

ROMANIA

THIRD NATIONAL REPORT

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A. REPORTING PARTY

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B. PRIORITY SETTING, TARGETS AND OBSTACLES

Box I.

Please provide an overview of the status and trends of various components of biological diversity in your country based on the information and data available.

THE STATUS OF ROMANIAN BIODIVERSITY

Romania is located in Central Europe, halfway between the North Pole and the Equator, and also halfway between the Atlantic Ocean and Ural Mountains. The total area of the country is 23,839,100 ha. This includes 31% mountains, 36% hills and plateaus and 33% plains and meadows.

The elevation of the country varies significantly, e.g. the Danube Delta is located at the sea level while the highest peaks of the Carpathian Mountains rise to over 2,500 m above sea level.

The lengths of the major rivers is 5,702 km, of which the Danube covers 1,075 km (18%). The hydrological network has a total length of 65,000 km. The total area of inland waters is 4,913 km², of which 1,991 km² are rivers and canals, 1,327 km² are represented by natural lakes and 1,594,8 km² by reservoirs.

Mountainous, grassland, and deltaic ecosystems dominate Romania's landscape. In the central and western parts of the country, mountainous areas comprise some 28% of total land area, dominated by vast tracts of relatively undisturbed forest in the U-shaped Carpathian Mountains. Around the mountains, forests gradually give way to grasslands, which have been predominantly converted, to agricultural use. To the east, the Danube River completes its 2,850 km course through 13 countries as it discharges into the biologically rich Danube Delta. The Delta, one quarter of which is shared with Ukraine, covers approximately 580,000 hectares (ha) [1 ha = 0.01 km² = 2.47 acres].

Today natural and semi-natural ecosystems cover approximately 47% of Romania. Significant proportions of these are highly degraded. Agricultural lands cover some 30% of the country. Native steppe and steppe-associated wet meadows have been systematically converted to cropland and pastures. The extent of loss of steppe is not thoroughly documented, but less than 10% remains of some types of grassland and shallow marsh ecosystems that were once common in Romania. Forests covers about 30% of the country, with roughly 35% being plantation forests.

Streams, rivers, and wetlands have been negatively affected by sedimentation and chemical runoff associated with the new agriculture-dominated landscape and urban influences. These combined with poaching and dredging have contributed to a significant loss of commercial fishing in recent years, with beluga landings representing only 20% of former levels. Draining of wetlands, elimination of native riparian vegetation, impoundment, and channeling of streams and rivers have all taken a serious toll on local aquatic resources in Romania. These activities have had greatest impact on the lower Danube River, the Danube Delta, and on the Black Sea coastal ecosystem.

Romanian forests face a serious challenge in the immediate future as approximately 30% of standing forests are slated to be restituted to families of former land owners. These forests, which have been under state control for over 50 years, are virtually intact and provide crucial habitat required for large mammals, watershed protection, and substantial economic reserves if sustainable harvested. Current forecasts, modeled on initial restitution efforts that resulted in wide-scale deforestation, indicate that future forest owners may denude up to 20% of forests restituted for immediate economic gain. Such an activity will result in forest fragmentation, which will disrupt genetic flow and habitat suitability throughout Romania's forests. Deforestation will also contribute to global and local climate change, which in turn are disruptive to forestry and agriculture.

The rapid decline of many natural habitats over the past 100 years threatens many species and has caused others to vanish from the landscape in Romania. Although they once ranged throughout Romania in lowland forests, agricultural, urban and industrial developments have forced large mammals such as the red deer, bear, lynx, and wolf into mountainous areas. Fortunately, these species are currently flourishing in Romania's Carpathian Mountains, but their futures are uncertain due to limited protection of their habitat and the short-term economic drive to deforest private lands. Information is insufficient to determine the status of insects and many other less obvious organisms, but some of these species are likely extirpated from Romania and many others are certainly in jeopardy due to habitat destruction and pollution. Furthermore, many of the species and ecosystems threatened in Romania are

under siege throughout their range; some are threatened with extinction from pollution and habitat encroachment. Invasive species, a growing problem in some natural systems, have a negative impact on agriculture, forests, and fisheries. The impact is as yet poorly understood with the exception of some pest species.

While virtually all the changes to the landscape and ecosystems in Romania are, and have been, made for local economic gain, their cumulative impacts are disrupting major ecological and physical systems to an extent detrimental to the economy and well being of the people. Loss of soil fertility reduces harvests and requires use of expensive chemicals; the application of which can further damage ecosystem health.

Romania lies at the geographic centre of Europe and includes five of the ten biogeographic regions (BGR) officially recognized by the EU: alpine, continental, panonic, pontic (euxinic), and steppe. Two of the BGR (steppe and pontic) are present in Romania but not in the EU. Thus, Romania has the greatest biogeographic diversity compared to EU countries: France has four BGR, Spain and Italy have three, and each of the other EU member states has only one or two BGR. The Alpine bioregion (54,213.68 km²) includes 33 habitat types of EU importance (3,110.6 km²); the Continental bioregion (127,810.84 km²) includes 38 habitat types (3,247.86 km²); the Pannonic bioregion (14,345.84 km²) includes 16 habitat types (1,028.95 km²); the Pontic bioregion (1,798.58 km²) includes 23 habitat types (603.84 km²); the Steppic bioregion (40,147.65 km²) includes 18 habitat types (1,168.97 km²).

Habitat diversity. As a consequence of its geographical location, Romania is a country with unique and high ecosystem, species, and genetic diversity. Romanian ecologists have identified 758 terrestrial ecosystem types. Perhaps a more unified measure of diversity is the habitat type, which is defined by dominant species populations rather than by the energetic and functional relationships which usually define ecosystems. While ecosystem definitions can be somewhat arbitrary, habitat types have been defined according to international scientific agreements. The EU CORINE Biotope Program has identified 783 habitat types in 261 areas throughout the country.

The extensive range of ecosystem/habitat types in Romania is largely the result of the influence of climate and elevation. Of major importance are the Carpathian Mountains, 60% of which are in Romania, and the Danube Delta, 75% of which is in Romania. In total 17 major terrestrial ecosystems exist, including all of the major ecosystem types existing in Europe. There is also a rich diversity of aquatic ecosystems including the Black Sea, rivers, floodplains, glacial lakes, subterranean karst cavities and caves, coastal wetlands, bogs, and mountain rivers. While grasslands account for a large number of ecosystem types, they no longer cover a large amount of Romanian land due to encroachment by agricultural development. Among the 783 habitat types, 94 have been designated as special conservation areas, while 25 of these are priority habitat types.

In the more humid regions at lower altitudes (up to 300 m), broad-leaved forests are predominant. In the less humid climates there are steppe grasslands, and in between the two regions there is a zone of silvosteppe containing a mix of forests and grasslands. The elevation change brought about by the Carpathian Mountains brings an abundance of biogeographic zones which include four main types: nemoral (broad-leaved forests); boreal (primarily coniferous forests); subalpine (shrubby conifers, azalea, blackberry and others); and alpine (containing grasses, sedges, dwarf shrubs and a dwarf pine – *Pinus cembra* – unique to the Carpathian Mountains).

Since almost half of all forests in Romania (13% of the country) have been managed for watershed conservation rather than production, Romania has one of the largest areas of undisturbed forest in Europe. The natural integrity of Romanian forest ecosystems is indicated by the presence of the full range of European forest fauna, including 40% of all European brown bears 30% of wolves, and 25-30% of lynx. Europe's second largest wetland, the Danube Delta, also lies predominantly in Romania. Major grasslands, caves, and an extensive network of rivers, add to ecosystem richness.

Woodlands and forests. Today, a total of about 6,567,000 ha of Romania (27.65% of the land area) is covered by forest. Of these, 6,161,000 ha are actually wooded, the other 400,000 ha being meadows, marshes, and ponds. Most of the forests are situated in the Carpathian Mountains, at altitudes above 700 m (58.5%). The rest of forests are located in hills and plateaus between 150-700 m (32.7%), with only 8.8% located at altitudes below 150 m. Conifers comprise 30.3% of all Romanian wooded areas. Spruce (*Picea*) are the dominant coniferous species, represented at 22.5% of all tree species, followed by fir (*Abies*) at 5.1%. Deciduous trees are best represented by beech (*Fagus*), which are the dominant tree species in Romania at 30.4%, followed by oak (*Quercus*) trees at 19.3%. Various other hardwoods including maple (*Acer*), ash (*Fraxinus*), acacia (*Robinia*) and hornbeam (*Carpinus*) comprise 14.3% of Romania's trees, and other softwoods including poplars (*Populus*) of European and American origin and indigenous species such as alder (*Alnus*) and willows (*Salix*) make up 5.7% of all tree species. There are 11 types of broad-leaved forests

In Romania the management of all forests (public or private) is done according to the Forest Code (Law 26/1996). Article 9 of this law states the goal of the sustainable management of forests. Article 17 states the need for management plans for all forests based on the need of providing continuous and improved ecological and socio-economical benefits. Articles 20, 22, 23, 25 and 26 of the Forest Code contain a series of decisions regarding the conservation and increase of biodiversity in forests through their functional zonation, by promoting species from natural types of forests in forest regeneration, by protecting the genotype and ecotype diversity of forests in seed reservations, seed plantations, protected areas and so on.

Romania has about 220,000 ha of virgin or cvasi-virgin forests (representing around 6.5% of the total forested area), of which 99% are located in mountain areas. Despite this, virgin forest have diminished steadily during the last century from around 700,000 ha in 1948, 600,000 ha in 1974, 400,000 ha in 1984.

Over 68% of forests are of natural type, corresponding to the potential vegetation type. This proportion was maintained relatively constant during the last 20-30 years, but presently there is a slight increase in the percentage of artificial forests. Over 50% of the forests are preserved under a special management requirement, being included either as protective forests, for water protection, for land or soil protection, protection against climatic or industrial noxious factors, for recreation or biodiversity conservation.

The proportion of forests included in protected areas increased constantly, reaching almost 700,000 ha in 2005, of which over 200,000 strictly protected (included in special protection areas). The surface of protected areas with forests will increase in the future.

In 2003 the process of forest certification was started in eight regions, covering over one million ha of forests, including both state and private-owned forests. It is focused on identifying valuable forests for conservation and thus adapt the management plans accordingly for biodiversity management.

The conservation of genetic diversity is limited to tree species with economic value and less to trees, bush and shrub species less exploited, but still extremely important for the sound management of biodiversity. In 1999-2000 the forest surface preserved for the conservation of genetic resources was around 11,300 ha, the protected forests used as source of seeds covered over 56,000 ha (decreasing from around 70,000 ha in 1986), while the surface of plantations for seeds was around 828 ha.

Wetlands. The south region of Romania is dominated by an area of steppes, steppe woodlands, and termophilous oak forests interspersed with wetlands. This mosaic of wetlands is the main reservoir of biodiversity in the region but it is endangered by agricultural fertilization, application of pesticides, mechanization, and engineered drainage. These wetlands are remnants of an aged natural area, which hundreds of years ago connected the Carpathian and Balkan Mountain Ranges.

The alluvial zones of the Danube basin constitute a unique heritage, which is necessary for the quantitative and qualitative maintenance of groundwater reserves, and consequently to the quality of drinking water. These alluvial wetlands zones are the richest natural regions in Europe in terms of biodiversity and biological productivity. The alluvial ecosystems are closely linked to the seasonally flooded areas of the Danube. Worldwide, these alluvial ecosystems play a crucial role in the physical and biological functioning of the great rivers and their regulation.

Grasslands, Shrubs. This complex category includes heathlands, which establish themselves after deforestation followed by extensive grazing, and other scrub-like formations resulting either naturally (through climatic and edaphic limitations) or from forest degradation. Grasslands are grass- or herb-dominated vegetation. Naturally occurring systems include alpine grasslands steppes. Semi-natural systems include calcareous grasslands, mat-grass sward on acidic soil, and humid or mesophilic grasslands used as meadows. The latter two semi-natural systems are both being affected by human activities other than traditional harvesting, such as road building, industrial development, and urban sprawl.

Bogs. Romania is rich in bogs, with the more than 430 catalogued covering a surface of 7,000 ha. These bogs produce rich topsoil and provide unique habitat for different species such as *Sphagnum* spp., *Drosera rotundifolia*, *Betula nana* and the glacial relics *Viola epipsila* and *Salix myrtilloides*. The most important are Poiana Stampei-Casoi (Suceava judet), Luci (Harghita judet), and Mohos-Tusnad Bai (Harghita judet). Others are located in Poiana Brazilor-Oas (Maramures judet), Gaina (Suceava judet), and the Apuseni Mountains (Cluj judet).

Caves and cave ecosystems. The karst (limestone with subterranean cavities) surface area of Romania covers 4,400 km². This puzzling geological structure is clearly displayed by a large variety of cave morphology and mineralogy. These karst areas were formed as uplift of limestone and other soluble rocks in the Carpathian Mountains exposed these rocks to surface and ground water that

dissolved away channels and cavities. This process is known as karstification. An active tectonic event somehow isolated and gave individuality to the area's specific karst evolution. Romanian caves provide an invaluable record of quaternary geology in this part of the world. Today, more than 10,000 caves are known, 8,000 of which are located in the southwest. The longest cave in Romania is Pestera Vantului in the Padurea Craiului Mountains (34 km). Topolnita cave in the Mehedinti Plateau is 15 km long and the cave from Zapodia in the Bihor Mountains measures 10.9 km. The deepest cave is Tausoare cave in the Rodna Mountains with an elevation change of 465 m.

Despite the poor conditions offered by the cold dark climate, life is flourishing in many Romanian caves. Where water persists in karst cavities, some 450 species of new invertebrates have been discovered, of which 356 are endemic. Some of these living fossils are good indicators of living and climatic changes during periods of glaciation. Bat diversity is high in Romanian caves. Seven different bat species can be found, sometimes in colonies of thousands.

Soils and agriculture. Plains and agro-ecosystems represent more than 12,000,000 ha (almost 50% of the Romanian territory and 90% of the plain areas), with 9,300,000 ha being arable land. The main plant species used in agriculture are wheat, barley, corn, sunflower, potatoes, oat, hemp, and flax. The main ecosystems of agricultural areas are: grassy lands used for cereals, vegetables, hemp, flax; orchards of apple, peach, plum, and apricot are mainly in hilly areas, frequently associated with meadows; hay meadows, also used as pastures; and associations of bushes and shrubs.

The diversity of species related to agro-ecosystems comprises: 15 species of mammals; 20 species of birds; 15 species of reptiles; 3 species of amphibians; more than 6500 species of invertebrates; and 640 species of plants (134 species of weeds). Of these, 7 animal species are threatened and 12 are vulnerable. Four species of mammals, 4 species of birds, 10 species of reptiles and one species of amphibians have limited areas in Europe.

Meteorological records over more than 100 years show an obvious trend of desertification for some 3 million ha in the East of the country, of which 2.8 million are agricultural land (representing about 20% of the total arable land). The surface of agricultural land affected by frequent drought limiting the productive capacity was as of 2002 of 7,100,000 ha, of which 3,178,000 had arrangements for irrigations, part of which are not functioning due to lack of maintenance.

Agriculture land is distributed according to suitability classes as follows: very good (2.8%), good (24.6%), medium (20.8%), weak (24.4%), very weak (27.4%) (as of December 2002, National Institute of Statistics). The most degraded are pastures and hayfields with 46.6% of the area in the very weak class and vineyards and orchards with 36.7%.

Soil degradation is affecting the quality of about 12 million ha of agriculture land, of which 7.5 million are arable land. Water erosion affects 6.3 million ha out of which 2.3 million are under soil erosion control measures. This type of erosion, together with land slides leads to soil losses estimated at 41.5 t/ha/year. Wind erosion affects 0.4 million ha and soil salinization 0.6 million ha, mainly in the irrigated or drained areas. Soil deterioration and compaction is manifested on 6.5 million ha of arable land. Land abandonment became a priority issue after 1990. It is estimated that abandoned land accounts for 5-10% of the agriculture land. It affects local ecosystems and landscape and contributes to the degradation of about 123,000 ha of arable land. Finally, drought affects 7.1 million ha, including the 3.2 million ha that were previously irrigated.

Species diversity. Romania belongs, from the biogeographical point of view, to the temperate European region. Romania is a meeting point between eleven biogeographic regions - arctic, alpine, west and central European, pannonic, pontic, balkanic, submediterranean and even eastern colchic, Caucasian and turanic-iranian. The country's geographic position, in conjunction with topographic variation and the Danube Delta has resulted in a high level of biogeographic diversity. Romania's floral diversity includes over 3,700 species and its faunal diversity is estimated to include more than 33,800 species. These figures include a large number of endemic and sub-endemic plants (228) and animals (1,000). The first checklist of species from the Black Sea lists 5,608 taxa, of which 3570 taxa are reported from the Romanian coastline. The groups with the highest number of species are Bacillariophyta (459 species, representing 12.8%), Ciliata (277 species, 7.75%), Copepoda (192 species, 5.3%) and Annelida (181 species, 5.07%).

Romania's freshwater animals originate from the Danube River drainage basin and are pre-glacial. Some relic species, which originate from the ancient Sarmatic Sea (crustaceans misidacea and cumacea, some polichaetes and limnocoardiids mussels) can be found today in the Danube River, the Danube Delta and in Black Sea coastal lagoons.

The Danube drainage basin virtually covers Romania's entire land surface and comprises the richest ichthiofauna (fish diversity) of all other European rivers. The basin was less affected by glacial periods and receives many cold tributaries, which provide good habitat for some rheophilic (fast water loving)

and psychrotermophilous (cold water loving) species including beluga sturgeon (*Huso huso*). While the majority of fish in the Danube are freshwater species, 23 fish species of marine origin also inhabit the Romanian sector of the Danube. In all, 108 fish species are known from Romania's coastal waters out of the 170 species reported in the Black Sea.

Romania is represented by a high diversity of groundwater fauna, the origin of which are fully pre-glacial. These organisms can be found living in subterranean water-filled karst cavities and in water bodies in above-ground caves. This life comprises many ancient species of crustaceans, such *Microcharon*, *Microcerberus*, *Stygasellus*, and the archiannelid *Troglochaetus*. Representatives of the only known terrestrial sulphano-genic organisms, which use sulphur instead of oxygen, are found in caves in Romania.

Flora. Of the 3,700 higher plant species catalogued in Romania, 23 species have been declared as natural monuments; 74 species have disappeared from Romania; 39 species are endangered; 171 species are vulnerable; and 1253 are considered rare species. Among harvested plants for medicinal use 3 species are endangered, 20 are vulnerable, 40 are rare (of which 18 vulnerable) and 2 are threatened. Grassland species include 37% of the total species represented. About 600 species of algae and a total of over 700 species of marine and coastal plants exist. A very high percentage of the plant species (4%) are endemic. In total there are 57 endemic taxa (species and subspecies) and 171 sub-endemic taxa (with their territory mostly in Romania). The inventory of important plant areas (IPA) has identified 276 IPAs of which 210 in protected areas (all or part, covering an area of 426,500 ha. According to biogeographic zones the IPAs are divided as follows: Continenta (128), Alpine (98), Steppic (40), Black Sea – Pontic (9) and Pannonic (1). Several IPAs already have international recognition, 3 from the Ramsar Convention and 22 are Biosphere Reserves.

Fauna. Of the close to 33,900 animal species catalogued more than 33,000 are invertebrates and 795 are vertebrates. Romanian vertebrates comprise: 211 species of fish, of which 17 are endangered, including all native sturgeons; 20 amphibian species, of which 3 are endangered; 23 species of reptiles, of which 9 are endangered; 439 species of birds (nesting, migratory and accidentally birds), of which 29 are endangered; 102 species of mammals, of which not more than 10 are endangered. Of the 1785 benthic species cited from the Black Sea 84% are species of marine origin, 10% are allohtonous freshwater and brackish water species while 6% are autohtonous, ponto-caspic relicts.

Migratory birds. Romania is a critical transit area for birds migrating within Europe. The country is crossed by bird populations that are mainly migrating from Europe and Eurasia to the Mediterranean and Africa around the eastern part of the Mediterranean Sea. The main migratory flyway of Romania is in the east between the Carpathian Mountains and the Black Sea. This zone forms a natural corridor for migration with a mountainous barrier to the west and a large water body to the east, thereby funneling birds' migrations south through Romania in autumn. A second, less utilized migratory flyway crosses through Romania's West Plain, which is part of the larger Tisa Plain shared with Hungary and Serbia. A lateral branch runs along the Danube River from east to west. This route is used by Crane (*Grus grus*) and Passeriformes (perching birds). A third flyway crosses the Transylvania basin, from northwest to southwest.

Protected areas. As of 2004, Romania has designated 955 protected areas, covering 7% of the country's area in accordance with the rules of International Union for Conservation of Nature (IUCN). These areas were identified by studies carried out by Romanian research institutes under the advisement of the Romanian Academy. Protected areas include three biosphere reserves, national parks, natural areas, national monuments and strictly protected scientific reserves. Regarding the Law 5/2000, the total surface of protected areas was 5.18% of the country area. By the Government Decision 2151/2004 this surface grew up to 7%. So, the number of protected areas increased by 11.9% and surface by 30.2%.

The Danube Delta Biosphere Reserve (DDBR) has a total area of 5,800 km² (2.5% of the total territory of Romania), which makes it the 22nd largest protected area in the world and the 3rd largest in Europe. It contains the greatest reed beds expanse worldwide and one of the worlds' largest wet habitat zones. Importantly, as compared to other world deltas, only the Danube Delta has been declared as a UNESCO MAB Biosphere reserve. DDBR includes 32 types of ecosystems and represents a natural genetic warehouse. Within this larger complex, 18 areas with a surface of 50,600 hectares (8.7% of the total DDBR) are totally protected and 13 areas with a surface of 223,000 hectares are buffer zones. The Delta is controlled by three international statutes (Biosphere Reserve, Ramsar Site and Site of World Natural and Cultural Heritage, which have been incorporated into Romanian law.

Legislation. Romania has a wide diversity of law directly or indirectly concerned with environmental protection. Recent legislation is derived from the new Romanian Constitution, international treaty obligations, and the requirements of the EU accession process. Because of the transition process, however, legislation prior to 1989 may often conflict with more recent laws and indeed the pace of law-making in the last eight years has meant the inconsistencies, gaps, ambiguities, and contradictions which impede a coherent and comprehensive approach to environmental protection. This has resulted in inconsistent management of protected areas and a lack of concerted efforts to conserve biodiversity. A comprehensive working system for the conservation of biological diversity is not in place in Romania. Government is pressured by EU accession concerns, by international NGOs and bilateral donors, and increasingly, by local NGOs. Various Ministries have proposed comprehensive laws, many of which have been promulgated by Parliament and signed by the President into law. A great number of wild species and natural habitats are the subject of the research programs and projects developed by universities, museums, research institutes and non-governmental specialized organizations.

Biosafety. For the moment there is no strategy for biosecurity, especially related to the use of genetically modified organisms (GMO), although there is a regulation system for GMOs starting with 2000. At this stage Romania has the facilities to develop in cooperation with third parties GMOs with important economic value. We do not have yet the capacity needed for development and taking full advantage of the products of modern biotechnology. Important human and institutional resources for biotechnology are mostly located in research-development academia and institutes : Institute of Biochemistry, Romanian Academy; Institute of Virology „Stefan Nicolau” Bucharest, Institute of Biology, Romanian Academy, Institute of Genetics and the Faculty of Biology, Bucharest University; University of Agricultural Sciences and Veterinary Medicine Timi_oara, University „Babe_-Bolyai” Cluj Napoca and University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. These institutes are not supported in obtaining facilities anyway by the government. The State Institute for Testing and Registering Varieties has the capacity and ability to test and register varieties and hybrids of genetically modified plants. Romania has no accredited laboratories for GMO analysis. Research in the private sector is almost absent

The net effect of these actions has caused progress in biodiversity conservation, and, more broadly, environmental protection. However, for the most part, the complex structure of law and confusing, overlapping authorities of various Ministries has caused same confusion. Noncompliance with laws and lack of enforcement are hampering environmental progress, but Romania is gaining some headway. The country has set aside a good deal of land in protected areas. It is making progress in controlling water and air pollution, and has begun afforestation and reforestation efforts.

Box II.

Goal 2	Promote the conservation of species diversity		
Target 2.1	Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
This target is included in the National Strategy for Biodiversity and is a national policy of the government that co-finances the Life Natura, Matra and Phare CBC programs. Legislation: ▪ The main law is Law 462/2001 focused on the protection of natural habitats and wild species of fauna and flora. ▪ The management of game species is regulated by Law 103/1996 (modified, updated and published again in 2002), Law 26/1996 (The Forest Code). ▪ Ex situ conservation of wildlife is regulated by Law 191/2002 (Law for zoological gardens and public aquaria). ▪ The activities of harvesting, capturing and/or purchase and commerce of wild species of plants and animals within the country or their export-import are under a special licensing process, according to the Ministry of Waters and Environmental Protection Order 647/2001. ▪ The Ministry of Agriculture, Forestry and Rural Development issues each year orders establishing the periods during which hunting and fishing are permitted, the quotas for certain wild species that can be harvested during a hunting season (e.g. OM 668/2004 that establishes the number of bear, wildcat and wolf that can be harvested during the hunting season 2004-2005). ▪ The Ministry of Agriculture, Forestry and Rural Development issues each year orders on the amount of wood to be harvested. ▪ Issue of the hunting licence is done according to a rule approved by the Ministry of Agriculture, Forestry and Rural Development 635/2004.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	X		Pastures and grazing areas from agriculture fields that are protected areas
b) Inland water	X		Protection of aquatic habitats included in protected areas, The existence of two Ramsar sites (Danube Delta and Insula Mic_ a Br_ilei). The implementation of the Water Framework Directive of the EU.
c) Marine and coastal	X		Several projects focused on dolphins, algal beds (<i>Cystoseira</i> and <i>Zostera</i>).
d) Dry and subhumid land	X		This category is not included in the classification of Romanian Protected Areas.
e) Forest	X		Many forested habitats and ecosystems are included in protected areas (mostly in national and natural parks). Projects focused on certain species (e.g. <i>Pinus cembra</i> , <i>Pinus nigra</i>).

f) Mountain	X	Partial protection.
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?		
a) No		
b) Yes, into national biodiversity strategy and action plan		
c) Yes, into sectoral strategies, plans and programmes		X
Please provide details below.		
It is not incorporated into the national strategy but in several sectoral strategies (National Forestry Plan and National Forestry Program).		
IV) Please provide information on current status and trends in relation to this target.		
The reintroduced beavers reach now 200-300 individuals in three departments (Olt, Mure_ and Ialomi_a).		
The reintroduced alpine marmot (<i>Marmota marmota</i>) has around 450-500 individuals distributed in three mountain areas (Retezat 200, F_g_ra_ 120-200 and Rodna >100).		
V) Please provide information on indicators used in relation to this target.		
VI) Please provide information on challenges in implementation of this target.		
VII) Please provide any other relevant information.		

Box III.

Target 2.2	Status of threatened species improved		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water	X		<i>Romanichtys valsanicola</i> conservation (Life Natura); ARBDD strategy for sturgeon protection

c) Marine and coastal	X		
d) Dry and subhumid land		X	
e) Forest	X		<i>Pinus cembra</i> ; seed plants
f) Mountain	X		Large carnivores program
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			X
Please provide details below.			
In the National Strategy and National Action Plan for Biodiversity Conservation and Sustainable Use of its Components (2001) a goal is the conservation of wild species endangered, endemic, rare and with high economic value. Amongst the actions taken for achieving this goal: - Action plan for the conservation of the target species; - Reintroduction/repopulation with the species extinct from certain habitats; The Administration of national and natural parks and of the biosphere reserves and the keepers of protected areas must elaborate management plans with actions for the improvement of the status of endangered species from the specific protected area. Recent finalized or on-going Life Natura projects: - In situ conservation of the meadow viper in Romania (<i>Vipera ursinii</i>) (National Institute for Research and Development Danube Delta 1999 – 2002). - Survival of <i>Romanichthys valsanicola</i> (Institute of Biology of the Romanian Academy 1999-2003). - Conservation of the Euro-Siberian forest of oak (<i>Quercus robur</i>) (The Council of the Department of Braşov, 1999 – 2001). - Program for the conservation of subterranean habitats for bats in the South-West Carpathians (Green Cross and GESS, 2001-2004). - Conservation of dolphins from Romanian Black Sea territorial waters (National Institute for Marine Research and Development, Constanţa, 2001-2004). - In situ conservation of large carnivores from the department of Vrancea (Vrancea Environmental Protection Agency, 2002-2005). - Sub-Mediterranean forests with <i>Pinus nigra banatica</i> (Caraş-Severin Environmental Protection Agency, 2004-2006). - Improvement of the wintering conditions for <i>Branta ruficollis</i> in Techirghiol Lake (to be started). - Saving <i>Pelecanus crispus</i> in the Danube Delta (to be started). - Saving <i>Vipera ursinii rakosiensis</i> in Transylvania (to be started).			
IV) Please provide information on current status and trends in relation to this target.			
The implementation of management plans in protected areas will improve the situation of endangered species. Several projects focused on highly endangered species were financed by Life Natura, bilateral cooperation, state-financed or from Romsilva's own sources. The results of the program Life Natura for the survival of <i>Romanichthys valsanicola</i> was not evaluated yet. The program for the conservation of dolphins in the Black Sea and for <i>Pinus cembra</i> in Ceahlău National Park are on going. The brown bear population in Romania was estimated at 6.700 individuals (at least a minimum of 5.600), wolves after traditional estimates reach 4.600 individuals (at least a minimum of 2.500), compared with 5685 brown bear individuals and 3.733 wolf individuals in 2000. The lynx population has an estimated population			

size of 2.400 individuals (at least a minimum of 1.200).

V) Please provide information on indicators used in relation to this target.

The most common used indicators used are: population size, rate of population increase, surface occupied, ratio between observed/reported, etc.

VI) Please provide information on challenges in implementation of this target.

There are no National Red Lists. Several Red Lists for selected taxa (flora, butterflies, mosses) have been published but they are not officially in use. There are several Red Lists published for the Danube Delta Biosphere Reserve and the Department of Ia_i. The WWF has published a Carpathian Mountains Red List, but the information for Romania is scarce and the list is not applicable.

The 2004 IUCN Red List contains 156 species from Romania, of which 27 were added during the 2004 re-evaluation, but again their status has no official recognition.

High costs are related to effective conservation measures: hydroelectricity in the Vâlsan river for *R. valsanicola*; the lack of technical instruments for inducing dolphins to avoid nets; the impact of dams on the Danube and of overfishing for sturgeon; lack of local regulations that compensate the losses of domestic animals to large carnivores; difficulties to accomplish extensive inventories nation-wide regarding the population estimates and poaching.

The major difficulty is protecting endangered species outside protected areas, especially those with economic value.

VII) Please provide any other relevant information.

Box IV.

Goal 3	Promote the conservation of genetic diversity		
Target 3.1	Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained		
I) National target: Has a national target been established corresponding to the global target above?			
No			
Yes, the same as the global target			
Yes, one or more specific national targets have been established			x
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	x		Research project (National AGRAL financing unit) - 'GESICA' – genotypes and modern technological systems for cereals; programs for hybrids, varieties.
b) Inland water	x		Breeds of Romanian carp at Nucet Research Station
c) Marine and coastal		x	

d) Dry and subhumid land	X		Breeds of cattle drought resistant
e) Forest	X		Law 161/2004 – conservation of valuable forests for reproduction. Seed bank for forest species in Bra_ov.
f) Mountain	X		Program for the conservation of autochthonous breeds of sheep, goats, cattle.
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
No			
Yes, into national biodiversity strategy and action plan			
Yes, into sectoral strategies, plans and programmes			X
Please provide details below.			
Conservation of genetic diversity of forest species is a goal included in national legislation (e.g. the Forest Code, Law 26/1996), in the technical requirements for forestry, law on the production, commerce and use of reproductive forestry materials, Law 161/2004). The conservation of genetic diversity of forest species is included also in the strategy for sustainable development of Romanian forestry. Bank of forestry seeds Bra_ov. Traditional breeds of sheep (Turcana, Tigaia) and cattle (B_l_at_Româneasc_, Pinzgau, Bruna de Maramure_)			
IV) Please provide information on current status and trends in relation to this target.			
According to national legislation, the operating system in Romania is based on the zonation of genetic resources and on the transfer of forest genetic material. A National Catalogue of the Reservation of forest seeds and a National Catalogue of basic genetic resources containing the potential sources of genetic material for reforestation are also in use. In 2000, Romania had over 56,800 ha of seed reserves (diminished from 70,000 ha in 1986), 164 seed orchards with an area of 828 ha and over 11,300 ha of forests preserved for their genetic resources. In the management of forests in Romania, priority is given to (i) natural regeneration which promote the best conservation of genetic diversity, and (ii) the use of local seeds for artificial regeneration.			
V) Please provide information on indicators used in relation to this target.			
VI) Please provide information on challenges in implementation of this target.			
The use of reproductive genetic material of unknown origin, the use of artificial regeneration instead of natural regeneration, the use of poplar and willow tree clones instead of native species etc.			
VII) Please provide any other relevant information.			

Box V.

Goal 4	Promote sustainable use and consumption.		
Target 4.1	Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity		
I) National target: Has a national target been established corresponding to the global target above?			
No			
Yes, the same as the global target			
Yes, one or more specific national targets have been established			x
Please provide details below.			
The strategies referring to natural resources do not mention which are sustainably managed and which are the areas of production managed as to provide for biodiversity conservation.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	x		There are codes of good conduct for agriculture
b) Inland water	x		Management plan for harvesting reed (<i>Phragmites</i>) in the Danube Delta.
c) Marine and coastal	x		The use of excluding devices in fishing nets for dolphins in the Black Sea.
d) Dry and subhumid land		x	
e) Forest	x		Certification of wood
f) Mountain	x		Strategy for Sustainable Development of the Mountain Region, aproved by HG nr. 1779/2004
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
No			
Yes, into national biodiversity strategy and action plan			
Yes, into sectoral strategies, plans and programmes			x
Please provide details below.			
The basic principle applied in the management of forests in Romania is continuity, implying the maintenance or improvement of the goods and services offered by the forests. Logging and harvesting other forest products is quantified in a way that will not impact on long term the productive capacity and the protection of forests at the level of each management unit. The sustainable management of forests is included in legislation and in the Strategy for the sustainable development of forestry during 2000-2020 and is included in the technical requirements.			

IV) Please provide information on current status and trends in relation to this target.
The requirements of the sustainable use of forests are overall respected at national level, both by the administration of state-owned forests and by the private owners of forests. Sometimes the existing regulations are not respected (illegal logging, harvesting more than the allowed quota, selective logging of valuable species).
V) Please provide information on indicators used in relation to this target.
A variety of indicators are in use for forests, at different spatial scales: - management unit: surface of forest, average volume of wood; annual average growth, species composition, the structure of the productive pool regarding the species, age, class of production, consistency etc.). - national unit: the 'Criteria and Pan-European Indicators for the sustainable management of forests', adopted by the L2 resolution of the MCPFE and modified after 1999.
VI) Please provide information on challenges in implementation of this target.
The export of reed, medical plants, wood and timber, leeches, mussels, living frogs and rabbits. The major problems in using natural resources in a sustainable way were generated by the high poverty level and unemployment in rural areas, the change in forest ownership, all these coupled with the lack of correlation between the existing institutional and legislative environment.
VII) Please provide any other relevant information.

Box VI.

Target 4.2	Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
There are regulations regarding the dimensioning of activities for the use of fauna and flora from the Danube, interior rivers, forests and mountain areas. Reduce the impact of unsustainable exploitation of pastures through the regulation of the animal load, fertilization and the addition of mixtures of seeds of perennial plants (OMAAP226/2003).			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	

d) Dry and subhumid land		X	
e) Forest	X		Clear reglementation regarding the exploitation, plantation (19.000 ha for afforestation).
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			X
Please provide details below.			
Harvesting is approved only after and impact assessment and is regulated within the limits of sustainability.			
IV) Please provide information on current status and trends in relation to this target.			
The water losses from the irrigation system are estimated by ISPIF (Institute for Studies and Projects for Land Improvements) at 60% of water used. Urban water consumption will increase creating additional pressure on this resource. Reforestation in 2001- 1104 ha, 2002 – 2192 ha, 2003 – 4290 ha, 2004 – 4281 ha. For 2005 are proposed 19.000 ha.			
V) Please provide information on indicators used in relation to this target.			
VI) Please provide information on challenges in implementation of this target.			
Poaching and illegal harvesting of trees which have a huge impact on erosion and floods. Lack of dam easement flow on interior rivers. Poverty has an impact on the volume of wood exploitable.			
VII) Please provide any other relevant information.			
Lack of regulations for unbiased exploitation of biological resources.			

Box VII.

Target 4.3	No species of wild flora or fauna endangered by international trade		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			X
c) Yes, one or more specific national targets have been established			
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		x	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			X
Please provide details below.			
Romania has signed CITES (law 69/1994). There is a CITES Bureau that issues approvals for export. There are 11 species of animals listed in Appendix I, 71 species of animals and 56 species of plants listed in appendix II, of which 2 species of animals are listed both in appendix I and II. Harvesting of game species is approved after an impact study accepted by the Romanian Academy, Commission of Natural Monuments. The export of trophies must be agreed by the Ministry of the Environment and Water Management (according to order 647/2001).			
IV) Please provide information on current status and trends in relation to this target.			
The export for medicinal plants has increasede from 2.352 tonnes in 1999 to 9.723 tonnes in 2000. No data are available for the moment. 100 kg of living medicinal leeches (<i>Hirudo medicinalis</i>) are exported every year.			
V) Please provide information on indicators used in relation to this target.			

VI) Please provide information on challenges in implementation of this target.
There is no data available on the collections of butterflies, beetles, snails, bird eggs and hunting trophies that are exported. There is no surveillance program and no specific training for custom staff. The price of hunting trophies is underestimated.
VII) Please provide any other relevant information.

Box VIII.

Goal 5	Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.		
Target 5.1	Rate of loss and degradation of natural habitats decreased		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			x
Please provide details below.			
Improve the status of pastures on medium and long term (OMAAP226/2003). In the NBSAP a strategic goal is the conservation of ecosystems and habitats of Romania, requiring the inclusion in protected areas of representative samples of all types of habitats and ecosystems inventoried at national level.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		x	
b) Inland water	x		Protection of springs; hydrological works.
c) Marine and coastal	x		Erosion of beaches.
d) Dry and subhumid land	x		Halt erosion, improve status of aridizing habitats.
e) Forest	x		Avoid the transformation of forests in other type of destination.
f) Mountain	x		Management of pastures, halt the destruction of dwarf-pine (<i>Pinus mugo</i>) and transfer its management to foresters.
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			x
c) Yes, into sectoral strategies, plans and programmes			

Please provide details below.

For the forestry sector, the legislation requires the conservation of valuable habitats by including them in the national network of protected areas or in the category of forests with special functions. The legislation is also very strict regarding the change of forest land use. In case a forest area can change its destination, a similar area in size and quality must be reforested.

The reduction of the degradation of forest areas is included in all management plans and is applied based on different measures: functional zonation of the forests, choice of treatments and technologies of exploitation, steep slope stabilization etc.

The management plans also refer to the improvement through reforestation or afforestation of degraded land.

IV) Please provide information on current status and trends in relation to this target.

The loss and degradation of forest habitats is extremely low, on small areas, caused either by natural disturbances or by human activities.

For examples the number of forest fires varied between a minimum of 34 affecting 123 ha (in 2004) to a maximum of 688 fires affecting 3607 ha (2000).

V) Please provide information on indicators used in relation to this target.

The indicators used in forestry are: the area of forests degraded or destroyed by disturbances (fires, pest invasion, erosion, etc.), the area of forests affected by illegal logging, the area of forests receiving other destination etc.

VI) Please provide information on challenges in implementation of this target.

The success of the implementation of the above mentioned measures for forest management was limited by the changes in land ownership, by the increased pressure for the change of destination of forested land, by outdated technologies for forest management by private owners, and by an increase in illegal logging.

VII) Please provide any other relevant information.

Box IX.

Goal 6	Control threats from invasive alien species.		
Target 6.1	Pathways for major potential alien invasive species controlled		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
Some measures of control are in place in the Black Sea.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			X
Please provide details below.			
In some area, the forests are affected by invasive alien species. There is no strategy or coherent action plan focused on alien invasive species. Major problems are caused in the Danube Delta and floodplain by <i>Amorpha fruticosa</i> , <i>Fraxinus pensylvanica</i> , <i>Fraxinus americana</i> , clones of Euro-American poplars and <i>Populus nigra</i> hybrids.			
IV) Please provide information on current status and trends in relation to this target.			
Only specific measures against invasive alien species in forests are included in local forest management plans.			
Besides alien species another high risk threat is represented by some allochthonous genotypes or even ecotypes.			
The Romanian Lepidopterological Society has organized in 2005 a workshop on alien species "Neobiota".			

V) Please provide information on indicators used in relation to this target.
VI) Please provide information on challenges in implementation of this target.
No available data
VII) Please provide any other relevant information.
A total number of 112 species and clones of alien tree species are records, of which only 6 are invasive: <i>Acer negundo</i>, <i>Ailanthus altissima</i>, <i>Amorfa fruticosa</i>, <i>Cytisus scoparius</i>, <i>Fraxinus americana</i>, and <i>Fraxinus pennsylvanica</i>. For aquatic ecosystems the rate of invasion since the 19th century was estimated at 3-4 years for Black Sea coastal waters and 4-5 years for freshwaters. In all 67 alien species have invaded aquatic systems in Romania (of which 60% marine and 40% freshwater) (Gomoiu et al., 2002).

Box X.

Target 6.2	Management plans in place for major alien species that threaten ecosystems, habitats or species		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
Only isolated measures for certain target species with heavy economic impact. Forest management plans have no specific recommendations regarding measures for the exclusion of invasive alien species which threaten ecosystems, habitats and/or species.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	X		
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest	X		ROMSILVA monitors pest insects for forests focused on: identification and control of bark beetles, leaf eaters in broadleaf and conifers and of insects damaging seedlings. The staff in the field identifies the species, followed by modelling and predictions. The forest directories centralize the data and elaborate projects for prevention and control.

f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No	X		
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
IV) Please provide information on current status and trends in relation to this target.			
The most affected forest areas by invasive alien species are the Danube delta and floodplain.			
V) Please provide information on indicators used in relation to this target.			
The areal of the invasive species.			
VI) Please provide information on challenges in implementation of this target.			
Lack of adequate technologies, restrictions in the use of chemicals. High costs of eliminating the invasive <i>Amorpha fruticosa</i> and other species from the Danube delta and floodplain.			
VII) Please provide any other relevant information.			
Two laws HG 1030/2001 and 1619/2003 a establishing the procedures and requirements for phytosanitary quarantine.			

Box XI.

Goal 7	Address challenges to biodiversity from climate change, and pollution.		
Target 7.1	Maintain and enhance resilience of the components of biodiversity to adapt to climate change		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established	X		
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been			

established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural			Specific programs for local breeds of cattle adapted to local conditions.
b) Inland water			
c) Marine and coastal			
d) Dry and subhumid land			
e) Forest	X		Genetic resources resistant to dryness, to high levels of soil humidity or acidity. Conservation of the silvo-steppe (steppic forests).
f) Mountain			
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			X
Please provide details below.			
There are several sectoral plans focused on remaining steppe and silvo-steppe ecosystems, agro-forestry, forest belts and migration corridors. The activity of monitoring the soil-forest vegetation in Romania (measuring the status of health of forests and biodiversity), atmospheric deposition, forest soils, climate parameters, carbon) is in place with funds from the Ministry of Agriculture, Forests and Rural Development, based on the Law of Environment Protection (137/1995), Forest Code (26/1996), Law 494/2002 for the approval of the OU 38/2002 on the functioning and financing the national system of monitoring soil-forest vegetation for forestry. The system of forest monitoring is strictly correlated to the monitoring of climate parameters. The monitoring of drought and risks associated at national level for forests is being constantly monitored (see Barbu and Popa, 2003).			
IV) Please provide information on current status and trends in relation to this target.			
A series of measures were taken: identification of ecotypes and genotypes resistant to climated changes and other stressors, developing management technologies for forests that will consolidate their stability, prevention measures for disturbance factors associated to climate changes.			
V) Please provide information on indicators used in relation to this target.			
The indicators used for estimating the impact of climate changes and pollution of soil and forest vegetation are those accepted by EU for the protection of forests in Europe against atmospheric pollution – Forest Focus and ICP-Forests.			
VI) Please provide information on challenges in implementation of this target.			
Insufficient or discontinuing financing of the program and difficulties in implementing it in privately-owned forests.			

VII) Please provide any other relevant information.

Foresters are looking for ecotypes with higher tolerance to dryness. An oak ecotype with higher resilience to drought has already been identified.

Box XII.

Target 7.2	Reduce pollution and its impacts on biodiversity		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target	X		
c) Yes, one or more specific national targets have been established			
Please provide details below.			
Legislation on environmental impact assessment (EIA): The Environmental Protection Law (law 137/1995) states the requirements for impact assessment and the need for EIA. the government ordinance HG 918/2002 describes the procedures and analysis of EIA by adopting the existing European Directive in the field. The Ministerial ordinances OM 860/2002 and OM 863/2003 provide details concerning the procedures involved in EIA and the issuing of the permit. Romania has ratified the Espoo Convention on the transfrontier environmental impact assessment (Law 22/2001) and the Ministry has issued also an order (OM 864/2002) for the approval of the procedure for assessing the impact in a transfrontier context and for the public participation in the process of decision, but the applicability is limited. The Environmental Protection Law requires also Strategic Environmental Assessments for plans and programmes (HG 1076/2004).			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	X		Good practices code for agriculture
b) Inland water		X	
c) Marine and coastal	X		BSERP (GEF-UNDP)
d) Dry and subhumid land		X	
e) Forest	X		A National Program for monitoring soil-forest vegetaion
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			

The National Action Plan for Environmental Protection (2003) has this target as objective.

The Black Sea Ecosystem Recovery Project (GEF-UNDP) has amongst its goals :

- Protocol for Land-based Activities (LBA) revised and submitted for national negotiation.
- Agricultural sector policy reviewed and concepts of BAP proposed
- Policies and legislation for application of BAT in the industrial and transport sectors
- Policies and legal instruments for pollution reduction for the municipal sector
- Investment programme for industrial and municipal wastewater treatment and other infrastructural measures in Black Sea coastal zones
- Black Sea Integrated Monitoring and Assessment Programme
- Pilot project for a Black Sea Vessel Traffic Oil Pollution Information System
- Study on inputs of nutrients to the Black Sea by atmospheric deposition
- Rapid assessment methodology for diffuse sources in the Black Sea basin
- Study for the use of phosphorus in detergents

IV) Please provide information on current status and trends in relation to this target.

BSERF-second phase

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XIII.

Goal 8	Maintain capacity of ecosystems to deliver goods and services and support livelihoods.		
Target 8.1	Capacity of ecosystems to deliver goods and services maintained		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
Specific regulations are included in the Forest Code and associated legislation and in the strategy for the sustainable development of Romanian forestry during 2000-2020.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	

d) Dry and subhumid land		X	
e) Forest	X		Technical and legislative procedures for forest management based on the principle of sustainable development.
f) Mountain	X		Restricting grazing intensity in pastures according to sustainability limits.
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			X
Please provide details below.			
Sustainable use of pastures through regulation of animal load, fertilization, addition of mixtures of seeds of perennial plants. Sustainable use of forest resources through the regulation of the annual exploitation level. Limiting the amount of fish lands in the coastal areas of the Black Sea at 1/10 of the maximum exploitation level. Limiting the noise levels.			
IV) Please provide information on current status and trends in relation to this target.			
Informations not available; no reports/public data available yet regarding the results of on-going projects.			
V) Please provide information on indicators used in relation to this target.			
For forests, at the level of management unit the evaluation is based on indicators adopted for sustainable development (average wood volume, average annual growth etc.) and at national level based on indicators from the MCPFE Resolution (Pan-European criteria and indicators for the sustainable management of forests).			
VI) Please provide information on challenges in implementation of this target.			
Two major challenges: the confusion regarding property rights and overgrazing.			
VII) Please provide any other relevant information.			

Box XIV.

Target 8.2	Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest	X		Identification and zonation of forests with social function
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
The Forest Code refers to the identification and zonation of forests with social role (recreation, protection of mineral and thermal water sources etc.) and providing facilities for local communities whose welfare depends on forest resources.			
IV) Please provide information on current status and trends in relation to this target.			
About 6% of Romanian forests are considered forests with recreational functions.			
V) Please provide information on indicators used in relation to this target.			

VI) Please provide information on challenges in implementation of this target.
The lack of effective communication and trust between forest administration and local communities. Local communities do not receive an equitable share of the benefits.
VII) Please provide any other relevant information.

Box XV.

Goal 9	Maintain socio-cultural diversity of indigenous and local communities.		
Target 9.1	Protect traditional knowledge, innovations and practices		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
The Strategy for Sustainable Development of the Mountain Region, aproved by HG nr. 1779/2004, according to art. 21of the Mountain Law nr. 347/2004, provides for specific measures in this field.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	X		Beekeeping.
b) Inland water	X		Step-stones for migratory fish in mountain rivers
c) Marine and coastal	X		Traditonal fishing with fixed nets (taliene)
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain	X		Grazing in mountain pastures.
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			X
Please provide details below.			

IV) Please provide information on current status and trends in relation to this target.
V) Please provide information on indicators used in relation to this target.
VI) Please provide information on challenges in implementation of this target. Grazing in forests; the rapid economic growth and development in traditional areas (including an increase in rural tourism, decline of traditional activities in favour of new and more profitable activities).
VII) Please provide any other relevant information.

Box XVI.

Target 9.2	Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
Within the EU preaccession fund the SAPARD Agency, the authority for technical and financial implementation of SAPARD Program, has been set up at the end of 2000 year, through the Emergency Ordinance no. 142/2000 approved by Law 309/2001 completed with Government Emergency Ordinance 140/2001. SAPARD Agency is a public institution with juridical personality, within the Ministry of Agriculture, Food and Forests. The SAPARD Agency was rendered the financial management of the SAPARD funds by the European Commission Decisions 2002/638/EC from 31 July 2002 and 2003/846 from 5 December 2003. In 2005 several news programs will start, one of which Measure 3.3 is focused on Agriculture production methods projected for the protection of the environment and landscape conservation.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural			
b) Inland water			
c) Marine and coastal			
d) Dry and subhumid land			

e) Forest		X	
f) Mountain			
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
IV) Please provide information on current status and trends in relation to this target.			
V) Please provide information on indicators used in relation to this target.			
VI) Please provide information on challenges in implementation of this target.			
VII) Please provide any other relevant information.			

Box XVII.

Goal 10	Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources.		
Target 10.1	All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
IV) Please provide information on current status and trends in relation to this target.			
V) Please provide information on indicators used in relation to this target.			

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XVIII.

Target 10.2	Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources		
I) National target: Has a national target been established corresponding to the global target above?			
a) No	X		
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural			
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No	X		
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			

IV) Please provide information on current status and trends in relation to this target.
V) Please provide information on indicators used in relation to this target.
VI) Please provide information on challenges in implementation of this target.
VII) Please provide any other relevant information.

Box XIX.

Goal 11	Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention.		
Target 11.1	New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and			

strategies?	
a) No	X
b) Yes, into national biodiversity strategy and action plan	
c) Yes, into sectoral strategies, plans and programmes	
Please provide details below.	
IV) Please provide information on current status and trends in relation to this target.	
V) Please provide information on indicators used in relation to this target.	
VI) Please provide information on challenges in implementation of this target.	
VII) Please provide any other relevant information.	

Box XX.

Target 11.2	Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4		
I) National target: Has a national target been established corresponding to the global target above?			
a) No	X		
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	

b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
IV) Please provide information on current status and trends in relation to this target.			
V) Please provide information on indicators used in relation to this target.			
VI) Please provide information on challenges in implementation of this target.			
VII) Please provide any other relevant information.			

Box XXI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 9 - Ex-situ conservation

30.  On Article 9(a) and (b), has your country adopted measures for the *ex-situ* conservation of components of biological diversity native to your country and originating outside your country?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures adopted for the *ex-situ* conservation of components of biodiversity native to your country and originating outside your country.

The Law for the functioning of zoological gardens and public aquaria was promoted (law 191/2002).
The Botanical Gardens in Romania have joined in a National Association of Botanical Gardens.
Romsilva also has seed-orchards for tree species with high economic value.

¹ Please note that all the questions marked with  have been previously covered in the second national reports and some thematic reports.

² The questions marked with * in this section on Taxonomy are similar to some questions contained in the format for a report on the implementation of the programme of work on the Global Taxonomy Initiative. Those countries that have submitted such a report do not need to answer these questions unless they have updated information to provide.

The Romanian Government decision no. 371/1990 established in 1990 the Bank of Vegetal Genetic Resources of Suceava. It has not developed since; it maintains its activities through collecting activities but there are no cryogenic technologies available.

The seed bank in Braşov is focused only of coniferous species.

At the Institute of Biology in Bucharest a project is underway for the conservation of endemic and rare plant species through *in vitro* methods.

31. ☒ On Article 9(c), has your country adopted measures for the reintroduction of threatened species into their natural habitats under appropriate conditions?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures for the reintroduction of threatened species into their natural habitats under appropriate conditions.

The beaver, alpine marmot, great bustard and European bison were reintroduced in the country.

32. ☒ On Article 9(d), has your country taken measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species?

a) No	X
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species.

