

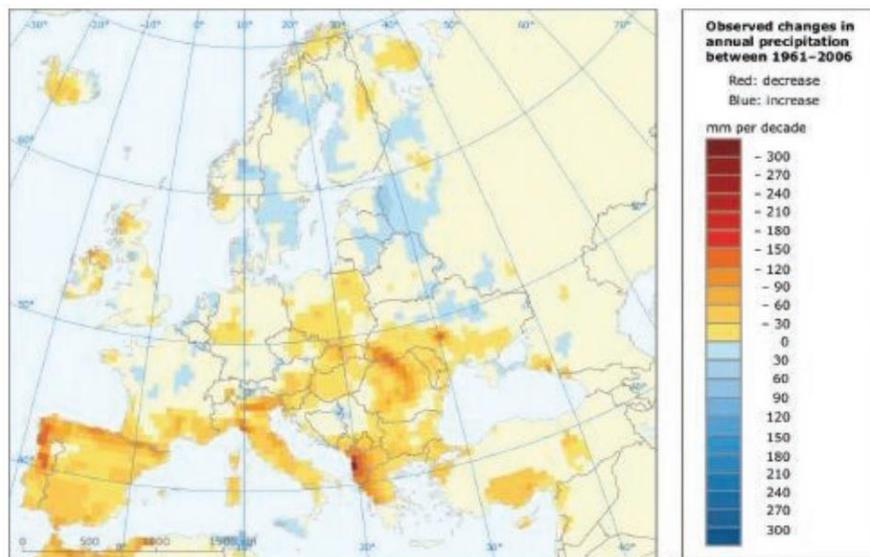
Environmental Problems in Iași - Romania

Pollution Debate GREEN ALLIANCE

Romania suffers great consequences of climate change in a form of tornadoes, floods and desertification. The country has had records of occasional tornadoes since late 19th century but in the last few years number of tornado-force winds beat all the previous records, with 9 tornadoes in less than a year, during 2005.

Floods in Romania also became frequent and abundant, taking many lives, affecting over 1500 settlements, and causing thousands evacuations. Yet another serious effect of changes in a global climate regime is drought that has been predicted to turn Romanian region Dobrudgia into a desert, within the next 100 years.

Romania is one of the countries which have already been most affected by climate change over the past decades. This is shown in the following map, which presents the observed changes in average annual precipitation in Europe from 1961 until 2006. Romania (alongside the southwest of Ukraine) is one of the hotspots already being affected by a significant reduction in average rainfalls, on a level comparable with those observed for Mediterranean EU countries such as Spain, Southern France, Italy and Greece. The map shows that the larger reduction occurred in Transylvania, which has plentiful water resources, but the impact has been felt during the summer when small rivers are not able to remain at their minimum environmental flow. A significant reduction in rainfalls also took place in the Prut-Barlad basin, at the border with Moldova, which is a water stressed area with major drought risks.



Source: European Environment Agency.

Groundwater is also an important factor in the analysis of spatial water stress. As mentioned earlier, Romania's deep aquifers (located at 100–300 m) have sufficient resources of good quality water and good recharge pace. In addition, shallow aquifers exist, located at small to medium depth (5–60 m), with variable water availability and unreliable quality because of the leakage of nutrients and other chemical pollutants from the surface. Although only the deep groundwater is used for water supply to population, there are also abstractions of water from shallow sources for individual human consumption or agriculture.

Air pollution and water pollution caused by industry are serious environmental problems in Romania. The country's factories, chemical plants, and electric power plants depend heavily on burning fossil fuels, a process that emits high levels of carbon dioxide and sulfur dioxide - a key component of acid rain. The industrial centers of Copșa Mică, in central Romania, and Giurgiu, in the south, have severe air pollution problems. Bucharest, the capital, also has serious air pollution. Much of the nation's industrial runoff ends up in the Danube river system, making water unsafe for drinking and threatening the diverse ecosystems of the Danube delta. The delta, the largest in Europe, was declared a World Heritage Site in 1991. Its lakes and marshes are home to hundreds of species of birds and dozens of fish and reptile species, many of which are threatened with extinction.

Poor farming practices, especially infrequent crop rotation, have led to severe soil degradation and erosion in parts of Romania, although today, nearly half of all Romanians still live out of farming, in rural areas. In the 1980s large tracts of marshland lining the Danube were drained and converted to cropland to aid food production. Deforestation, however, is not a serious problem in Romania, where forests cover 27.7 percent of the land.

Romania has already started investing in clean energy, such as solar, wind and hydro energy sources. Also, several projects on using geothermal energy have already been implemented in the country.

Romania is indeed rich in biodiversity, particularly in the broad Danube delta, the largest delta in Europe, which is reserve of water plants, wetland ecosystem and swamp haven for both flora and fauna. This region has excellent opportunities for eco tourism, especially for birdwatchers. Moreover, Romania has one of the largest undisturbed forest area in the world (13% of the country – half of total forest land), and 5% of a total country area represents protected land.