

# Millennium Development Goals for Romania

## Progress report

February 2009

### Goal 1: Reduce severe poverty

The strong economic growth, sector reforms, and the supporting policies of the Romanian Government had as a consequence a considerable decrease - by approximately 70% - in severe poverty between 2002 and 2006.

Severe poverty decreased from 10.9% in 2002 to 4.1% in 2006.

Urban/rural discrepancies remain nonetheless significant.

- % -

	Total	Urban	Rural
2002	10.9	5.4	17.5
2006	4.1	1.7	7.1

Source: National Statistics Institute and the World Bank

By household categories, severe poverty mostly affected the farmers and the pensioners from agriculture. The most exposed to the risk of severe poverty remain the single persons, mono-parental families, three-children or more families, and individual over 65 years of age.

The Roma population has been more affected by severe poverty compared to the other ethnic groups.

### Goal 2: Increase the compulsory education graduation rate of children from rural areas

The graduation rate from secondary education with and without passing the final graduation exam reached 105% in urban areas and 80.1% in rural areas in 2006/2007.

Statistics indicate there is no change in graduation rates in rural areas, compared to the reference year 2001/2002.

Meeting the 95% target by 2012 is therefore unlikely.

### Target 5: Increase the literacy rate in the Roma population

The no. of Roma students increased constantly between the school year 2002/2003 and the school year 2006/2007. Although the no. of Roma students opting for Roma language, history and traditions classes also followed a growing trend, only approx. 10% of the total no. of Roma students expressed interest in such classes.

**Total Roma students' enrollment and no. of students enrolled for Roma language and/or history and traditions**

School year	Students self-identified as Roma	Roma students studying Roma language and/or history and traditions
2006/2007	260,105	25,525
2005/2006	243,008	24,903
2004/2005	220,000	24,129
2003/2004	183,176	20,528
2002/2003	158,128	15,708

Source: Ministry of Education, Research and Youth, 2007

**Goal 3: Promote gender equality and support employment of women and youth**

**Target 6: Increasing women's employment rate to 60% by 2015**

Practically, women's employment rate did not vary between 2002 and 2007, as shown in the tabel of below.

**Employment rate 15 – 64 years of age by gender**

- % -

	2002	2003	2004	2005	2006	2007
Total	58,0	57,8	57,9	57,7	58,8	58,8
Male	64,1	64,1	63,6	63,9	64,7	64,8
Female	52,0	51,5	52,1	51,5	53,0	52,8

Sursa: National Institute of Statistics

**Target 8: Halving domestic violence cases by 2015**

After increasing to over 9,000 cases in 2005 and 2006, domestic violence cases decreased to 8,787 in 2007, whereas the number of deaths induced by domestic violence decreased from 151 in 2006 to 136 in 2007.

**Goal 4: Reduce children mortality**

**Target 9: A decrease of the mortality rate in children aged 1 to 4 years by 50% between 2002 and 2015**

After the year 2000, when the mortality rate in children aged 1 to 4 years reached less than one death in 1000 children of the same age, the amplitude of the decreasing trend declined (as typical for any phenomenon when arriving to low levels). Thus, after stabilizing for three consecutive years (2003-2005) at 0.7, the mortality rate in the first childhood (1 to 4 years of age) entered again into a period of decrease between 2005 and 2007, when it reached the level of 0.6. Overall, the rate decreased by 25% between the reference year of 2002 and 2007.

**Target 10: A decrease of infantile mortality by 40% between 2002 and 2015**

The infantile mortality rate decreased significantly from 17.03 in the reference year of 2002 to 12 in 2007. Urban/rural disparities remain high. In 2007, infantile mortality declined to 14.1 in rural areas, compared to 10.1 in urban areas.

### **Goal 5: Improve maternal health**

#### **Target 12: Reduce the maternal mortality rate to 10 deaths/100,000 children born alive by 2015**

Results in this area indicate a stabilized, sustainable positive trend. The **maternal mortality rate** has decreased by more than 50% in the past 8 years, from 34 deaths in 2001 to 14 deaths on 100,000 alive-born children in 2008.

By causes, the **maternal mortality by direct obstetrical risk** decreased from 17 deaths in 2003 to 11 deaths /100,000 alive-born children in 2008, whereas the **maternal mortality by abortion** decreased from 13 deaths/100,000 alive-born children in 2003 to 3 deaths in 2008, the latter being the lowest level recorded in the past 20 years.

### **Goal 6: Reduce the incidence of HIV/AIDS, malaria and other diseases**

#### **Target 14: Maintain the incidence of HIV/AIDS in 2015 at the level of the year 2006**

After **the target** set in this area, of maintaining for the year 2007 the same incidence of HIV/AIDS as that recorded in 2002 **was met**, a new target was established in 2007 and included in the Progress Report of 2008. The new target is of **Maintaining the incidence of HIV/AIDS in 2015 at the level of the year 2006.**

In fact, the incidence of HIV/AIDS began **decreasing** in 2004. At present (February 2009), Romania is a country with a low level of incidence and prevalence of HIV and AIDS. According to the official data there are no signs of concentration of the epidemic in any of the groups considered as vulnerable or at risks.

#### **Target 15: Achieve a 30% decline of tuberculosis between 2006 and 2015**

The target set in this area in 2002 when the national MDG framework has been designed was of stopping the increase of TB incidence by 2005. As a result of an effective National TB Control Program, expanding on the background of gradually improving economic and social conditions, **the 18 years-long growing trend was halted in 2003.** TB incidence continued to **decline** since then, from 135.7 new cases to 96.6 cases in 2006, and 90,8 new cases in 2007. The rate of the deaths associated with tuberculosis followed a similar trend, from 10.7/100.000 inhabitants in 2002, to 7.9 in 2006, and 7.5 in 2007.

#### **Target 17: Increasing the share of the forestry fund in the country's area from 27% to 35%, until 2040**

#### **Indicator 18: The proportion of lands covered by forests**

## 1. The evolutions registered in 2002-2006

Note: forestry fund= forest area

Around 27% of the surface of Romania is covered by forests, a percentage below the European average and also under the researchers' expectations. According to the latter, the optimal percentage of the forestry vegetation, corresponding to the natural conditions of the country, is estimated somewhere between 32-35% of the country's surface. By end 2006, the forestry fund covered an area of 6.427 thousand hectares, out of which: 6.272 thousand hectares representing forests, 30.2% coniferous wood and 69.8% leaf-bearing wood. The remaining 155 thousand hectares represent: land designated for afforestation, land for agricultural production and administration or land which is non suitable for agriculture and is included in the management plan.

**Table 7.1. Evolution of the forestry fund**

thousand hectares

	2002	2003	2004	2005	2006
The total area of Romania	23839	23839	23839	23839	23839
Forestry fund - total	6388	6368	6382	6391	6427
The share of the forestry fund in the total area of Romania %	26.8	26.7	26.8	26.8	27.0

Source: The Statistical Yearbook of Romania, the National Institute of Statistics 2006

During 2002-2006, the share of land covered by forest remained constant, revealing the fact that the forest conservation measures and afforestation have succeeded to decrease the deforestation rate. Out of the total restored surfaces in 2006 (27.5 thousand hectares), afforested land represent 56.4%.

**Table 7.2. Evolution of regeneration and afforestation**

	2002	2003	2004	2005	2006
REGENERATION TOTAL hectares	30 043	22 978	24 478	27 058	27 554
out of which: afforestation	16 448	14 772	14 100	14 389	15 533
Restoration %	0,13	0,10	0,10	0,11	0,12
Afforestation %	0,07	0,06	0,06	0,06	0,07

Source: The Statistical Yearbook of Romania, the National Institute of Statistics 2006

As per December 31<sup>st</sup> 2005 statistics, the state owned forestry fund, managed by the National Forest Administration– Romsilva, was of 4234 thousand hectares, representing 66% of the national forest area.

The area affected by illegal clearings, with a remaining scarce forest coverage, is estimated up to 96,823 hectares, out of which 64,768 ha recently restituted forest areas in basis of the Restitution Law no. 18/1991 and 32,055 hectares restituted areas in basis of the Law no. 1/2000.

During 2005, the land restitution of forest to former owners based on land tenure laws continued, and included Law no. 247/2005. In 2005 based on the afore mentioned legislation., 147 thousand hectares were validated for restitution and 86 thousand hectares restituted to former owners.

The low share of forests and of other land with forest vegetation and their skew distribution in the country, favors erosion with all its negative economic and social consequences. During the last 16 years the investments made were insufficient. This is due to several social and legal difficulties and the lack of institutional and financial capacities of those institutions in charge with forests and land for afforestation.

Increasing the areas covered with forest vegetation has been done through different ways:

- Afforestation of degraded and marginal lands, not suitable for agriculture. According to the National Action Plan of the National Anti-Drought Strategy and to several studies made by the National Institute of Research – Development for Pedology, Agro-chemistry and Environment Protection, 2.170 thousands hectares of degraded land are estimated to be at national level, most of them in the highlands and mountain regions;

Until 2004 afforestation of degraded lands has been done on the state owned property only, however starting with 2005, the afforestation of degraded lands included categories of land owners, other than the state. The technical feasibility studies and afforestation works were done for the first time through the Territorial Inspectorates for Silvicultural and Hunting Regime of the Ministry of Agriculture and Rural Development;

In 2005 3,406 hectares state-owned degraded land managed by Romsilva (National Forest Administration) was afforested. In 2006, a surface of 5,521 hectares of degraded lands was afforested, out of which: 3,842 hectares property of the state, managed by National Administration of Forests-Romsilva, and 1,679 hectares of degraded lands that were in property of administrative-territorial units and private individuals.

- Planting protective forest belts along water courses and roads, for the protection of the crops against drought and protection of slopes against erosion etc. The possibilities of increasing the areas of forest vegetation by creating protective forests belts is today limited and the reason for this inconvenience is represented by the lack of the cadastral surveys, of data bases of the owners. Also, another reason is the lack of cooperation among the private forest owners for the establishment of forest plantations. The development of the agricultural and forestry cadastral surveys at the national level, facilitates the establishment of protective forest belts, with favorable social and economical consequences;
- the establishment of specific tree and shrubs plantations on the agricultural land unfit for production is a method of increasing the surface with wood biomass. Romania has a high

potential of using biomass as energy source and this is estimated up to 19% of the total primary source used for energy production. In this way, beside increasing the forest areas by cultivating species with short production cycle the use of the renewable energy sources on medium and long term is secured.

## **2. Prospects for achieving the target**

The annual pace of afforestation is increasing in time and this increase is proportionally linked with the stabilization of the new ownership regime and the increase of the awareness on the importance of the wise and sustainable management of the forest. The enhanced confidence in the security of the administration of the forest plantations established on degraded lands, contributes to a growing interest for afforestation.

During 1991-2005 the illegal clearings were estimated to 32,524 hectares, representing 0.51% of national forestry fund. This was possible under the former administrative and legislative framework which was not backed up by regulations on the silvic or administration services.

The idea of having an Emergency Ordinance of Government no. 139/2005 regarding administration of forests in Romania (approved by Parliament with modifications and completions through Law no. 38/2006) was triggered by the need to solve the afore mentioned issues and by the necessity of establishing a unitary administration of all the Romanian woodlands. The fact that about 880,000 hectares of forests, especially those belonging to recent private owners (individuals) on the basis of Law no. 18/1991 and Law no. 1/2000, were not in the records of any Forest Districts (decentralized Forest Management Units) was also addressed by this ordinance.

The enforcement of this regulation led to a decrease of forest areas which are not in the government records from 880,000 hectares to 519,000 hectares.

We are confident that we'll reach our objective, by decreasing the illegal clearings (especially by ensuring the Forest District's monitoring of all woodlands, irrespective of the ownership regime), increasing afforestation on degraded or unsuitable for agriculture land and establishment of protection forest belts.

## **3. Challenges and risks**

- lack of cadastral surveys necessary for identification of land ownership regime
- reluctance or refusal of land owners (mostly of private individuals) to agree on the establishment of forest belts, out of fear that afforestation and the necessity of respecting the official forestry regulations would lead to limitations of the property right and decrease of property surface;
- recent land owners opposition to conduct afforestation works on their respective (degraded) land recently given back to them or the opposition of the former owners who are claiming the land.

- The difficulty in finding the non-residents land owners whereabouts and hence the impossibility of consulting and asking for permission to conduct afforestation works.
- The impossibility of identification of the land owners in case of successional litigations over unclear inheritance;
- Lengthy procedures of expropriation; in accordance to the provisions of Law no. 33/1994, regarding expropriation in case of property of public interest, the procedures of expropriation last minimum 9 months;
- The high compensations costs in case of expropriation;
- Lack of legal incentives for the establishment of protective forest belts, such as bonuses for reforestation
- The time frame needed to develop forest seedlings is 1 to 3 years; the production of forest seedling in nurseries, necessary for afforestation is a commercial activity that starts after the development of technical and economic documentation which among others gives the necessary numbers of seedlings for the given afforestation/reforestation works.

#### **4. Aspects contributing to achieving target**

- Developing legal framework under which private owners of degraded or unfit for agricultural purposes land may be compensated to conduct the following: afforestation works; planting forest belts; establishing forest plantations for biomass. Hence, procedures of expropriation – on property for public interest basis-- can be avoided in case the land owners who are the possessors of such land suitable for afforestation—are willing to conduct these works. Lengthy official procedures and expenses from state budget that accompany expropriation cases can this way be avoided.
- Developing a legal framework in order to support the specific forest plantations and biomass production areas;
- Initiating awareness raising campaigns for the land owners with regards to their rights and obligations in case they accept afforestation works of their lands.
- Continuing the identification and delimitation of the land unsuitable for the agricultural culture and building up perimeters for afforestation;
- Purchase of lands, through National Forest Administration– Romsilva, financed from the Conservation and Restoration Fund, according to the Forestry Code.

#### **5. Priority public policies facilitating the achievement of the target and priorities for resource allocation**

The increase of the forest area is necessary, mainly in order to restore the areas strongly affected by the erosion, as a result of intensive clearings and exceeding the acceptable limits of deforested areas. In order to balance the deficit of forests on the national level, the afforestation works shall be promoted mainly within the counties with less than 12% woodlands.

In addition, the compensations for the land owners on basis of Government's Ordinance no. 96/1998, with the subsequent modifications and completions, shall lead to significant decrease of illegal clearing (for example: allocation of compensation amounts is expected to decrease the pressure of land owners to get the necessary funds for administration)

Applying the National Plan for Combating Illegal Trees Clearings, document already developed and expected to be soon approved could lead to the significant decrease of illegal clearings hence to the increase of forestry areas, by:

- conducting regular controls, together with other state institutions having prerogatives of control (Police, Military Police, Financial Police);
- intensification of controls within the woodlands out of Forest Districts custody;
- identification of forestry areas out of Forest Districts custody and fining the land owners found without administration/services contracts with the authorized Forest Districts;
- Creating and updating the data bases of all companies that develop activities within forestry field, as well as creating the data base of the documents with special regime which are declared lost, stolen or destroyed;
- Regular monitoring of the state forest districts;
- Afforestation of the land which is not fit for agriculture; After the accession to European Union, Romania may benefit from subsidies for only 7,1 million hectares out of 9,4 million hectares of arable land. The agricultural lands, which is not covered by subsidies should be afforested and the works should be sponsored by the state budget or European Union contributions, according to the common agricultural and energy policy. In 2004, at national level, a surface of 387 thousand hectares arable land was not used for agricultural production, in 2005 this surface has increased to 517 thousand hectares and in 2006 to 834 thousand hectares.

**Target 18 : Increase percentage of protected natural areas up to 19% by 2015**

**Indicator 19 : The share of protected natural areas to ensure preservation of biological diversity**

### **1. Trend from 2002 to 2006**

Romania is a European country with a diverse and well – preserved natural asset due to the interference of 5 biogeographical regions: Alpine, Continental, Panonic, Steppic and The Black Sea (Pontic). At present, the surface of the protected natural areas of national and international interest is of about 9% of the whole territory of the country, i.e. about 2.1 mil.ha.

The biogeographic area of our country is comprised of three geographical units, relatively evenly distributed - plain, hill and mountain - including a great diversity of hydrological and pedo-climatic conditions that differentiate a range of 52 eco-regions. These include a large variety of terrestrial ecosystems, aquatics ecosystems specific to Black Sea shore and littoral areas, to steppes areas, to forested-steppes, to hills, mountains, lakes, waters and floodplains, droughty areas, wetlands, including those specific to the Danube Delta. The analysis of the distribution of the protected natural areas concludes that they are concentrated in the mountainous area (natural and national parks), as well as in the eco-regions with ecosystems specific to waters and floodplains (Prut river, Tur inferior river, lower Prut floodplain), wetlands and Danube Delta.

Out of the protected natural areas, the natural parks have the most important share and, most significantly, their share out of the total protected areas increased from 17,4% in 2002 to 35,8% in 2005.

**Table 7.3. Size and structure of protected natural areas**

	2002		2005	
	Surface (ha)	Structure (%)	Surface (ha)	Structure (%)
TOTAL	1 448 271	100	2 031 912	100
out of which:				
-scientific reserves	101 207	7,0	111 277	5,5
-national parks	300 544	20,7	315 857	15,5
-nature monuments	2 177	0,2	7 705	0,4
-nature reserves	128 265	8,9	204 355	10,1
-natural parks	251 632	17,4	728 272	35,8
-biosphere reserves	664 446	45,8	664 446	32,7

Source: National Institute of Statistics

Between 2002-2006, 2 normative acts, namely GD no. 2151/2004 and GD no.1581/2005, were issued, establishing the status of protected natural area for new zones. Thus were created 2 national parks and 7 natural parks with a total surface of about 461.195 ha. as well as 2 scientific reserves, 77 natural reserves, 3 nature monuments and 28 specially protected areas Avian special conservation areas.

## 2. Prospects for achieving the target

According to the Emergency Ordinance no. 57/2007 regarding the status of the protected natural areas and preservation of the natural habitat, flora and wild fauna, the protected natural areas are classified under the following categories:

- of national interest: scientific reserves, national parks, nature monuments, natural reserves, natural parks;
- of international interest: natural sites of world natural patrimony, geo-parks, internationally significant wetlands, biosphere reserves;
- of community interest or Natura 2000 sites: sites of community importance, special areas of preservation, special protection aviary and fauna areas;

To ensure special measures to protect and preserve *in situ* the assets of the national patrimony it is necessary to fulfil the provisions regarding the protected natural areas of national and international interest.

To attain a surface close to the global and European average it is necessary to continue the process of expanding the network of protected natural areas, especially by designating some zones to include ecosystems and less represented regions of protected natural areas, with a more balanced distribution.

Under these circumstances, it is estimated that the weight of protected natural areas of national and international interest may reach 19% by year 2015s.

At the same time, Romania's commitments to the EU include designating, at the date of accession, the protected natural areas of community interest, respectively the sites of community importance and the special protection areas Avian special conservation areas which have a major contribution to the increase of the protected natural areas in our country. The list of the sites of community importance was adopted through MO no. 776/2007 on designating sites of community importance, as an integral part of the Natura 2000 ecological network in Romania and was officially sent to the EC. The bill on designation of specially protected areas Avian special conservation areas as an integral part of the Natura 2000 ecological network in Romania, is in process of obtaining inter-ministerial approval, and will be sent to the EC.

### **3. Challenges and risks**

#### **Economic:**

- Disregard of the long term positive economic effects of reasonable use of biodiversity and its components by giving priority to immediate economic benefits, that are catastrophic in the long run and lead to overexploitation.
- Application of laws on ceding back properties exponentially increased pressure on natural resources, especially forests.

#### **Social:**

- The low standard of living comparative to other European countries, with direct and visible consequences on culture and civilization and also on the importance of preserving biodiversity at all levels, generates high pressure on resources of protected natural areas, especially on non-renewable resources. Intensive fishing, irrational and massive logging, overgrazing, intensive agricultural practices, and hunting, are but a few elements that led to the loss of traditional mark of activities in protected natural areas and of the human-nature balance.

#### **Ecological:**

- By increasing the protected areas to ensure biodiversity through inclusion in the Protected Natural Areas Network of natural zones characterized by valuable biodiversity, the selection base for these areas will decrease in regions where larger surfaces were designated.

- Lack of research at the national level has led to a small number of protected areas whose surface still remains low.

**Administrative:**

- To date, not all protected areas have their own administrations. Therefore, Romania has to develop administrative structures to deal with this shortcoming.

**4. Aspects contributing to achieving the target**

**At national level**

- Existence of several well-preserved ecosystem complexes, natural habitats and wild species, as a consequence of reasonable development of the Romanian social-economic system.
- Existence of a national legislative framework and of a well-developed national institutional structure in the field of nature preservation, both from administrative and scientific requirements points of view.
- Possibility of extending - through resizing and/or new designations - the natural and national park network, as well as natural reserves – a common strategy of developed states and at the same time accessible to Romania.

**At international level**

- Romania has signed and ratified the most important international Conventions on nature preservation.
- As a European Union member state, Romania has yet well-preserved, natural capital which represents a notable contribution to the European natural capital, thus of high level of interest and protection.
- Romania, as an EU member state, is the beneficiary of non-reimbursable funds for environmental protection.

**5. Public policies priorities for achieving the target and resource allocation priorities**

- Developing administrative structures of the protected natural areas by establishing the National Agency for protected Natural Areas;
- Establishing the Romanian ecological corridor network;
- Setting up infrastructure for information management, as an instrument for supporting the decision-making process and public awareness;
- Setting up a Romanian Biodiversity Information Management systems;
- Developing and implementing a public awareness strategy;
- Developing the implementation process for 92/43/EEC Directive (Habitats) and 79/409/EEC Directive (Birds);
- Elaborating the guidelines for the management of Natura 2000 network;

- Preparing and participating in **biogeographic seminars**. Within 3 years from the accession date, bio-geographical seminars shall be organized, while the sites of community importance shall become **special preservation areas** within 6 years from the accession date;
- Increasing fund absorption;
- Designation of special protected areas Avian special conservation areas as a integral part of the Natura 2000 ecological network;
- Ensuring competitive management based on EU requirements and agreements to which Romania is part of with regard to the national network of protected natural areas.

### **Target 19: Reducing greenhouse gas emissions by 8% between 2008 - 2012**

#### **Indicator 20: Greenhouse gas emissions**

##### **1. Trends from 2002 to 2005**

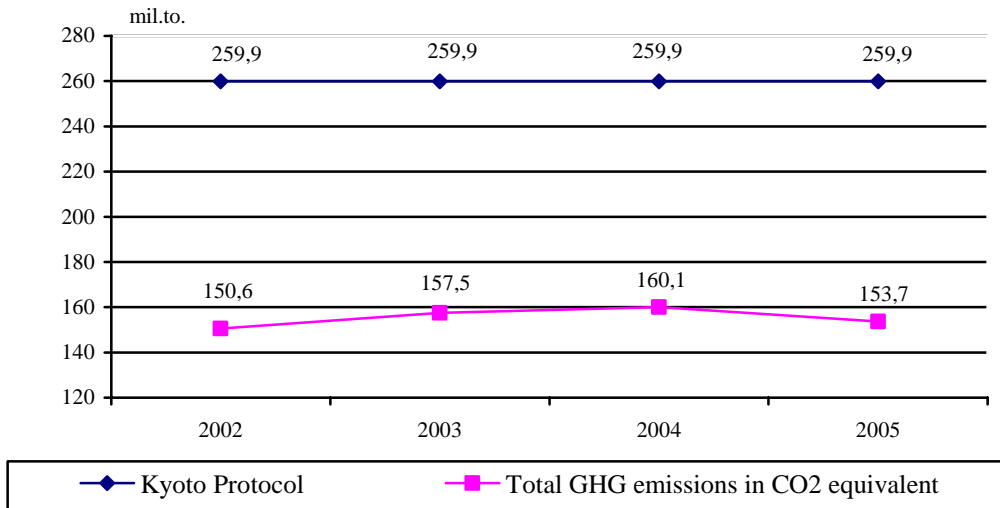
Romania signed the United Nations Framework Convention on Climate Change (UNFCCC) at the Earth Summit in Rio in 1992, and ratified it by Law no.24/1994, being the first country included in the Annex I of the UNFCCC which ratified the Kyoto Protocol by Law no.3/2001.

According to the last national inventory of Greenhouse Gas emissions sent to the UNFCCC Secretariat and taking into account the forecasts for greenhouse gas emissions for the period of 2008 – 2012 presented in the fourth Romanian Communication to UNFCCC, there is ground for Romania to meet the Kyoto Protocol's commitments to reduce GHG emissions in the first commitment period (2008-2012), even if a solid economic development is forecast to meet the objective of reaching the development level of the first EU member states.

The total GHG emissions, without LULUCF (Land use, Land-use change and Forestry), decreased by 40% between 1989 -2005. The aggregated GHG emissions' trends reflect the main characteristics of the country's economic development. The period of 1989 -2005 was characterized by an industrial restructuring process and transition to the market economy. At the same time, the first reactor of the Cernavoda nuclear power plant started to operate at full capacity in 1996, leading to a decrease of overall GHG emissions. After 1999, the improvement of economic indicators as well as the EU accession process have determined a slight increase of the overall GHG emissions.

In absolute values, the total GHG emissions in 2005 amounted to 153 mil. tones CO<sub>2</sub> equivalent, in comparison to the baseline emission level (1989) of 282 mil. tones CO<sub>2</sub> equivalent.

#### **Figure 7.1 GHG emissions trends in CO<sub>2</sub> equivalent**



Source: Romanian National Inventory Report, 2007 (NIR)

## 2. Prospects for achieving the target

Romania has committed to reducing the GHG emissions by 8%, during the first commitment period, 2008 – 2012.

In accordance with the GHG emissions projection, the Kyoto Protocol’s reduction objective of 8% during 2008 – 2012 will be achieved without additional costs.

Given a high economic growth scenario without any additional reducing measures, it is very unlikely that GHG emissions exceed the level of the Kyoto Protocol’s target before the end of the first commitment period (2012).

## 3. Challenges

Difficulties encountered during implementation of policies and measures on GHG emission reduction and adjustment to climate change are of financial, technical and institutional nature.

To reduce uncertainty, coverage and quality of inventories have to be improved over the coming years. In particular, insufficient data for some non CO2 gases (HFCs and SF6) and some source categories remain an important problem to be solved.

## 4. Actions contributing to achieving the target

Economic reorganization and modernizing the technology of important industrial sectors and measures for improving energy efficiency..

Promotion of bio-fuels and renewable energy sources in accordance with the new EU objectives.

## 5. Public policies priorities for achieving the target and resource allocation priorities

Priorities in resource allocation refer mainly to the preparation of the national system for estimating GHG emissions and to the professional expert training in preparing national inventories of GHG emissions. The specific procedure for the national system for estimating GHG emissions will establish the legal, procedural and institutional framework on GHG emissions national inventory and will be adopted by Governmental Decision.

Taking into account that Romania has lately fulfilled its reporting requirements on inventories and in order to increase credibility of GHG estimations and inventory, it is necessary to introduce more national emission factors and calculation methods for estimating emissions in different fields and sectors. Such well-justified and representative national parameters will lead to more accurate estimates of GHG emissions.

### Target 20: Doubling the percentage of population from rural areas with access to drinking water by 2015

#### Indicator 21: Percentage of population with access to drinking water sources

##### 1. Trends from 2002 to 2005

Romania is one of the European countries with average covering of water supply, taking into account that only 66% of the population benefits from drinking water from the public water service. In Europe, 96% - 100% of the urban population and 87% of rural population is connected to the public water supply systems, according to the WHO Report "Global Water Supply and Sanitation Assessment 2000". In the last 25 years, Romania recorded an increase in the number of users connected to drinking water systems from 29% to 65% of population, taking into account also the current major changes in the ratio of urban and rural population. In 2005, 94.3% of households in urban areas and 29.1% of households in rural areas were connected to public water supply systems.

The following table shows that the number of localities which benefit from public water supply systems increased from 1691 in 2002 to 1935 in 2005, with a corresponding increase in the distribution network of over 7500 km.

**Table no. 7.4 Evolution of indicators on drinking water distribution system**

	2002	2003	2004	2005	2005/2002
Number of localities with drinking water supply systems	1691	1756	1860	1935	1.14
Out of which: Municipalities and towns	268	276	309	315	1.18

Total length of the drinking water distribution network (km)	40269	42263	44987	47778	1.19
Out of which: Municipalities and towns	23207	23835	24647	25171	1.08
Drinking water delivered to consumers (mil.m <sup>3</sup> )	1349	1218	1161	1089	0.81
For domestic use	811	714	707	628	0.77

Source: Romanian Statistic Yearbook, National Institute for Statistics 2006

Data available in 2003 indicate the following characteristics of the structure of the drinking water system in Romania:

- out of 1398 existing drinking water treatment plants:
  - 797 drinking water treatment plants produce drinking water for a population between 50 – 5000 persons;
  - 601 drinking water treatment plants produce drinking water for more than 5000 persons.
- 25% of public water supply systems, which supply drinking water to 50 - 5000 persons, do not comply with the limit values for bacteriological parameters, turbidity, ammonia, nitrites, iron;
- 10% of public water supply systems, which supply drinking water to more than 5000 persons, distribute inadequate drinking water in terms of oxidability, turbidity, ammonia, iron, nitrites, taste, odor;
- 12.5% of the total urban population in 21% urban localities is affected by the poor quality of drinking water distributed with discontinuities of more than 8 hours/day.

Data collected from 258 localities and included in the last report of the Bucharest Public Health Institute for year 2003 indicate that:

- out of the total number of collected and analyzed samples over one-year period, the percentages of inadequate samples are:
  - microbiological parameters, total Coliformes and fecal Coliformes, exceeded the limit of 0/100ml in 1% samples and respectively, 1,3% of the total samples;
  - inadequate samples related to chemical parameters were: 2% of samples for oxidability, 2% for ammonia, 1% for nitrites, 1% samples for toxic substances.

## 2. Target reach prospective

The studies carried out emphasized that actual water needs of 20.4 billion cubic meters/year will increase to approx. 27 billion cubic meters/year between 2005 – 2010 and to 32 – 35 billion cubic meters /year between 2020 – 2025 to cover needs.

The main priorities so that population benefits more from good quality drinking water are:

- To fulfil the water needs at the source to produce drinking water needed by urban population;
- To improve and develop infrastructure of centralized water supply systems and sewerage systems in municipalities and towns;
- To extend the centralized water supply services in rural areas;
- To improve water quality by upgrading, expansion and construction of new waste water treatment plants for urban waste waters.

Costs related to these measures were estimated at app. Euro 15 billion and will be partially covered from EU funds (app. Euro 500 mil./year), from the state budget and loans from international financial institutions.

Financial plans to ensure necessary resources were established by the responsible ministry and agreed with other ministries and with the European Union.

The local authorities have to elaborate their own developing and updating strategies on public water and sewerage service infrastructure and are directly responsible for providing population with quality services at affordable costs.

Under these circumstances, it is possible that the whole urban population and about 60% of the rural households benefit from drinking water from the public water supply systems in 2015.

### **3. Obstacles and risks**

These refer to:

- improper condition of the drinking water supply systems;
- insufficient distribution or total lack of drinking water supply systems
- territorial planning of crowded urban areas inadequate to the current European requirements;
- inadequate quality of untreated drinking water from own sources;
- inadequate materials used for treating and distributing drinking water;
- reduced capacity of ground water installations in rural households.

### **4. Actions contributing to achieving the target**

- Development of legal framework and institutional capacity building for a sustainable use of natural resources. The most important legal amendment is Law no. 311/2004 for modifying and amending the Law no. 458/2002 on drinking water quality. This law reflects the Council Directive 98/83/EC on quality of human-use water.
- Technological improvement of water treatment plants and distribution networks. The operational costs are estimated at Euro 2 billion. These costs will be covered from the state budget, the local budgets, public-private partnerships and internationally financed projects.

- As a member state, Romania is the beneficiary of EU non-reimbursable funds for implementation of the Directive on drinking water.

#### **5. Public policies priorities for achieving the target and resource allocation priorities**

Taking into account the provisions of the Environmental Operational Sectoral Programme, there are several priority fields in resource allocation:

- to ensure public water and sewerage services at affordable costs;
- to ensure quality drinking water for every locality;
- to improve quality of water streams;
- to improve sludge management from waste water treatment plants.

Total investments from the state budget, the local budgets, international financial assistance and public-private partnerships during 2004-2015 (additional staff expenditures are not included here) are estimated at app. Euro 5.6 billion.