

Law of Ukraine

"On the State Programme for Formation the National Ecological Network of Ukraine for the
Years 2000-2015"

(Vidomosti Verkhovnoyi Rady Ukrayiny (VVR), 2000, issue 47, page 405)

The Supreme Council (Parliament) of Ukraine RESOLVES hereby as follows:

1. The attached State Programme for Formation the National Ecological Network of Ukraine for the Years 2000-2015 shall be approved.
2. This Law shall become effective from the date of the publication thereof.
3. The Cabinet of Ministers of Ukraine shall:
 - appoint people in charge of the implementation of actions related to the development of the national ecological network;
 - earmark appropriate funds for the implementation of actions related to the development of the national ecological network for the forthcoming year during the development of the draft State Budget of Ukraine and the draft State Economic and Social Development Programme of Ukraine.

LEONID KUCHMA
President of Ukraine
City of Kyiv, 21 September 2000
No. 1989-III

Approved by
Law of Ukraine
No. 1989-III
of 21 September 2000

The State Programme for Formation the National Ecological Network of Ukraine for the Years 2000-2015

Section I. GENERAL PROVISIONS

The State Programme for Formation the National Ecological Network of Ukraine for the Years 2000-2015 (hereinafter referred to as the “Programme”) has been developed in the context of requirements related to the further refinement, improvement and development of the environmental legislation of Ukraine, as well as in line with recommendations of the Pan-European Biological and Landscape Diversity Strategy (1995) in respect of the issue of the development of an Pan-European Ecological Network as a single spatial system of areas of European countries with the natural or partly altered condition of the landscape.

A great deal of importance is placed upon the improvement of the regulatory and legal framework in the field of the preservation, expansion, restoration and protection of the single system of areas with the natural condition of the landscape and other natural complexes and unique areas, the establishment of natural objects subject to special protection on their territory, thus contributing to the reduction, prevention and elimination of the negative impact of the business and other activities of the people on the environment, the preservation of natural resources and the gene pool of the animate nature.

The ecological network development provides for changes in the structure of the stock of lands of the country by attributing (on the basis of the justification of the environmental safety and the economic feasibility) some lands used for purposes of the economy to the categories subject to the special protection with the restoration of the diversity of natural landscapes inherent in them.

The wealth of natural landscapes is the common property of the Ukrainian people, its natural heritage and should serve to the current and future generations as declared in the Constitution of Ukraine (254k/96-VR).

1. Terms and Definitions

The following terms and definitions shall be used herein:

‘biological (biotic) diversity’ shall be understood as the totality of all species of plants, animals and micro-organisms, groups thereof, and ecosystems within the territory of Ukraine, its territorial and internal marine waters, exclusive (marine) economic zone and continental shelf. The biological diversity consists of the species, population, cenosis and genetic diversity. Human beings are an integral component of the biological diversity and cannot exist other than within it;

‘buffer zone’ shall be understood as an area with the natural or partly altered condition of the landscape, which surrounds the most valuable sections of the ecological network and protects them against the impact of negative external factors of the natural or anthropogenic origin;

‘ecological network’ shall be understood as an integral territorial system, which includes areas of natural landscapes subject to the special protection, and areas and objects of the natural reserve fund, resort, curative, recreational, water protection, field protection areas and objects of other types as specified by the legislation of Ukraine and is a part of the structural territorial elements (hereinafter referred to as the “elements”) of the ecological network, namely natural regions, natural corridors and buffer zones;

‘cadastre of areas and objects of the natural reserve fund’ shall be understood as a system of recording and assessing the condition of areas and individual objects of the natural reserve fund, and their territorial totalities in terms of quantity and quality, whose purpose is to provide executive agencies, local self-administration bodies, individuals and legal entities with adequate data on the legal status, title, regime, geographical location, quantitative and qualitative

characteristics of these areas and objects, their environmental, scientific, educational, recreational and other value for the purposes of the protection, preservation and efficient management of the operation and development of the natural reserve fund;

‘land conservation’ shall be understood as the withdrawal of (agricultural or industrial) lands from the economic turnover for a certain period to take actions aimed at the restoration of the fertility and environmentally acceptable condition of soils, as well as the restoration (renewal) of the lost environmental balance in a specific region;

‘ecological network status monitoring’ shall be understood as a system of the observation of changes in components of the environment within the ecological network in order to timely identify the negative trends in their condition, assess possible consequences of such changes, predict and prevent negative processes, eliminate their aftermath;

‘population’ shall be understood as a totality of individual organisms of the same species with general conditions required to maintain the number of such organisms at a certain level during a long period;

‘natural region’ shall be understood as a natural and territorial formation of considerable area, whose integrity shall be determined by area-specific phyto-landscape, physical and geographical, administrative and other indices characterised by typical and unique natural complexes, diverse flora and fauna, and which plays a regional role of stabilising the environment;

‘natural corridor’ shall be understood as an area of land or water surface either being in or brought to the natural condition, which ensures that the environment meets the conditions of the continuity, systematic unity and carries out the bio-communication functions at various levels of the spatial organisation of the ecological network;

‘natural landscape’ shall be understood as an integral natural and territorial complex with genetically homogenous and uniform natural conditions of localities, which have developed as a result of the interaction of components of the geological environment, relief, hydrogeological regime, soils and biocenoses;

‘coastal marine natural landscapes’ shall be understood as natural landscapes including land and sea (water) based natural complexes and objects;

‘existence environment of plants and animals’ shall be understood as a totality of environmental conditions (both abiotic and biotic), which an individual, a population or a species exists in and cannot exist without;

‘cenosis (biocenosis)’ shall be understood as an historical totality of plant and animal species inhabiting an area with more or less uniform existence conditions (biotope).

2. Current Condition of Areas and Objects Subject to the Special Protection

Areas and objects subject to the special protection (areas and objects of the natural reserve fund, resort and curative, recreational, water and field protection, and other natural areas and objects) account for a relatively insignificant share of the territory of Ukraine. The current area and territorial structure of the lands of Ukraine, which are subject to the special protection, provide certain grounds for attributing them to a territorial system with certain features of an ecological network. The current condition of natural landscapes of Ukraine meets the criteria of the Pan-European Ecological Network only in part.

The national ecological network shall include the share of lands of the country, where natural landscapes have been preserved in an almost unchanged or partly changed condition.

The area of lands being components of Ukraine’s National Ecological Network is specified in Annex 1.

In addition, the ecological network shall also include individual littoral sections of the Black Sea and Sea of Azov.

Natural landscapes can be observed at almost 40 per cent of the territory of Ukraine. They are preserved in the least changed condition at lands covered with forests, shrubs, marshes, and at open lands, whose area accounts for about 19.7 per cent of the total area of the country. Since only 44 per cent of forests perform protective and environmental functions, one may assume that landscapes occupying about 12.7 of the territory of the country are in the condition close to the natural one.

The best-protected are the natural complexes within territories of the natural reserve fund. As of 01 September 2000, the natural reserve fund of Ukraine includes biosphere and natural reserves, national natural parks, regional landscape parks, special reserves, natural monuments, reserve tracts, botanical gardens, dendrological parks, zoological parks, parks being monuments of the landscape architecture with the total area of around 2.4 million hectares, or 4 per cent of the territory of the country. Almost 0.5 million hectares of these lands have been granted for use to institutions of the natural reserve fund.

Currently, the flora of Ukraine consists of over 25 thousand plant species; the fauna consists of almost 45 thousand animal species. The negative anthropogenic factors of the influence upon the environment resulted in the extinction of a large number of biological species and endangered the existence of many existing species. This resulted in 541 plant species' and 382 animal species' being included in the Red Book of Ukraine and 127 rare and extinct typical plant groupings' being included in the Green Book of Ukraine. The number of almost all species of birds of prey, as well as waterfowl, Gallinaceae, crane-like birds, mammals, fishes and insects is gradually reducing.

Negative changes in the marine flora and fauna are brought about by the appearance of dangerous foreign species. The *Lychnia*, *Koeleria*, *Centaurea*, *Liliaceae*, *Amaryllidaceae*, *Gallinaceae*. Till the end of this century, 20 more species of mammals and a number of other species of animals and plants can be entered in the Red Book of Ukraine. More than 20 per cent of populations of wild herbs or technical plants are on the eve of the exhaustion as a result of the uncontrolled use.

In biocenoses of Ukraine, the trend of the rapid propagation of virus infections has been observed. A number of flora and fauna objects are affected with viruses.

According to the Programme of the Prospective Development of Reserves in Ukraine (177/94-VR) approved by Resolution of the Supreme Council (Parliament) of Ukraine of 22 September 1994, the area of the natural reserve fund has been growing dynamically. However, its share in the total area of Ukraine, the diversity of types of natural landscapes and plant groups, the territorial structure of the nature protection territories do not fully comply with international standards, the strategy of planning the territory of the country. In addition, as a result of the prevalent development of raw material production sectors in Ukraine, which are the most hazardous sectors from the environmental point of view, and the excessive tillage of soils, the conditions of ensuring the territorial continuity of areas with natural landscapes deteriorated. This complicates and sometimes makes impossible the spatial processes of the biological exchange at the cenotic and genetic levels inherent in the live nature.

The favourable pre-requisites for the increase in the area of lands with natural landscapes, which emerged in the course of the reform of economic relations in the field of the land use, are ensured by:

- withdrawing agricultural lands (first of all, degraded arable lands) as a result of the non-profitability of their use for designated purposes;
- withdrawing land plots, which have lost their natural condition and endanger the preservation of the environment, from the industrial use (in the field of raw materials production, construction and in other sectors);
- giving preference to the restoration of natural landscapes as the most appropriate type of the use of lands withdrawn from the agricultural use;
- establishing water protection zones and coastal protection belts around waters;

- increasing the area of forests, woodland belts around agricultural lands, industrial and residential areas;
- the need for Ukraine to comply with its international commitments in the field of the environmental protection.

3. Objective and Tasks of the Programme

The principal objective of the Programme is to increase the area of lands of the country under the natural landscapes to the level sufficient for the preservation of their diversity close to their initial natural condition and the development of their territorially integrated system built to ensure the possibility to use the natural ways of the migration and propagation of species of plants and animals, which would ensure the preservation of natural ecosystems, species and populations of the flora and fauna. At that, the National Ecological Network should meet the requirements to the operation thereof within the Pan-European Ecological Network and perform the leading functions in respect of the preservation of the biological diversity. In addition, the Programme should contribute to the balanced and sustainable use of biological resources in the economy.

Major tasks of the Programme shall be as follows:

- 1) in the field of the development of the national ecological network:
 - to determine the spatial structure of the ecological network in order to systematise and determine the ways of the integration of natural environments of the existence of populations of wild flora and fauna species in a territorially integral complex;
 - to determine the area of individual ecological network elements in order to ensure favourable conditions of the existence, free propagation and migration of plant and animal species;
 - to justify and refine the organisational, economic, scientific, practical and other actions in order to support the process of the development and protection of the ecological network;
 - to determine areas for the development of components of the national ecological network, such as natural regions, natural corridors of national importance; to define their place in the structure of lands;
 - to optimise the area, structure and status of elements of the ecological network, to increase their protection status;
 - to reserve and then confer the appropriate status on reserve areas being rich in terms of the biodiversity, especially on the old nature groupings, river-bed, mountain, and gully forests, virgin lands, typical and unique ecosystems and landscapes, existence environments of rare and endangered species, geological formations and standard soil types, etc.;
 - to agree upon the issues related to the transboundary integration of elements of ecological networks of neighbouring countries with elements of the national ecological network of Ukraine in order to develop the Pan-European Ecological Network;
 - to inform the population about the role of the ecological network in maintaining the environmental balance in regions, to ensure the participation of local executive agencies and the population in the preservation of the landscape diversity;
- 2) in the field of the protection and restoration of land resources:
 - to optimise areas of agricultural lands and to reduce the extent of the tillage of such lands;
 - to improve the structure of agricultural lands and to enrich them with natural components;
 - to introduce a soil-protective farming system with the contour-irrigation organisation of the territory;
 - to restrict the destructive intensive use of environmentally vulnerable lands;

- to preserve the agricultural lands with very washed out and very deflated soils at slopes, whose gradient exceeds 5-7 degrees;

3) in the field of the protection and restoration of water resources:

- to ensure the ecological sanitation of natural land and water areas, especially river sources, to improve the condition of flood ecosystems in basins of Dnipro, Dniester, Southern and Western Boog, Siversky Donets, Danube, including the creation of protective belts along the coasts of water objects, especially at very steep areas, to take actions aimed at the preservation of wetlands, to enhance their water protective and water control ability, ensure their re-naturalisation and improve the protection of natural complexes of the water protection zones of water objects;

- to develop and take actions aimed at the preservation of coastal landscapes of the Sea of Azov and the Black Sea, to create a network of marine objects of the natural reserve fund;

4) in the field of the protection, use and restoration of resources of the flora and fauna:

- to create areas with forest and meadow type vegetation in agricultural landscapes;

- to restore (re-naturalise) the steppe, meadow, wetlands and other natural landscapes, where appropriate and feasible;

- to arrange for new areas to maintain the existence environments of certain plant and animal species entered in the Red Book of Ukraine and the natural plant groups entered in the Green Book of Ukraine, the European Red List of Plants and Animals Endangered throughout the World, as well as other plant and animal species included in lists of international conventions and agreements binding upon Ukraine;

- to optimise the agriculture, forestry, hunting and fishing taking into account the existence conditions of species of the local flora and fauna;

- to improve the condition of the protection, preservation and restoration of greenery plantations and forests being components of greenery zones of cities and other populated areas;

5) in the field of the biodiversity preservation:

- to maintain, strengthen and restore key ecosystems and existence environments of plant and animal species;

- to ensure the stable management of the positive potential of the biological diversity by way of the optimal utilisation of the social and economic opportunities at the national and regional levels;

- to take into account the objectives in the field of the preservation, and balanced and sustainable use of the biological diversity in all sectors using or influencing the same;

- to take targeted actions meeting the requirements of the preservation of various types (mountain, steppe, meadow, coastal, marine, river, flood, lake, wetland and forest) of ecosystems and based upon the legal and financial potential of the nature users and state authorities.

4. Conceptual Provisions of the National Ecological Network Development

The following shall constitute the legal basis for the development of the national ecological network: Laws of Ukraine “On Environmental Protection” (12264-12), “On Natural Reserve Fund of Ukraine” (2456-12), “On Fauna” (3041-12), “On Flora” (591-14), the Land Code of Ukraine (561-12), the Forest Code of Ukraine (3852-12) and the Water Code of Ukraine (213/95-VR). The natural areas of international importance shall be set up in accordance with international treaties of Ukraine, for instance 1971 Convention on Wetlands of International Importance especially as Waterfowl Habitat (995_031), 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention (995_089), 1979 Convention on the Conservation of European Wildlife and Natural Habitats (995_034) (1979), 1979 Convention on the Conservation of Migratory Species of Wild Animals (995_136), Convention on the Protection of the Black Sea Against Pollution (995_065) (1992), Convention on Biological Diversity (995_030) (1994), Pan-European Biological and Landscape Diversity Strategy (1995), Convention on the Protection and Use of Transboundary Watercourses and International Lakes (994_273) (1999).

The natural regions, natural corridors and buffer zones in their continuous integrity shall form a network, which unites natural landscape areas into a territorially integral system. Depending on functions, area and animal and plant species structure, elements of the international, national and local importance shall be identified within the national ecological network.

The natural regions shall be formed in territories, which contain objects of the natural reserve fund, whose percentage is considerably higher than the country average value, as well as other territories, which meet the conditions determined by the national environmental protection legislation or international regulatory and legal acts (conventions, agreements, treaties, etc.) and ensure the protection of the landscape and biological diversity, especially those, which include habitats of rare and endangered species of plants and animals.

The natural corridors shall have the form of natural landscape areas of a prolonged configuration being of various width, length, or shape, and interconnecting natural regions. They should ensure the appropriate conditions of the preservation of wildlife species.

The buffer zones shall be established to protect the natural regions and corridors against the detrimental impact of external factors, to create more favourable conditions within them for the development, self-restoration, and optimisation of management forms in order to preserve the existing natural values and to restore those extinct.

The following shall be the components of structural elements of the ecological network:

1) areas and objects of the natural reserve funds being the major natural elements of the ecological network, namely: natural and biosphere reserves, national natural parks, regional landscape parks, sanctuaries (landscape, forest, botanical, general zoological, ornithological, entomological, ichthyological, hydrological, general geological, palaeontological, and karst/speleological), natural monuments, as well as their protection zones; artificial objects (botanical gardens, dendrological parks, zoological parks, parks being monuments of the landscape architecture);

2) water objects (sections of a sea, lake, water reservoir, river), wetlands, water protection zones, coastal protection belts, allocation belts, coastal belts of waterways and sanitary protection zones, which make up the relevant basin systems;

3) forests of the first group;

4) forests of the second group;

5) resort and curative areas with their natural resources;

6) recreational areas for the organisation of the recreation of the population and tourism;

7) other natural areas (areas with steppe vegetation, meadows, pastures, rock placers, sands, saline lands, etc.);

8) land plots, where natural plant groupings entered in the Green Book of Ukraine grow;

9) land plots, where species of animals and plants entered in the Red Book of Ukraine stay or grow;

10) partly, the agricultural lands used extensively—pastures, meadows, hay harvesting areas, etc.;

11) radioactively polluted lands, which are not used and are subject to special protection as natural regions with specific status.

Section II. DEVELOPMENT OF THE NATIONAL ENVIRONMENTAL NETWORK

5. Increasing the Area of the National Ecological Network

In order to increase the area of the national ecological network, the Programme provides for the following actions:

1) setting up objects of the natural reserve fund in areas, which meet the conditions of ensuring the protection of natural complexes (Annex 2);

- 2) increasing the area of lands granted for use to institutions of the natural reserve fund from 0.5 to 2 million hectares;
- 3) preserving natural landscapes in areas being of historical and cultural value;
- 4) including actions aimed at setting up and arranging the water protection zones and coastal protection belts of water objects in programmes of the ecological sanitation of basins of Siversky Donets, Southern Boog, Dnister, Danube and Western Boog, implementing a special regime of the use of lands in river source areas;
- 5) forming transboundary nature protection areas of international importance;
- 6) setting up protective forest plantations and field protection forest belts, arranging meadows (Annex 3);
- 7) preserving the degraded and polluted lands with subsequent partial reforestation thereof (Annex 4);
- 8) maintaining natural landscapes in lands used for the industrial, transportation, communication and defence purposes;
- 9) increasing the area of forests in an environmentally appropriate manner.

As a result of the implementation of the above actions, it is projected that the area of lands of the national ecological network will be as specified in Annex 5.

6. Restoration of the Natural Condition of Elements of the Ecological Network

In areas being components of the national ecological network, it shall be ensured that special actions be taken aimed at the prevention of the destruction of or damage to natural landscapes, natural plant groupings entered in the Green Book of Ukraine, the preservation of animal and plant species entered in the Red Book of Ukraine, the improvement of their existence environment, the creation of appropriate conditions for their propagation in their natural state and dissemination.

In order to ensure the performance of the environmental protection functions of the national ecological network, the Programme provides for the following actions:

- 1) the protection of the animal existence environment during their migration and wintering, and the creation of a system of the protection of animals;
- 2) the expansion of the network of water objects for the migration of fish;
- 3) the creation of conditions for the restoration of the diversity of species of plants and animals, and phyto-cenoses in natural zones;
- 4) the protection of wetlands of the international and national importance;
- 5) the implementation of actions aimed at preventing the detrimental impact on natural complexes of elements of the national ecological network;
- 6) the implementation of a system of taking the environmental protection actions in order to preserve natural complexes of elements of the national ecological network;
- 7) the preservation of populations of plant and animal species, special actions aimed at ensuring the migration of animals and plants at intersections of natural and transport corridors.

7. Development of the Integral Territorial Structure of the National Ecological Network

The national ecological network shall include elements of the national and local importance to be identified on the basis of scientific, legal, technical, organisational, financial and economic criteria.

The following shall be considered elements of the national ecological network of national importance:

- natural areas, where both existing natural reserve areas and those to be set up are concentrated. First of all, these are Carpathian Mountains, Crimean Mountains, Donets Ridge, Azov Highlands, Podillia Highlands, Polissia (marshy woodlands), sources of small rivers, certain estuary areas of large rivers, marine coastal area, the continental shelf, etc.;
- major communication elements of the national ecological network, namely, the latitudinal natural corridors ensuring the natural communications of zonal nature in Polissia (forest zone), Halychyna - Slobozhanshchyna (forest-steppe zone), Southern Ukraine (steppe

zone), as well as meridional natural corridors limited in terms of their space with valleys of large rivers (Dnipro, Danube, Dnister, Western Boog, Southern Boog, Siversky Donets), which combine water and flood landscapes, i.e., the ways of the migration of numerous species of plants and animals.

A separate natural corridor of international importance consists of a chain of coastal and marine natural landscapes of the Sea of Azov and the Black Sea, which surrounds the territory of Ukraine in the South.

The list of major elements of the national ecological network of national importance is provided in Annex 6.

Elements of the national ecological network being of local importance shall be identified in specific regional programmes and regional schemes of the ecological network development.

8. Organisation of Common Transboundary Elements of the National Ecological Network and the Pan-European Ecological Network

The programme provides for the integration of the national ecological network with ecological networks of neighbouring countries being members of the Pan-European Ecological Network by means of setting up common transboundary elements of the ecological network within natural regions and natural corridors, agreeing upon the land use projects in border areas.

The common transboundary elements of the national ecological network will be set up in co-operation with the following countries:

- the Republic of Poland (Western Polissia biosphere reserve, Eastern Carpathian biosphere reserve, Roztochany biosphere reserve);
- the Republic of Belarus (Western Polissia biosphere reserve, Rivne natural reserve, Prypiat-Stokhid national natural park);
- the Russian Federation (Snov natural reserve, Luhansk natural reserve, Desna-Stara Guta national natural park, Meotida national natural park, Donets Ridge national natural park);
- Romania (Danube biosphere reserve, Vyzhnytsia national natural park);
- the Republic of Moldova (Lower Dnister national natural park);
- the Slovak Republic (Eastern Carpathian biosphere reserve).

The list of actions aimed at setting up the national ecological network of Ukraine and the scope of funds required for such actions are provided in Annexes 7 and 8.

Section III. PROGRAMME IMPLEMENTATION MECHANISM

9. Regulatory and Legal Framework

In order to ensure the implementation of the Programme, it is planned to adopt legal acts aimed at implementing the legal norms of the development of the national ecological network. To this end, the laws of Ukraine on the national ecological network of Ukraine, on the preservation of lands, on the economic incentives motivating the land owners and users to take actions aimed at the development and maintenance of the ecological network, on the coastal belt of the seas shall be adopted; appropriate changes shall be introduced in the Land Code of Ukraine, the Forest Code of Ukraine, the Water Code of Ukraine, laws of Ukraine “On Environmental Protection”, “On Ensuring the Sanitary and Epidemiological Well-being of the Population”.

It is planned to develop and approve other regulatory and legal acts aimed at improving the economic mechanism related to the protection and restoration of natural landscapes, and the preservation of their biological diversity.

In order to strengthen the liability for the violation of requirements of the legislation on the protection, use and restoration of the landscape diversity, it is planned to introduce changes in the Criminal Code of Ukraine and the Administrative Misdemeanour Code of Ukraine.

10. Funding

The implementation of the set of actions provided for hereby shall be financed from funds of the State Budget of Ukraine, the republican budget of the Autonomous Republic of Crimea, local budgets, environmental protection funds in budgets of all levels, as well as from other sources, for instance grants of the Global Ecological Foundation and other international environmental organisations. The Programme may be funded by enterprises of all ownership forms and other legal entities.

The major source of the coverage of expenses for the development of elements of the national ecological network being of national importance shall be the funds earmarked in the general and special funds of the State Budget of Ukraine for the actions aimed at the protection of the environment. The development of structural elements of the national ecological network being of local importance shall be funded from funds specified in appropriate sections of local budgets and local environmental protection funds.

The feasibility study of actions aimed at developing the elements of the national ecological network being of national importance with approximate estimate of the results thereof shall be submitted annually as part of the draft State Economic and Social Development Programme of Ukraine for the coming year by a specifically authorised central executive agency being in charge of the issues of the ecology and natural resources of Ukraine, which is the party contracting the Programme on behalf of the state.

11. Scientific Support

In order to provide the scientific support to the actions aimed at the development of the national ecological network, the Programme provides for the fundamental and applied research aimed at developing recommendations and methods of the preservation and restoration of the landscape diversity, including the evaluation of the current condition of natural landscapes, the justification of the most efficient actions, which will ensure the balanced and sustainable use of their natural resources, the inventory of natural complexes and components thereof, the organisation of keeping the cadastres of natural resources and the environmental monitoring within the national ecological network, the establishment of appropriate databases and geographical information systems.

12. Organisational Support

The organisational support to the implementation hereof shall be rendered by the specifically authorised central executive agency being in charge of the issues of the ecology and natural resources of Ukraine, together with concerned central and local executive authorities. This agency shall also control the implementation hereof.

The agency ensuring the organisation of the Programme implementation shall submit reports to the Cabinet of Ministers of Ukraine on an annual basis, as well as the necessary information on the progress of the implementation of Programme tasks.

On the basis of the provided information, the Cabinet of Ministers of Ukraine shall adjust the Programme tasks, their contents and scope of funding.

A deliberative body (Co-ordination Council) shall be set up to co-ordinate activities of the central and local executive agencies implementing the Programme. The membership of the body shall include officials of these agencies, representatives of public organisations and leading scientists. The co-ordination council shall also exercise the functions appertaining to:

- the organisation of the development of the general and regional schemes of the national ecological network development;
- the preparation of proposals related to the inclusion of the national ecological network in the General Zoning Diagram of the Territory of Ukraine as a special functional area;
- the preparation of proposals on the adjustment hereof, if necessary;
- the organisation of the compilation of the national report on the status of the development of the national ecological network once in 5 years.

13. Information about the Status of the National Ecological Network and the Public Participation in the Development Thereof

In order to increase the level of the ecological education and training, and environmental awareness of the population, to make more active its participation in the implementation of actions aimed at the development of the national ecological network, the Programme provides for the following:

- the support to the establishment of new and the involvement of the existing public environmental expert centres in activities aimed at making the society realise the significance of the problem of the preservation of the landscape diversity and the existence environments of plant and animal species;

- the development and the implementation of proposals concerning the involvement of the population in the actions aimed at the development of the national ecological network, including young people and taking into account the experience of the out-of-school environmental education in the field of the generation of the environmental culture and awareness of the problems of the environmental protection.

Section IV. PROGRAMME IMPLEMENTATION STAGES

It is planned to implement the Programme till the year 2015 in two stages (2000-2005 and 2006-2015).

At the first stage, it is planned to ensure the increase in the area of individual elements of the national ecological network, to apply economic levers of the support to their development in lands of all ownership forms, to develop the appropriate regulatory and legal framework, to undertake the necessary scientific research and take organisational actions.

At the second stage, it is planned to bring the area of the national ecological network to the level required for ensuring the environmental security of the country, commissioning a stable system of the environmental actions aimed at the preservation of the landscape and biological variety.

Section V. SOCIAL, ECONOMIC AND ENVIRONMENTAL RESULTS OF THE PROGRAMME IMPLEMENTATION

The Programme implementation will ensure the preservation and restoration of the landscape diversity and contribute to:

- maintaining the environmental balance on the territory of Ukraine;
- creating the natural conditions for the life and development of human beings in an environmentally balanced environment brought as close as possible to natural landscapes;
- preventing the irreversible loss of a part of the gene, demographic, cenotic and ecological pool of the country;
- ensuring the balanced and sustainable use of the nature in a considerable portion of the territory of Ukraine;
- developing the resource base for tourism, recreation and making the population healthier;
- increasing the natural resource potential in agricultural lands adjoining the national ecological network;
- improving the regulatory and legal framework of the environmental protection and harmonising the same with the international one;
- developing the Pan-European Ecological Network;
- ensuring the restoration of bio- and geochemical turnovers in the environment, reducing the threat of the degradation and the loss of fertility of lands;
- re-naturalising the lands withdrawn from the agricultural use;

- strengthening the co-ordination of activities of central and local executive agencies, local self-administration bodies, public environmental organisations in the field of the solution of problems of the environmental security of Ukraine.

Annex 1
to the Programme

Areas Being Components of the
National Ecological Network

Area type	Area	
	thousand hectares	as percentage of the total area of the country
Hay harvesting area	2307.3	3.82
Pastures	5465.6	9.06
Forests and other areas covered with woods including:	10380.2	17.2
Forests	9424.6	15.62
Forest-type belts	645.5	1.07
Shrubs	310.1	0.51
Open marshes	940.4	1.56
Radioactively polluted lands not used for the economic purposes	136	0.21
Open lands not covered or slightly covered with vegetation	1180.8	1.96
Waters, total including:	2415	4
Natural watercourses	244	0.4
Artificial watercourses	162.2	0.27
Lakes	540.8	0.9
Artificial reservoirs	1133.7	1.88
Estuaries	334.3	0.55
<hr/> TOTAL	<hr/> 22825.3	<hr/> 37.81

Annex 2
to the Programme

Protected Areas and Objects of the Natural Reserve Fund of Ukraine

Category of areas and objects of the natural reserve fund	Area of lands					
	thousand hectares			as percentage of the total area of the country		
	as of 01.09.2000	as of 2005	as of 2015	as of 01.09.2000	as of 2005	as of 2015
National natural parks	600	1455	2329	1.0	2.4	3.9
Natural reserves	160	350	422	0.3	0.6	0.7
Biosphere reserves	212	250	301	0.3	0.4	0.5
Other categories of the natural reserve fund	1427	2200	3223	2.4	3.6	5.3
TOTAL	2399	4255	6275	4	7	10.4

Annex 3
to the Programme

Protective Forest Plantations, Field-protection Forest Belts, Meadow-covered Degraded and Radioactively Polluted Lands—Projected Components of the National Ecological Network

Region	Area, thousand hectares		
	protective forest plantations	field-protection forest belts	meadow covered degraded and radioactive lands
Autonomous Republic of Crimea	9.66	5.6	30.5
Oblasts (provinces):			
Vinnitsa	18.2	0.7	38.6
Volyn	34.95	1.53	53.7
Dnipropetrovsk	109.62	17.88	261
Donetsk	36.83	10.45	51.6
Zhytomyr	90.55	0.7	3.2
Zakarpattia	1.17	0.23	14.9
Zaporizhia	33.78	16.6	248.4
Ivano-Frankivsk	7.89	0.68	10.9
Kyiv	45.67	2.76	46.3
Kirovograd	39.88	4.8	44
Luhansk	27.49	5.4	226.3
Lviv	7.15	0.28	29.4
Mykolaiv	72.28	20.8	72.8
Odessa	66.62	22.77	17.9
Poltava	105.55	9.02	168.5
Rivne	68.3	1.7	72.7
Sumy	6.54	2.26	54.9
Ternopil	11.11	0.5	63.7
Kharkiv	40.21	12.86	26.8
Kherson	16.48	20.42	25.8
Khmelnitsky	10.05	0.86	60.5
Cherkassy	44.52	5.97	48.2
Chernihiv	40.03	0.42	60.7
Chernivtsi	2.66	0.02	31.9
City of Kyiv	0.1		0.1
City of Sevastopol	0.61	0.1	0.4
TOTAL	947.9	174.31	1763.7

Annex 4
to the Programme

Degraded and Polluted Lands Intended for the Conservation

Region	Area, thousand hectares	
	Degraded and polluted lands	Including the lands to be reforested
Autonomous Republic of Crimea	31.9	1.4
Oblasts (provinces):		
Vinnitsa	42.6	4
Volyn	75	21.3
Dnipropetrovsk	347.4	86.4
Donetsk	66.4	14.8
Zhytomyr	79.2	76
Zakarpattia	15.1	0.2
Zaporizhia	256	7.6
Ivano-Frankivsk	14.8	3.9
Kyiv	84.3	38
Kirovograd	69.7	25.7
Luhansk	231.2	4.9
Lviv	29.4	
Mykolaiv	87.8	15
Odessa	37.2	19.3
Poltava	267.6	99.1
Rivne	124.2	51.5
Sumy	58.2	3.3
Ternopil	63.7	
Kharkiv	57.1	30.3
Kherson	33.25	7.45
Khmelnitsky	63.5	3
Cherkassy	80.84	32.64
Chernihiv	89.7	29
Chernivtsi	32.21	0.31
City of Kyiv	0.1	
City of Sevastopol	0.8	0.4
TOTAL	2339.2	575.5

Annex 5
to the Programme

Individual Components of the National Ecological Network

Environmental network component	Area, thousand hectares		As percentage of the total area of the country		As percentage of the area of the ecological network as of 2015
	as of 01.09.2000	as of 2015 (proj.)	as of 01.09.2000	as of 2015 (proj.)	
Hay harvesting areas and pastures	7772.9	9536.6	12.88	15.8	37.9
Forests and forested areas	10380.2	10955.7	17.2	18.15	43.55
Open marshy lands	940.4	940.4	1.56	1.56	3.75
Radioactively polluted lands not used for the purposes of the national economy	136	136	0.21	0.21	0.5
Open lands without vegetation or with inconsiderable vegetation	1180.8	1180.8	1.96	1.93	4.7
Waters	2415	2415	4	4	9.6
TOTAL:	22825.3	25164.5	37.81	41.68	100

Annex 6
to the Programme

Major Elements of the National Ecological Network Being of National Importance

Ecological Network Element	Location (in terms of the physical and geographical conditions)	Major areas and objects being components of the ecological network
	NATURAL REGIONS:	
Carpathian region	Carpathian mountain country	Carpathian, Roztochany, Eastern Carpathian biosphere reserves; Gorgany natural reserve; Synevyr, Carpathian, Uzh, Skole Beskydy, Hutsulshchyna national natural parks
	Prykarpattia and Opillia	Halytsky national natural park
Crimean mountain region	Crimean mountain country	Krymsky natural reserve, Yalta mountain and forest reserve, Karadag, Opuksky natural reserves. Sevastopol, Chatyr-Dag national natural parks
Western Polissia region	Western Polissia	Western Polissia biosphere reserve; Cheremsky, Rivne, Southern Polissia natural reserves
Central Polissia region	Dnipro Polissia	Polissky biosphere reserve, Dniprovsky, Desniansky natural reserves, Mezynsky, Korostyshyvsky, Ichniansky, Holosiyivsky national natural parks
Eastern Polissia region	Eastern Polissia	Serednioseymsky, Desna-Stara Guta, Trostianets-Vorskla national natural parks
Podillia	Podillia Highlands	Medobory natural reserve; Podilsky Tovtry, Kremenetski Hory, Central Podillia, Savransky Forest, Dnister Canyon national natural parks
Middle Dnipro	Middle Dnipro	Ukrainian Forest Steppe Biosphere reserve; Cherkassky Bir, Kholodny Yar, Middle Dnipro, Trakhtemyrivsky, Pereyaslav-Khmelnitsky, Chornolissky national natural parks, Kaniv natural reserve
Donets	Siversky Donets valley	Sviati Hory, Siversky Donets, Slobozhansky, Homolshansky

		national natural parks
Donets-Azov	Donets Ridge, Azov Highlands	Ukrainian Steppe Natural reserve; Priazovsky and Meotida national natural parks
Tavria	Dnipro-Molochna Interfluve	Black Sea, Askania Nova biosphere reserves; Lower Dnipro, Azov-Sivash national natural parks
Lower Dnister	Lower course of Dnister valley	Lower Dnister national natural park
Lower Danube	Lower course of Danube valley	Danube biosphere reserve
Azov	Sea of Azov	Kazantypsky, Opuksky natural reserves, Azov-Sivash, Sivash, Meotida national natural parks
Black Sea	Northeast shelf of the Black Sea	Zernova Great Philofora Field, Small Philofora field, Dzharylgach, Kinburn Cape national natural parks
	NATURAL CORRIDORS:	
Polissia	Forest zone	Forests of the 1st and 2nd groups, marshes
Halychyna - Slobozhanshchyna	Forest steppe zone	Forests of the 1st and 2nd groups, forest belts, meadows, pastures
Southern-Ukrainian	Steppe zone	Forest belts, pastures, hay harvesting areas
Coastal	Coastal belt of the Sea of Azov and the Black Sea	Internal marine waters, capes, shoals, beaches, islands
Dnister	Dnister valley	Flood plains, shrubs, sloped lands with insignificant vegetation, forests, water objects
Boog	Southern and Western Boog valleys	Hay harvesting areas, sloped lands with insignificant vegetation, forests, water objects
Dnipro	Dnipro valley	Flood plains, shrubs, hay harvesting areas, sloped lands with insignificant vegetation, forests, water objects
Siversky Donets	Siversky Donets valley	Flood plains, shrubs, hay harvesting areas, sloped lands with insignificant vegetation, forests, water objects

Annex 7
to the Programme

ACTIONS AIMED AT THE DEVELOPMENT OF THE NATIONAL ENVIRONMENTAL NETWORK

Name of the object of the natural reserve fund (area, hectares)	Budget code	Estimated cost of work, UAH thousand	From the following sources:			Time for completion (in years) broken by budget codes for each object
			state budget	env. protection funds	grants of int'l env. organisations	
1. Development of designs for the establishment of natural reserve fund objects and the land allocation for the organisation of territories thereof						
National natural parks to be established						
Priazovsky, 20 thousand	200600 240600	320	220	100		2000-2002
Meotida, 15 thousand	200600 240600	120	70	50		2000-2002
Sivash, 195 thousand	200600 240600	400	300	100		2000-2002
Prypiat-Stokhid, 50 thousand	200600 240600	450	300	150		2000-2002
Svidovets, 15 thousand	200600 240600	120	70	50		2001-2003
Halytsky, 14 thousand	200600 240600	70	40	30		2001-2003
Pereyaslav-Khmelnytsky, 10 thousand	200600 240600	80	50	30		2001-2003
Hutsulshchyna, 50 thousand	200600 240600	400	300	100		2001-2003
Dnister Canyon, 10 thousand	200600 240600	80	50	30		2002-2004
Dzharylgach, 10 thousand	200600 240600	80	50	30		2002-2004
Trostianets-Vorskla, 40 thousand	200600 240600	300	200	100		2002-2004
Siversky Donets, 20 thousand	200600 240600	160	100	60		2003-2005
Granite Steppe Boog, 5 thousand	20600	40	40			2003-2005
Velyky Loog, 40 thousand	200600 240600	300	200	100		2003-2005

Lower Sula, 7 thousand	200600 240600	140	100	40		2004-2006
Central Podillia, 15 thousand	200600 240600	120	80	40		2004-2006
Samarsky Bir, 20 thousand	200600 240600	160	100	60		2005-2007
Precarpathian, 20 thousand	200600 240600	160	100	60		2005-2007
Dykankivsky, 15 thousand	200600 240600	120	80	40		2006-2008
Slobozhansky, 10 thousand	200600 240600	80	50	30		2006-2008
Kinburn Cape, 10 thousand	200600 240600	80	50	30		2007-2009
Trakhtemyrivsky, 10 thousand	200600 240600	80	50	30		2008-2010
Lower Dnipro, 50 thousand	200600 240600	400	300	100		2009—2011
Krymsky, 25 thousand	200600 240600	200	130	70		2010-2012
Savransky Forest, 10 thousand	200600 240600	80	50	30		2011-2013
Chatyr-Dag, 5 thousand	200600	40	40			2012-2014
Saki, 10 thousand	200600 240600	80	50	30		2013-2015
Zernova Great Philofora Field, 100 thousand	200600	100	100			2013-2015
Small Philofora field, 30 thousand	200600	60	60			2013-2015
Biosphere reserves to be established:						
Western Polissia, 40 thousand	200600 240600	280	200	80		2000-2002
Eastern Carpathian, 50 thousand	200600 240600	350	250	100		2000-2002
Krymsky, 40 thousand	200600 240600	320	250	70		2001-2003
Roztochany, 25 thousand	200600 240600	170	120	50		2012-2015
Polissia, 50 thousand	200600 240600	350	250	100		2004-2006
Ukrainian Forest Steppe, 50 thousand	200600 240600	350	250	100		2010-2012
Donets Ridge, 20 thousand	200600 240600	140	100	40		2012-2015
Natural reserves to be expanded						
Medobory, 2 thousand	200600	20	20			2000-2002
Polissia, 14 thousand	200600	100	80			2001-2003

	240600			20		
Dnipro-Oril, 505	200600	10	10			2002-2004
Biosphere reserves to be expanded						
Carpathian, 10 thousand	200600 240600	70	50	20		2002-2004
Danube, 20 thousand	200600 240600	140	100	40		2003-2005
Black Sea, 50 thousand	200600	50	50			2005-2007
National natural parks to be expanded						
Vyzhnytsia, 3 thousand	200600	20	20			2001-2003
Synevir, 3 thousand	200600	20	20			2001-2003
Podillia Tovtry, 20 thousand	200600 240600	100	70	30		2002-2004
Uzh, 10 thousand	200600	50	50			2003-2005
Sviati Hory, 10 thousand	200600	50	50			2004-2006
TOTAL		7410	5270	2140		

Note: The Programme does not cover the establishment of new natural reserve fund areas under the National Dnipro Basin Environmental Sanation and Potable Water Quality Improvement Programme (123/97-VR) approved by Resolution of the Supreme Council (Parliament) of Ukraine of 27 February 1997 as follows: Stara Guta biosphere reserve (8 thousand hectares); Dniprovsky (55 thousand hectares), Desniansky (54 thousand hectares), Southern Polissia (15 thousand hectares) natural reserves; Holosiyivsky, (3 thousand hectares), Ichniansky (46.68 thousand hectares), Mezynsky (31.6 thousand hectares), Cherkassky Bir (40 thousand hectares), Serednioseymsky (2 thousand hectares), Chornolissky (15 thousand hectares), Kholodny Yar (6 thousand hectares), Dnipro-Boog (50 thousand hectares), Korostyshyivsky (20 thousand hectares), Kostopilsky (30 thousand hectares), Middle Dnipro (300 thousand hectares) national natural parks.

Actions	Budget code	Estimated cost of work, UAH thousand	From the following sources:			Time for completion (in years) broken by budget codes for each object
			state budget	env. protection funds	grants of int'l env. organisations	
2. Keeping the state cadastre of the natural reserve fund of Ukraine						
Setting up an automated system for keeping the state cadastre of the natural reserve fund of Ukraine	240600	400		200	200	2000-2002

Taking inventory of natural complexes of areas and objects of the natural reserve fund of Ukraine	240600	2000		2000		2001-2015
Setting up and keeping a single geographical information system and database, preparing the reporting materials of the state cadastre of the natural reserve fund of Ukraine	200600 240600	1500	500	500	500	2001-2015
Issue of the reporting materials of the state cadastre of the natural reserve fund of Ukraine	200600	200	200			2001-2015
TOTAL:		4100	700	2700	700	
3. Preservation of populations of species of animals and plants						
Development of regulatory documents and keeping the state cadastral of flora and fauna	200600 240600	11200	6000	5200		2000-2015
Inventory of habitats of plant species entered in the Red Book of Ukraine and plant groupings entered in the Green Book of Ukraine	200600 240600	1500	500	1000		2000-2015
Assessment of the status of populations of plant and animal species entered in the Red Book of Ukraine	240600	700		700		2000-2015
Establishment of centres for artificial rearing of rare and endangered species of plants and animals	200600 240600	200	100	100		2002-2005
Establishment of centres for the storage of the genetic material of rare and endangered species of plants and animals	200600	3000			3000	2002-2015
TOTAL:		16600	6600	6900	3100	
4. Taking actions arising from the performance of commitments of Ukraine under international treaties						
Setting up the national and regional databases of the ecological network	200700	500			500	2000-2005
Development of the General Scheme of the National Ecological Network Development	200700	800	400		400	2000-2002

Development of regional schemes of the ecological network development	200700	2500			2500	2001-2005
Compilation of the national list of objects of the natural heritage	200700	300	300			2002-2004
Identification of new wetlands meeting the criteria of wetlands of international importance	200700	400			400	2001-2015
Development of management plans for wetlands of international importance	200700	1000			1000	2001-2015
Identification of areas of special interest in respect of their preservation within the natural reserve fund of Ukraine according to 1979 Convention on the Conservation of European Wildlife and Natural Habitats	200700	800	400		400	2001-2005
Identification of areas of special interest in respect of their preservation according to 1979 Convention on the Conservation of European Wildlife and Natural Habitats outside the natural reserve fund of Ukraine	200700	400	200		200	2001-2005
Preparation of descriptions of the most valuable objects of the natural reserve fund for the award of the European Diploma of the Council of Europe	200700	100	100			2001-2005
Preparation of descriptions of the relevant objects of the natural reserve fund for entering them into a special list of bio-genetic natural areas	200700	100	100			2006-2015
Compilation of lists of wetlands of national importance	200700	100	100			2006-2015
Compilation of lists of wetlands of local importance	200700	700	700			2006-2015
Development of management plans for wetlands of national importance	200700	800	800			2001-2015
TOTAL:		8500	3100		5400	
5. Scientific work to support the implementation of the Programme						

Development of proposals for the improvement of the system of the development of the ecological network of natural areas with different level of the anthropogenic influence, methods and criteria of the identification of natural areas for the preservation of the landscape diversity by turning them into reserves	040202	500	500			2000-2015
Study of the species, census diversity and the middle- and large-scale mapping of natural complexes and components thereof for the purposes of the comprehensive monitoring, the establishment of geographical information systems	040202	3000	3000			2000-2015
Development of a system of criteria for the assessment of the condition of components of ecosystems of natural reserve areas on the basis of their scientific, recreational and social importance. The development of methodologies of the economic valuation of natural reserve areas	040202	300	300			2000-2015
Development and implementation of methods and techniques of the sociotechnical basis of the biodiversity of the natural reserve fund. The development of the concept and strategy of the ecosystem protection and management in national natural parks	040202	700	700			2000-2015
Development of the scientific model of the organisation of the monitoring of the environment in areas of the natural reserve fund and keeping of the state cadastre of the natural reserve fund of Ukraine	040202	2500	2500			2000-2015
TOTAL:		7000	7000			
PROGRAMME GRAND TOTAL:		43610	22670	1174 0	9200	

Annex 8
to the Programme

GENERAL ALLOCATION OF FUNDS REQUIRED FOR THE IMPLEMENTATION
OF THE NATIONAL ENVIRONMENTAL NETWORK DEVELOPMENT PROGRAMME
FOR YEARS 2000-2015 (BY STAGES AND SOURCES OF FUNDS)

UAH '000

o.	General Actions	Sub- total	Broken down by years						
			2000	2001	2002	2003	2004	2005	2006- 2015
	Development of designs for the establishment of natural reserve fund objects and the land allocation for the organisation of territories thereof	7410	940	800	760	700	700	700	2810
	Keeping the state cadastre of the natural reserve fund of Ukraine	4100	400	250	250	200	200	200	2600
	Preservation of populations of species of animals and plants	16600	250	250	250	250	250	250	15100
	Taking actions arising from the performance of commitments of Ukraine under international treaties	8500		500	500	500	500	500	6000
	Scientific work to support the implementation of the Programme	7000	400	440	440	440	440	440	4400
	TOTAL:	43610	1990	2240	2200	2090	2090	2090	30910
	from the following sources:								
	State Budget	22670	540	590	600	440	440	440	19260
	Environmental protection fund	11740	600	800	750	800	800	800	7190
	Grants of international environmental organisations	9200	850	850	850	850	850	850	4100