploration of the relationship between the environment, economy and society as well as the social conditions necessary to realise harmonious environmental management.

(ca) Scientific basis for governmental environmental policy, exploration of the environmental aspects of environment-oriented economic development alternatives (energy policy, environmental friendly agriculture, water management, traffic, etc.) based on the requirement of sustainable development.

(cb) Research on environmental economics and conditions necessary to fit a market economy.

(cc) Basis for the development of legal and economic rules for the regulated protection, utilisation and development of the environment.

(cd) Exploring modern methods of environmental education, training, dissemination of knowledge and awareness raising.

(ce) Theoretical basis for public participation, interest enforcement mechanisms of the society. Analysis of the role of local governments, possible management of the interest conflicts, identical interests among local, regional and national levels.

(d) Regional complex environmental research.

(da) Elaboration of criteria necessary for comprehensive ecological evaluation of heavily polluted, ecologically damaged regions, industrial crisis regions, and recreational regions highly endangered by overload; scientific basis for decisions and measures to improve the state of the environment.

(db) Scientific basis of methods for the prediction of the environmental effects of planned developments influencing the economic and environmental image of a region and for the evaluation of the effects following realisation.

(dc) Complex investigation of large lakes (e.g. regions of Lake Balaton and Velence).

(dd) Definition of optimum land use - based on the protection of the environmental assets of the territory - belonging to individual regional endowments as the basis of regional planning.

(e) Research and technical development ensuring the technical-technological conditions of environmental protection and nature conservation.

(ea) Development of so-called subsequent environmental procedures, instruments, and equipment extending production and consumption horizontally mainly to reduce the existing critical environmental pollution and damage.

(eb) Technical-technological research and development relating to the elimination of unexpected environmental events, emergencies (e.g. transportation, technological accidents) and the elimination, rehabilitation of potential sources of danger (e.g. waste and poison landfills, abandoned military and industrial plants).
(ec) Development of environmentally sound and ecologically clean technologies, products, production systems and environmentally conscious company management systems. The aim, in accordance with restructuring is the development of industrial, agricultural and technical infrastructural technologies that, incorporated into technologies, promote prevention of emissions, and economical, environmental friendly use of environment-natural resources.

(ed) Research promoting environmentally friendly energy generation for the use of domestic energy resources with regard to the particular Hungarian geological endowments.

(f) Standardisation and quality assurance based on environmental management adjusting to the regulations of the developed countries and the European Union.

(fa) Standardisation (taking over and adopting standards which ensure accord and mutual application; adjustment of Hungarian standards to be elaborated to the regulation system of the developed countries; mutual acknowledgement of standards).

(fb) Quality certification (environment friendly character of product technology, etc. qualifying organisation and laboratory accreditation).

4.4. DEVELOPMENT OF THE ENVIRONMENTAL INFORMATION SYSTEM

Although there are different environmental data bases in Hungary which accumulate extraordinarily great quantities of data, data processing, arranging the data collected and to be collected is only partly solved:

(a) The environmental information system should consist of *sectoral-professional systems* and *central system* as the synthesis of the former ones where access to data is guaranteed on both national and international levels. Within the uniform, complex, information system reliable collection of data on local, regional and national levels, their control, arrangement on the basis of Geographical Information System, processing and forwarding, adding the necessary remote sensing data and adequate, regulated accessibility are solved.

(b) The European System of Integrated Economic and Environmental Indicators, the central environmental-economic, statistical data base and the Emission Structure Information System are to be developed.

(c) The elaboration of the substantive framework for environmental reports on the basis of the results of national, detailed environmental surveys and development of the necessary indicators are to be launched.

(d) Establishment of the indicators of sustainability, environmental performance and environmental accounting are to be emphasised and statistical as well as information requirements relating to the former are to be guaranteed.

(e) Data bases in accordance with OECD and EU requirements are to be established and operated.

(f) Topical subsystems referring to regional and settlement levels are to be developed.

(g) The concept and details of operation of the information system of special fields on the basis of the act on regional policy and settlement are to be elaborated.

4.5. INSTITUTIONAL SYSTEM

Experience shows that the organisational system of environmental protection has always wrestled with problems that can be traced back to the lack of clear jurisdiction, and to limited or missing levels of authority over environmental elements and systems. These concerns will prevail, but the majority of the problems can be overcome by a suitable institutional system, infrastructure and efficient relationships.

Strengthening the environmental institutional system is fundamental for the implementation of the Program both at the level of national institutions and regional, local levels. Without them the practical enforcement of the principle of sustainable development, the protection of public interest and performance of public tasks would be at risk.

The institutional system of environmental protection should be decentralised, that is, the independence, organisational and financial possibilities of local and regional institutions should be strengthened. The system of horizontal relations and the environmental work of affected sectors, chambers, professional organisations and their units dealing with environmental protection are also to be strengthened.

The above criteria are to be taken into account for the development and operation of the institutional system of environment protection.

4.6. PUBLIC PARTICIPATION AND AWARENESS RAISING

Different actors and organisations of the society have outstanding roles in the implementation of the Program. In this respect, local authorities have special tasks in accordance with the acts on environmental protection, nature conservation and regional policy.

The development of environmental knowledge and attitude is indispensable for all citizens and professions to advance towards sustainable development. *The task of education, training, and information is to clarify the environmental consequences of decisions and the right solution modes for everyone.*

The mass media play a crucial role in forming the attitude of the public to the environment. At present, although the press, radio and televisions cover environmental issues, the impact seems to be insignificant as they are unable to counterbalance the deluge of opposite information from the same sources. Improvement of the situation is a strategic issue but it means not only the increase of frequency but also of quality. *More efficient forms of information are to be developed.*

A minimum expectation of the society is the *guarantee of the right to information.* Giving basic environmental data is not sufficient, the causes are also to be clarified since protection without them can only be restricted. The opportunities for access to information are to be improved. *Public awareness, and interest can be raised only if the description of the real situation for the citizens is the usual practice and cannot be the subject of permanent considerations.*

People will work voluntarily for sensible aims but without sufficient background or support these initiatives will fade away. The background that supports for the voluntary environmental initiatives of inhabitants or communities must be created, and the feeling of being alone characterising these initiatives should be redressed.

The public must be shown that environmental conditions and assets are important components of the right quality of life. *The task of the Program is to create possibilities which enable an environmentally friendly way of life.*

In addition to the above, activities in public education, higher education and cultural institutions have important roles in strengthening public participation and awareness raising. In order to introduce a healthy way of life into the social scale of values, sport activities at schools should become the basis of mass sport.

In order to facilitate implementation, the drafted and adopted Program should be widely published. Improvement of environmental and nature conservation education is indispensable as part of the National Basic Curriculum. By the end of the Program all students in higher education

should take part in environmental-nature conservation education. Support for non-governmental organisations relating to the Program should be broadened.

4.7. INTERNATIONAL CO-OPERATION

In the Program, a key element is Hungary's compliance with the requirements of the European Union in the field of environmental protection. This issue, as in other countries, has the following dual character.

On the one hand, the advantages of the Hungarian environmental state and regulation are to be conserved, and on the other, where the regulation is to be changed or specific steps are to be taken, they must be fulfilled at a reasonable pace.

A sensible accommodation level and pace is to be found that complies with the EU requirements and meets international conventions while also meeting Hungary's needs. The aim of the strategy is to comply with the environmental regulations of the EU, but taking the above criteria (environmental efficiency, feasibility, predictability, gradual approach, etc.) into account, at a pace in accordance with the interests and carrying capacity of the country. Regarding the Program, a fundamental goal is that basic substantive and formal tasks in connection with joining must be solved and other substantive ones must be started within six years.

Tasks relating to integration mean the introduction and enforcement of different regulations, standards, and norms and the integration effort which the strategy has already defined in connection with sustainable development. When regulations are introduced, the different periods and extent of investment necessary for introduction and enforcement should not be neglected.

In accordance with the current practices, full compliance with the obligations agreed in international conventions is an important requirement. Compliance with the stipulations of the conventions signed within the UN Framework is an indispensable condition for joining the European Union. In the field of the development of bilateral relations with neighbouring countries, the main task is to guarantee the implementation of the signed conventions and to establish new relationships for possible joint actions.

Fulfilment of international obligations and the relevant tasks should be closely related to the solution of domestic environmental problems. Adequate linkage of the two is a criterion of efficiency.

The proportion of environmental expenditure rose to some 1% in 1995 and 1996. (In 1996 the expected environmental development expenditure is HUF 71.1 billion.)

In the first three years of the Program - starting from the projections of the modernisation programme - the proportion of environmental expenditure compared to gross domestic product will gradually grow from 1% in 1996 to 1.4%, and may reach 1.7% between 2000 and 2002. This refers to direct costs. If a certain portion of indirect developments is also considered, this growth may gradually reach 1.7% and 2.2% between 2000 and 2002. For direct costs, this projected growth of the share of GDP from 1% to 1.7% is taken as the maximum of the direct development expenditure in the Program.

According to economic forecasts the growth of the GDP may reach an average of 4-5% annually by the mid-term of the Program; in a favourable case, even higher growth is possible following the turn of the millennium. If economic growth accelerates, environmental expenditure may also grow.

The Program takes the expenditure from international environmental conventions and domestic programmes as a minimum. (sulphur dioxide, nitrogen oxide, carbon dioxide, ozone conventions; national municipal sewerage and sewage treatment programme; intersectoral action programme to improve the quality of air; earmarked programme to protect drinking water aquifers; Lake Balaton, Lake Velence action plans, etc.). These obligations account for three quarters of the development expenditure of the Program.

5. AREAS REQUIRING SPECIAL MEASURES

During the process of surveying the problems and seeking solutions, two regions emerged where general environmental measures, such as direct interventions are not sufficient because of their special conditions and a comprehensive package of measures affecting the whole region is necessary. They are the region of Lake Balaton and the capital agglomeration.

In addition, the large industrial regions (e.g. North Transdanubian industrial area, Sajó valley) and the Great Plain also require special attention to the environment. In industrial regions the situation can be traced back to industrial load, that is to high air, water and soil pollution and waste disposal. In the case of the Great Plain, the basic problem is the lack of water in the region, especially on the table between the Danube and Tisza which entails harmful ecological and agricultural, social and economic consequences. In these regions consistent implementation of the tasks listed for the environmental media - along with regional or local programmes - is sufficient to solve the problems. Therefore in the industrial regions, industrial load and utilisation are to be reduced and the polluted areas are to be eliminated according to the Program. In the case of the Great Plain, special political decisions are necessary to see how and under what ecological, social and economic conditions it is worth utilising the region in the long run.

Environmental protection has handled the capital agglomeration and Lake Balaton as highlighted regions already in the past. This activity however concentrated only on the most dangerous processes and urgent problems, first of all because of funding needs. Implementation of some action programmes was successful but as a whole they did not prove to be sufficient. Elimination of some sewage emitting sources, transformation of animal breeding plants from liquid manure

to traditional one, limitation of the use of agricultural chemicals and dredging in the bay of Keszthely were some efforts to protect the water quality in Lake Balaton.

The survey of problems relating to the preparation of the Program proved that in both regions there are several harmful environmental effects which are not direct consequences of the gravest problems. This implies that not only the most important problems are to be solved and that their solution sometimes may result in further environmental problems.

Therefore in the six years of the National Environmental Program, a comprehensive package of measures should be elaborated which deals with the environmental problems related to each other and covers the interactions of the different solutions. It is insufficient to impose strict traffic restrictions for example in the city centre without providing other means of transport, and parking facilities are also to be improved at suitable locations so that they should not cause even greater environmental problems.

The difference between the two regions is that in the case of Lake Balaton the solution of environmental problems requires national governmental co-ordination and in the case of the capital, primarily the Capital Local Authority and the local authorities of the agglomeration have to address the problems.